

The Anthropocene: Politik—Economics—Society—Science

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Editors

Climate Security in the Anthropocene

Exploring the Approaches of
United Nations Security Council
Member-States

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The Anthropocene: Politik—Economics— Society—Science

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Security Council Member-States

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For Future

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Chapter 1

Introduction: A Framework for Assessing Climate Security



Judith Nora Hardt , Cameron Harrington , Franziskus von Lucke ,
Adrien Estève , and Nicholas P. Simpson

Abstract This chapter introduces the book, *Climate Security in the Anthropocene—Exploring the Approaches of United Nations Security Council Member-States*. Climate change is increasingly positioned as a security issue. A number of influential governance actors including states, international organisations, and civil society groups now connect climate change to a variety of security threats such as armed conflict, disasters, low socio-economic development, and fragile governing institutions. These threat perceptions have translated into political action and have led to the formation of a complex constellation of governance actors in response. In particular, over the past fifteen years both permanent and non-permanent member-states of the United Nations Security Council (UNSC) have been instrumental in constructing and responding to climate security threats. This introductory chapter presents the overall aim of the book, which is to analyse whether the concept of security has shifted over time with respect to climate change, and if so, how these shifts have occurred in state practices. It begins by tracing the evolution of climate security in academic scholarship and in the UNSC. It then presents the theoretical framework of the book, which distinguishes between three ideal-types of climate security: *national security*, *human security*, and *ecological security*. It concludes by outlining the methodology of the book, which is comprised of fifteen case study chapters that explore the various ways in which member-states that sat on the UNSC between 2018 and in 2020 constructed and responded to climate security threats.

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1.1 Climate Security in the Anthropocene

Humans have transformed a range of planetary processes fundamental to Earth's habitability. According to many, these transformations are so vast that we now live in an entirely new geological epoch called the *Anthropocene* (Steffen et al. 2007). The most far-reaching and critical of these anthropogenic changes is the impact of humans on the Earth's climate. In April 2022, the United Nations Intergovernmental Panel on Climate Change (IPCC) concluded that there is a 50% chance of average global warming reaching 1.5 °C warmer than pre-industrial levels by 2026. A rise to average global warming of 3.2 °C by 2100 is also projected unless rapid and deep greenhouse gas (GHG) emissions reductions are implemented over the next 30 years (IPCC 2022; Pörtner et al. 2022). The IPCC also warned that the effects of human-caused climate change have been experienced earlier, are more widespread, and have greater consequences than previously anticipated (Pörtner et al. 2022; IPCC 2022).

Individuals, societies and states are increasingly exposed to severe climate change events such as floods, wildfires, droughts and extreme temperatures, and are experiencing their impacts in diverse and uneven ways, including a rise in food insecurity, the spread of diseases, and water shortages (IPCC 2022). Scientists fear that climatic effects are increasing vulnerability and inequality, with the potential to exacerbate existing socio-economic problems (Barnett/Adger 2007). These knock-on effects include, but are not limited to, affecting political instability, increasing displacement and migration, and acting as a risk multiplier for violent conflicts (UNSC 2007, 2011; Pörtner et al. 2022). It is clear that climate change presents significant threats to current and future generations and presents severe risks to humans, non-humans, and ecosystems necessary for the habitability of the planet (Pörtner et al. 2022; Ripple et al. 2019; Steffen et al. 2015; Rockström et al. 2009).

The causes and consequences of climate change are dispersed and complex and transcend the ability of individual countries to address them alone. They require collective, urgent, and transformative responses (IPCC 2022a). In the 1992-established United Nations Framework Convention on Climate Change (UNFCCC), states acknowledged the need to avoid “dangerous anthropogenic interference with the climate system” (United Nations 1992: 9) and have since then adopted several political agreements to limit greenhouse gas emissions, such as the Kyoto Protocol (1997) and the Paris Agreement (2015). However, while these political efforts are worthwhile, scholars and activists agree that they are far from enough to deal effectively with the climate crisis and have largely failed to initiate the necessary systemic changes and cooperation at a global level (Pörtner et al. 2022; Gardiner 2004; Christoff 2016).

Despite inadequate political action to limit greenhouse gases and transform the global economy, key political actors at the highest levels increasingly understand climate change as an important security threat. Speaking at a 2021 session of the United Nations Security Council (UNSC), then German Foreign Minister Heiko Maas proclaimed that “[...] climate change is the existential threat of our times” (Maas 2021), and in December 2021 UN Secretary-General António Guterres warned: “Climate change is not the source of all ills, but it has a multiplier effect and is an aggravating factor for instability, conflict and terrorism. We must address these challenges in an integrated manner and create a virtuous circle of peace, resilience and sustainable development” (Guterres 2021). This threat perception has already translated into political action and has led to the formation of a complex constellation of governance actors in order to deal with the security implications of climate change (see Trombetta forthcoming in 2023). Thus, a number of states, UN institutions, and non-governmental actors have begun to discuss and address the multiple security implications of climate change—referred to here as the *climate-security nexus*—and to coordinate political responses (UNEP 2011; Modéer 2019).

Since the year 2007, the increasing conceptualisation of climate change as a *hard* security issue, has led to several initiatives to bring climate change into the UNSC (Maas 2020, 2021; UNSC 2007, 2011, 2013, 2018, 2020; see Fig. 1.1). Despite these efforts, the UNSC has so far not officially recognised climate change as a threat to global peace and security, nor instigated comprehensive action. Nevertheless, with scholars, climate activists, and even armed forces around the world highlighting the potentially serious effects of climate change on global peace and stability (CNA Military Advisory Board 2014; NATO 2022), the pressure to act has been mounting on the UNSC. It is, after all, the world’s most consequential security institution and the only international body officially charged with maintaining international peace and security. This is why the question of how the UNSC and its member states perceive and deal with the security implications of climate change is at the centre of this edited volume.

The existing literature has already in part begun to inquire whether and how the UNSC could or should take action in response to climate change (e.g., Detraz/Betsill 2009; Cousins 2013; Scott 2015). While initially several researchers recommended a cautious approach (Scott 2015; Cousins 2013) due to the possible negative consequences of militarisation of environmental or climate politics and the misuse of any environmental agenda for geopolitical interests (see e.g. Trombetta 2008), the tenor has changed. In recent years, work on this issue has been driven by the fundamental assertion that climate change has become an inescapable topic for global (security) governance actors and regional institutions and can therefore no longer be ignored by the UNSC (Brock et al. 2020; Lövbrand/Mobjörk 2021). Based on this, several proposals to address climate change in the context of the UNSC have been elaborated (Maertens 2021; Conca 2019; Scott/Ku 2018; Vivekananda et al. 2019; Dröge 2020; Parker/Burke 2017; Born et al. 2019).

In contrast to this existing literature, this book does not primarily focus on the UNSC alone, but offers the first systematic assessment of the diverse perceptions and framings of climate security and policy responses by UNSC member countries. It focuses on the global level and future outlines of possible actions or reforms, as well as tangible political and institutional transformations in response to the growing perception of climate change as a security issue at multiple levels of society. A specific focus throughout the book is thus on the multiplicity and changeability of climate security perceptions and the meaning of security in general. For instance, climate change can be constructed as an immediate threat to the national security of the state, legitimising military action; as a human security challenge that necessitates appropriate disaster management; or as an existential danger to ecosystems or even the whole planet, calling for far-reaching global responses. To account for these multiple understandings of the climate-security nexus, the book pays particular attention to how states and institutions within these states (including different ministries or sectors), understand climate security very differently; how this changes over time; how it translates into diverse political and institutional responses to deal with the climate-security nexus; and how it transforms the meaning of security in general.

Our analysis addresses these questions by turning directly to individual states that form the UNSC. Instead of focusing on UNSC debates and resolutions, the book thus discusses and compares the positions of fifteen 2020 UNSC member states¹ (the five permanent and ten non-permanent members, see Fig. 1.1) on whether and how the climate-security nexus is addressed and has affected the countries' institutions and policies (see also Zhou 2017; Scott/Ku 2018).²

Following a bottom-up methodology, the country case studies are mostly developed by scientists from the countries themselves, which ensures a thorough understanding of the local peculiarities and specific political debates. Empirically, the chapter authors refer to a broad and extensive empirical research base of primary and secondary sources and use this material to explore the national, regional, and global origins of the debates on climate security in their respective countries. Thus, each chapter elaborates on how key political actors have approached the climate-security nexus since 2007 and how each country has positioned itself in UNSC debates on climate security.

¹ Methodologically, we do not distinguish between the categories of five permanent members and ten elected non-permanent members. Instead, this book examines if and how the fifteen UNSC member states in the year 2020 (see Fig. 1.1) have approached/acknowledged the climate-security nexus.

² The first empirical foundation of this research was established through the 11 month "Climate Change in the UNSC" project, which was carried out by the authors in cooperation with a large international network of interdisciplinary and country-specialised partner scientists and peer-review processes and supported by the German Foreign Office and associated to the Institute for Peace Research and Security Policy of the Hamburg University. The project led to a research report (Hardt/Viehoff 2021) and to a policy brief (Hardt, Judith Nora 2020 "A Climate for Change in the UNSC? Member States' Approaches to the Climate-Security Nexus", *IFSH Policy Brief*; at: <https://ifsh.de/en/news-detail/new-ifsh-policy-brief-a-climate-for-change-in-the-unscc> (15 October 2022)).



Fig. 1.1 The 2020 member states of the United Nations Security Council. *Source* Hardt and Viehoff (2021: 7)

In the following sections of this introduction, we first briefly explore the genealogy of the climate-security nexus in the literature (Sect. 1.2). Thereafter, we discuss how climate security has been handled in the context of the UNSC (Sect. 1.3). Finally, we introduce the overarching theoretical framework and methodology of the book (Sect. 1.4).

1.2 Genealogy of the Climate-Security Nexus

While the political debate has intensified since the mid-2000s and acquired even more momentum in the 2020s, the connections between a changing climate and security have long been discussed. In fact, the issue's modern origins date back to the 1960s and the debates about nuclear winter (Dalby 2009: 37–39; Gray 1985) and the 1970s when discussions about the “limits to growth” and the effects of overpopulation arose (Meadows/Meadows 1972; Ehrlich 1968). The debate became even more prominent in the 1980s and 1990s when concerns about the connection between environmental degradation and conflict became prevalent in academic circles and reached the highest political levels (Deudney 1990; Ullman 1983: 134; Homer-Dixon 1994). However, in these earlier discussions climate change was only one issue amongst others in a broader environmental security debate and it was not until the mid-2000s, and

especially since the year 2007, that climate security as such became a focal point of attention (Center for Naval Analyses 2007).

Table 1.1 provides a chronological overview of the topics typically associated with the field of climate security. It shows that the current focus on climate security arose most prominently in 2007 and was linked to three interrelated developments. First, the publication of the fourth assessment of the Intergovernmental Panel on Climate Change (IPCC); second, the emergence of a new climate security debate which occurred in the US, driven primarily by think tanks (Center for Naval Analyses 2007; Campbell et al. 2007; von Lucke 2020: 59ff.); and third, the first UNSC debate on climate change (Brauch et al. 2009: 83). It also shows that, since then, the debate has increasingly diversified and touches upon issues such as *human security* (IPCC 2014), *peacebuilding* (e.g., Matthew 2014; Ide 2020; Hardt/Scheffran 2019), *transformation* (e.g., Brauch et al. 2016), *development and humanitarian issues* (e.g., Barnett/Adger 2007; Dalby 2002, 2009; Floyd 2007; Barnett 2001, 2007; Floyd/Matthew 2013), as well as *ethical considerations* surrounding these new forms of security thinking (e.g., Dalby 2013; Nyman/Burke 2016).

A particularly influential strand that also stands at the centre of most climate-security debates at the political level mainly focuses on the connections between climate change and (violent) conflict (Gleditsch 2015; Mach et al. 2019; Brzoska 2018; Ide et al. 2020). Although this strand partly continues the earlier debates on environmental conflict (e.g., Homer-Dixon 1994), it has become more nuanced. Thus, while some still argue for a causal connection between a changing climate and conflict (Smith/Vivekananda 2007; Hsiang et al. 2013; Brown/McLeman 2009), others question a direct or causal relationship (Barnett 2000; Raleigh/Urdal 2007) or have even found evidence for increased cooperation under environmental stress (Mach et al. 2019; von Uexkull/Buhaug 2021; Ken et al. 2005; Ide et al. 2021). The tenor today is that climate change can negatively interact with a range of variables such as low socioeconomic development, low capabilities of the state and existing instabilities, which together have the potential to increase the risk of violent conflicts or exacerbate existing ones (Scheffran et al. 2012; Barnett/Adger 2005; Salehyan 2008; Gleditsch 2012; Mach et al. 2019; Barnett/Adger 2007).

Apart from the still influential research on climate conflict, connections to the concept of the Anthropocene, which has its origins in the Earth System Sciences, have become much more prominent since the late 2010s (Dalby 2009; Harrington/Shearing 2017; Hardt/Viehoff 2020; Hardt 2018). The Anthropocene recognises that the critical life-supporting systems of the planet have moved out of the relatively stable state of the Holocene epoch within which human civilization had evolved (Crutzen/Stoermer 2000) and that the Earth is now experiencing an increasing period of non-stationarity, mainly as a result of the actions of humans. This has fundamentally disrupted the planetary biosphere at unprecedented speed (Steffen et al. 2007;

Table 1.1 Major research phases of climate security

Phases (start)	Key research strands on the climate-security nexus
1960–70s	• Nuclear winter hypothesis • First mentions of environmental issues as security threats
1989	• First wave of more detailed research on the interrelation between environment and conflict: empirical case studies, mostly focused on national security • Partly intertwined with a theoretical debate about the nature of security itself in political debates (broadening and deepening of security)
1994	• Second wave of research on the links between environment and conflict: focused on different methods and empirical case studies • High resonance in political circles, especially in the US under the Clinton-Gore administration
2003	• Research on the links between environment and peace • Pentagon report on abrupt climatic changes and national security
2007	• Direct focus on the link between climate change and security (as opposed to a broader focus on the environment) • First UNSC debate • Influential think tank-driven debate in the US • Link to or inclusion of environmental security in the concept of human security • Environment and energy security/independence • Climate change, security and migration • Gender, marginalisation, environment and security • Introduction of complexity theory and a critical focus on the de-politicisation of climate change through discourses of resilience, risks, adaptation and mitigation
2009	• Focus on the Anthropocene as a new geological era and context for the environment/climate security link and human security • Strong influence of Earth System Sciences (planetary boundaries) and Climate Sciences • Emergence of Ethical Security Studies
2017	• Focus on various institutions and on how the link between climate change and security is included/addressed or institutionalised • Discussion on how actors address the link and in what terms, and what future activities, risks and potentials might be
2020	• Emergence of a new research phase on topics such as the Anthropocene, complex crises, tipping points, compound risks, how different actors (ranging from global governance and states to civil society) address the climate-security nexus, the merging of research communities and a focus on the science-policy interface

Source Adopted from Hardt (2018: 45)

Zalasiewicz et al. 2011) and dramatically increases the risks of exceeding the planetary boundaries, hence leading the planet towards an uninhabitable *Hothouse Earth* trajectory (Steffen et al. 2015, 2018; Rockström et al. 2009; Ripple et al. 2019).

As several scholars that work on the climate-security nexus show, the Anthropocene has important security ramifications, both in theory and practice (Harrington/Shearing 2017; Dalby 2020; Fagan 2017; Holley et al. 2018; Simpson et al. 2019). While still widely debated, the Anthropocene calls into question core assumptions about causality, subjectivity, justice, and governance. Conceptually, it also challenges the anthropocentric foundations of security thinking, which include a belief in the power and agency of what Fishel (2015: 113) calls the “hard-shelled nation-states competing in anarchical conditions ruled by fear and exclusion.”

Beyond these different topical strands, the climate-security debate is closely inter-linked with larger theoretical debates on the (changing) concept of security itself. Starting in the 1980s, several scholars called for a *broadening* of security studies, which traditionally looked at security threats emanating from states or military actors. By contrast, others argued that threats could potentially arise from any sector, including the environment (Krause/Williams 1996, 1997; Ullman 1983; Crawford 1994; Mathews 1989). Paralleling this broadening of the threat category, many also called for a *deepening* of security. This entailed the consideration of new referent objects beyond the state, such as individuals, groups of people, or the whole of humanity (Booth 2005: 14; Dunn Cavelt/Mauer 2010: 2). It was in this context of broadening and deepening that the debate increasingly moved away from a focus on *national security* or *military security* and began to be focused on *ecological*, *individual* and, later, *human security* (Ullman 1983; Mathews 1989; Matthew 2010: 48–50; Dalby 1992; Pirages 1991; Booth 1991). During these theoretical and conceptual developments, security scholars began to problematise the epistemological foundations of what counts as a security issue—i.e., how it should be conceptualised and measured. Thus, several critical scholars of security moved away from the assumption that security threats are objectively given and self-evident and also questioned the value of security (Booth 2005, 2007). Instead, they argued that security issues are socially and discursively constructed.

In the 1990s, this rethinking of what counts as a security issue led to the birth of the concept of *securitisation* by the so called *Copenhagen School* (Buzan et al. 1998). According to these scholars, security “becomes thus a self-referential practice, because it is in this practice that the issue becomes a security issue – not necessarily because a real existential threat exists but because the issue is presented as such a threat” (Buzan et al. 1998: 24). The necessary precondition for an issue to become a security issue is that influential actors or accepted social discourses construct it as threat to a valued *referent object* (Buzan et al. 1998: 26; Austin 1975; Searle 1969). The consequences of a successful securitisation range from an increase in political attention, speeding up or bypassing *normal* political processes, and legitimating new ways to deal with the threat, to elevating issues above day-to-day politics and pushing them into the realm of *high politics*. In its most extreme form, this process can also legitimate *extraordinary* or *emergency* measures and can suspend or circumvent democratic procedures and depoliticise debates (Buzan et al. 1998: 5), which is why the Copenhagen School sees securitisation as inherently problematic.

Researchers have applied the securitisation framework to climate change in diverse ways. While some have argued against securitising climate change, or

the environment more broadly, due to the negative, anti-democratic effects of this (Oels/von Lucke 2015; Wagner 2008; Cousins 2013) others have shown how climate change can be *successfully* securitised, largely without a recourse to extraordinary and undemocratic policies. In part pointing to the *Welsh School* of Critical Security Studies, which attributes a positive value to security (Booth 2005a, 2007), they show how securitisation can help to politicise debates and to legitimise much-needed policies to deal with the challenge, especially when debates avoid narrow national security conceptions (von Lucke et al. 2014; Diez et al. 2016; Rothe 2015; Floyd 2007, 2010; Trombetta 2011, 2012).

Recently, other ways of analysing climate security have supplemented the securitisation approaches. The first comes from literature emphasising the *riskification* of climate change (Corry 2012; Diez et al. 2016; Estève 2021) which looks at long-term and diffuse conceptions of *risks* rather than *threats*. This allows for a broader analysis of climate security, expanding the time horizons of security and allowing for the incorporation of future projection pathways and scenarios in climate science.

Another analytical tool reverses the viewpoint, and instead of analysing the securitisation of climate change, focuses on the *climatisation* of security (Maertens 2018; Oels 2012; von Lucke 2020), and hence “the process through which domains of international politics are framed through a climate lens and transformed as a result of this translation” (Maertens 2021: 640). The concept of climatisation enables us to analyse how concepts and practices related to climate change have become incorporated into broader security agendas, such as peacebuilding operations, and have thus contributed to fundamentally transforming what security means.

As shown in this brief genealogy, the field of climate security is broad and diverse. It encompasses a variety of research foci and methods, and its conclusions differ quite substantially. It is thus easy to understand why the relationship between security policy and climate change remains in flux, with no clear consensus having yet emerged on how to identify and operationalise something called *climate security*. This is why it is imperative to precisely analyse the diverse ways in which climate change has been linked to security and to critically discuss the associated political and practice consequences.

1.3 Climate Security in the United Nations Security Council

The debates about climate security in the UNSC and in the domestic politics of its permanent and non-permanent member states mirror this multiplicity and changeability of the climate-security nexus and therefore stand at the centre of this book. Since its creation following the end of the Second World War, the UNSC has largely employed a traditional understanding of security and particularly concerned itself with issues such as violent conflict, war and military activity (Bosco 2009). In recent years, however, the UNSC has evolved significantly and has dealt with a variety of broad security topics that fall outside the scope of traditional national security, including the Responsibility to Protect, HIV/AIDS (Elbe 2009), and the plight of

women (UNSC 2019) and children (e.g., UNSC 2018) in conflicts. As a result, some argue that the UNSC should be seen as a dynamic, responsive and an evolving institution (Scott/Ku 2018; Conca 2019).

Climate security first became a matter of debate in the UNSC in the year 2007, which coincided with a resurfacing of climate security discussions in the scientific literature (Barnett/Adger 2007; Brown et al. 2007), but also in major think tank reports in the US (Center for Naval Analyses 2007), and in governmental advisory reports in Germany (WBGU 2007). The very first climate security debate in the UNSC was initiated by the United Kingdom (UK), under the lead of then Foreign Secretary Margaret Beckett, and focused on climate change, energy and security (UNSC 2007) (Harrington, this volume). In 2011, Germany initiated another open debate that led to a presidential statement (marked blue in Fig. 1.2) which “expresses [the Security Council’s] concern that possible adverse effects of climate change may, in the long run, aggravate certain existing threats to international peace and security” and also addressed potential territory loss in low-lying island states (UNSC 2011; von Lucke, this volume). Thereafter, the issue received less attention and climate security was only treated in the context of several Arria-Formula³ meetings.⁴ The topics discussed in these meetings revolved around sea level rise (Permanent Mission of the Ukraine to the UN 2017), “preparing for [the] security implication of rising temperatures”,⁵ and the potential to “transform these new threats into opportunities for cooperation” (Eliasson 2015).

Not least due to worrying IPCC reports (IPCC 2018) and the increased attention on the climate crisis due to social movements (Thunberg 2018), climate security again became much more important in the UNSC in 2018. That year, Sweden initiated a debate dedicated to climate-related security risks (UNSC 2018), which was followed by an open debate in 2019, initiated by the Dominican Republic, that emphasised the effects of climate-related disasters on international peace and security (UNSC 2019). As it can be seen in the following Fig. 1.2, there have been nine Arria-Formula Meetings (marked yellow in Fig. 1.2) and eight thematic UNSC debates (marked green in Fig. 1.2) on climate change and security by the time of finalising this book’s introduction in October 2022.

In April 2020, France launched an Arria-Formula meeting on climate and security risks (Permanent Mission of France to the UN 2020) which resulted in a joint statement from ten UNSC member states committing themselves to a collective initiative

³ The Arria-Formula Meetings are an informal UNSC working format that provide an opportunity to exchange views with external experts and civil society representatives.

⁴ At: <https://www.securitycouncilreport.org/whatsinblue/2013/02/arria-formula-meeting-on-climate-change.php>; www.whatsinblue.org/2015/06/arria-formula-meeting-on-climate-change-as-a-threat-multiplier.php (11 October 22)

⁵ At: <https://www.whatsinblue.org/2017/12/climate-change-arria-formula-meeting.php> (11 October 22).

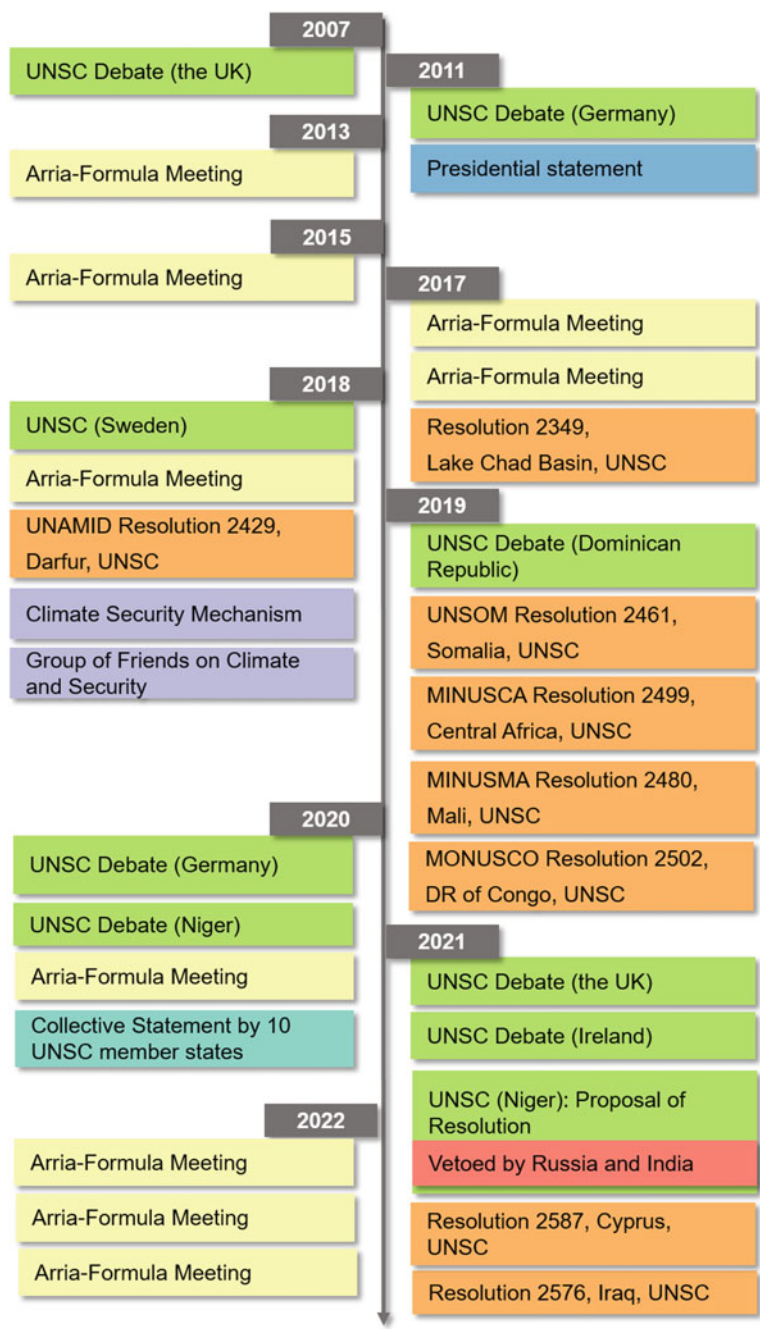


Fig. 1.2 Milestones of climate security at the UNSC (2007–2022). *Source* Developed by the authors

(marked in light blue in Fig. 1.2) to address climate-related security risks within the UNSC (Permanent Representation of the Federal Republic Germany to the UN 2020). It was the first time that ten states had engaged in such an Initiative to Address Climate-related Security Risks and it was supposedly the basis of what the German Permanent Mission (PM) had already been preparing as a UNSC resolution, but had refrained from presenting due to the announcement by the US under President Donald Trump that it would be vetoed (Dziadosz 2020; Fillion 2021). In the same year, Germany and Niger initiated further open debates on climate security and the humanitarian effects of environmental degradation and peace and security, and the UNSC saw additional Arria-Formula meetings on sea level rise and climate finance and their implications for international peace and security and on climate and security in Africa in the year 2022.⁶ The UK organised a debate on *Addressing climate-related security risks to international peace and security through mitigation and resilience building* (February 2021). During the UNSC debate on *Maintenance of international peace and security climate and security*, organized by Ireland, the United Nations Secretary General António Guterres described the briefly released IPCC report “as a “code red” for humankind”.⁷ During a UNSC meeting in December 2021⁸ Niger presented an—eventually failed—proposal to permanently add climate change to the UNSC agenda (December 2021)⁹ as it was vetoed by Russia and India (marked red in Fig. 1.2).

While we thus have seen a significant increase in UNSC debates and meetings on climate security since 2007, this has so far not resulted in substantial policy changes, including meaningful statements, declarations, or initiatives. The main reason for this failure is the combination of the closed nature of the UNSC (only 5 permanent on 10 non-permanent members) and the veto system, with a lack of consensus of the member states concerning what climate security actually means and how international institutions should respond (see Maertens 2021; Conca 2019; Scott/Ku 2018).

Common counter arguments against including climate change in the permanent agenda of the UNSC include: the denial of climate change as a security threat, or complaints about a too-narrow national security focused conception of climate security; fears of a militarisation of climate change; the elitist, unfair institutional setup of the UNSC; the claim that other UN agencies or international bodies are already responsible for climate change (e.g., the UNFCCC, the Paris Agreement); or inadequate recourses of the UNSC (Hardt 2021; Stepanov, this volume; Vuori,

⁶ At: <https://www.securitycouncilreport.org/whatsinblue/2022/03/arria-formula-meeting-climate-finance-for-sustaining-peace-and-security.php> (11 October 2022); at: <https://www.securitycouncilreport.org/monthly-forecast/2022-10/climate-and-security-3.php> (8 November 2022).

⁷ At: <https://unric.org/en/guterres-the-ippc-report-is-a-code-red-for-humanity/> (11 October 2022).

⁸ At: <https://documents-dds-ny.un.org/doc/UNDOC/PRO/N21/392/34/PDF/N2139234.pdf?OpenElement> (10 October 2022).

⁹ At: https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_2021_990.pdf (11 October 2022).

this volume). By contrast, those advocating for an inclusion of climate change in the UNSC agenda underline the need to include the existing and growing threats of climate change in a broader consideration of security. They reject the critics' assertion that viewing a problem as a security problem necessarily leads to militarisation, arguing instead that successful security policy has a wide range of instruments at its disposal, including soft security measures (Harrington, this volume; von Lucke, this volume, Estève, this volume).

Despite these shortcomings when it comes to permanently establishing climate security in the UNSC, the increased attention on the issue in the Council has led to tangible changes in key political discourses and policies. Thus, several UNSC resolutions and field missions since 2017 have included references to, and operated on the premise of, the adverse effects and implications of climate change, natural disasters and other ecological changes on stability and security, mostly focused on Africa, as for example Resolution 2349 (marked in orange in Fig. 1.2) on the Lake Chad Basin Region (UNSC 2017). Moreover, apart from the UNSC, climate security has become much more important in the broader UN system, and several UN agencies (UNEP 2011; Modéer 2019) and secretaries-general (e.g., Ki-moon 2011; Guterres 2019) have advocated for the climate-security nexus agenda. One of the most important developments has been the establishment in 2018 of the Climate Security Mechanism (CSM) as a joint initiative of the United Nations Department of Political Affairs (DPPA), the United Nations Environmental Programme (UNEP) and the United Nations Development Programme (UNDP). The CSM (marked in purple in Fig. 1.2) promotes a dialogue on the linkage between climate change and security among UN institutions and works with UN entities and (sub-)regional organisations to integrate climate-related security risks into analysis, planning and programming. It has also convened a Community of Practice on Climate Security amongst over 20 UN entities that meets bimonthly to identify opportunities for cooperation on climate security. Finally, the increased attention on the climate-security nexus at the UN level facilitated the creation of the Group of Friends (GoF) on Climate and Security in 2018 (co-chaired by Germany and Nauru), which tries to further institutionalise climate-related security risks within the UN system and to increase the general awareness of the connection (marked in purple in Fig. 1.2). It is thus surprising that in the face of these several recognitions and in spite of the ever-increasing scientific evidence and the growing manifestation of its effects –in the year 2022 exemplified by weather extremes and destruction –the UNSC still refrains from officially recognising the interlinkages between climate change and security.

1.4 Theoretical Framework and Methodology of the Book

While one goal of this book is to better understand the above-described developments concerning climate security at the UNSC (including the apparent lack of robust UNSC

action), its main focus is on mapping and making sense of the very diverse approaches to climate security in different member state of the UNSC—which eventually can help to explain what happens, or does not happen, at the UNSC level. The theoretical framework of this book thus offers a dynamic approach to climate security that has allowed us to loosely guide the individual chapters and to enable meaningful comparisons between them (see the concluding chapter), yet without restricting the empirical analysis too heavily. The starting point is the above-discussed assumption that security issues are socially constructed or securitised (Buzan et al. 1998). That is, instead of conceiving them as objectively given, we assume that influential actors and broader discourses actively elevate some issues into the realm of security and determine what counts as a legitimate threat, who is threatened, who can protect and with what means (McDonald 2013). Following a broad reading of securitisation (Diez et al. 2016), we consider issues as successfully securitised even without having legitimised *extraordinary* or *emergency* measures (Buzan et al. 1998: 21). The main criterion is whether the process of constructing them as security issues has enabled political counter-measures that, without the reference to a threat/security, would not have seemed legitimate (Trombetta 2011). This conceptualisation of political security issues does not mean that the authors do not recognise the physical science basis of climate change and the mounting evidence for its devastating security implications. Instead, this approach emphasises that there are multiple political interpretations of the interrelations between climate change and security that heavily depend on broader discourses and country-specific preconditions such as culture, economy, geography, and the political background of central securitising actors.

Based on the genealogy in Section 1.2 which discussed existing literature on climate security and on our own previous works on the climate security nexus Hardt (2018), von Lucke (2020), Harrington and Shearing (2017), Estève (2021), Simpson et al. (2021) we thus distinguish between three ideal typical manifestations of climate security, namely *national security*, *human security*, and *ecological security*. These ideal types differ along four key dimensions: what they construct as threatened *referent object* (security for whom); what *threats* they point to; *who they legitimise* as being able to restore security; and by what *means* (see Table 1.2).

The first frame holds that if climate change is mainly constructed as a *national security* issue the security of the state is of paramount importance. The focus is on the preservation (and sometimes expansion) of national territories and appropriate military responses to ensure the survival of the sovereign state. Socio-economic effects such as violent conflict, domestic or regional instability, or migration lie at the centre of attention of this frame. Usually, the state or its agencies are the main providers of security. Thus, the defence sector, the military or intelligence agencies often embrace this frame and use it to legitimise new policies and practices related to climate change.

By contrast, the main referent object of a *human security* framing of climate change is the wellbeing of individuals or groups. The concern is with the direct threats of climate change to humans, such as resource scarcity, the individual harms born from an increase in irregular migration, extreme weather and the spread of diseases.

Table 1.2 Overview of three dominant security concepts in relation to climate change

Questions	National security	Human security	Ecological security
Security for whom? (<i>referent object</i>)	State, specific territory, the military	Primarily people, groups and individuals, partly humanity as such	Nature, Earth System, ecosystems
Security from what <i>threats</i> ?	Second-order socio-economic effects of climate change, political instability, fragile states, violent conflicts, partly climate-induced migration, partly also direct effects of climate change; direct or indirect threats from other states	Direct physical effects of climate change (extreme weather, resource scarcity e.g., water and food, spread of diseases, sea level rise), as well as state, non-state and global actors, physical violence, underdevelopment and poverty, environmental hazards	Abrupt changes to the status quo and the resilience of biophysical and geophysical environments that sustain life; climate change; different socio-ecological processes such as species extinction, biodiversity loss, tipping points, environmental degradation
Security by whom?	Primarily by the state and its agencies, armed forces, defence, foreign ministries, intelligence services	State agencies (often the development sector), non-state actors, civil society, NGOs (local, national and international), the UN, international/multilateral organisations and concerted action	Earth System Science, Climate Science, and other natural sciences; states, international organisations, and collective action; environmental organisations and advocacy; individual action
Security by which <i>means</i> ?	Primarily by military means, to a lesser extent, by diplomatic and economic means (examples are military interventions, a strengthening of border controls, or the preparation of armed forces and military installations for changed climatic conditions)	Development cooperation/human development, conflict prevention, educational activity, peace-building, democratisation, capacity building, sustainable resource management, risk management. In extreme cases also military intervention i.e., in the case of <i>responsibility to protect</i> (R2P) measures	Nature-based solutions that seek a reduction in biodiversity loss; CO2 emissions reduction; reforestation; environmental protection measures; a promotion of sustainable development or other, more radical policy interventions

Source Elaborated by the authors on the basis of Hardt (2018) and Hardt/Viehoff (2020)

These effects can impact the flourishing of human individuals. Unlike national security, many different actors can participate in safeguarding human security, ranging from international organisations and state development agencies to NGOs and grass-roots organisations. While military instruments can also play a role—e.g., peace-keeping operations, Responsibility to Protect (R2P) interventions—the main focus is on development cooperation, economic and technical support, or educational measures (Commission on Human Security 2003; United Nations Development Programme 1994; Barnett 2007).

Our last conception, *ecological security*, focuses on socio-ecological interconnections and the need for so-called *natural* systems to be maintained and restored, given the scale and severity of anthropogenic disruption such as biodiversity loss and climate change. It emphasises multi-scalar interventions—from the local to the global—to protect and preserve ecological sustainability and the human and non-human communities which depend on it. Although in many respects it is fundamentally different to more conventional modes of security, its inclusion as a theme for security actors is useful when considering security within the Anthropocene epoch as it recognises humanity's dependence on and intertwinements with these disrupted systems and their consequences for both national and human security imperatives. In this regard, ecological security concentrates on ecosystem resilience and the rights and needs of the most vulnerable across space (populations of the developing world), time (future generations), and species (other living beings) (McDonald 2021).

While individual chapters of this volume may sometimes slightly depart from this overall theoretical framework to account for country-specific peculiarities, it nevertheless is at the core of all chapters. It allows us to systematically highlight similarities and differences between UNSC member states and to better understand why countries have adopted very different political and institutional responses to climate risks, which also helps to explain the discussions about climate security at the UNSC level. Instead of discussing the climate change-security nexus as a future issue, or seeing it as an externally measured vulnerability, this approach assesses the practices and perceptions that already take place and focuses on the national and local perspective and perception of climate change impacts, providing a robust empirical foundation.

All country chapters (appearing in alphabetical order in the book) start out by asking three interrelated questions: First, has the respective country perceived climate change as a security issue (especially in connection to our three ideal types of climate security), and if so, how? Second, which policies, practices and institutional responses have followed from this specific understanding of climate security? And third, how has the country positioned itself in the debates on climate change at the UNSC level? Mostly authored by scholars from the countries themselves or experts on the specific cases, all chapters draw on a broad range of secondary literature but especially on primary sources such as government policies, ministry documents (such as security strategies, military doctrines, policy frameworks and presidential orders), and UNSC documents. Each country chapter primarily covers the period

from 2007 (when climate change was first discussed at the UNSC) through to the end of 2020,¹⁰ with a particular emphasis on recent events, and it includes member state activities at the domestic, regional and international levels as well as their corresponding positions in the UNSC.

The shared theoretical approach and the provision of detailed methodological guidelines to all partner scientists have ensured a systematic, rigorous comparative analysis of the national perspectives on the climate change-security nexus in the fifteen country cases. This approach furthermore ensures the inclusion of a multiplicity of visions, since it draws from local approaches, knowledge, and values of how to understand, seize, and act upon the threats posed by climate change. This basis also enables us to draw conclusions on how national perceptions of the climate-security nexus eventually influence international conceptions of security and thereby also global governance and responses at the UNSC. On this basis, it also contributes to ongoing theoretical debates about the nature and political effects of changing conceptions of security and the securitisation of climate change.

Overall, we hope that this book will not only help to further expand the academic debate on climate security but to also inform decision-makers about the multiplicity of climate security perceptions and political responses, and thus to eventually contribute to designing more effective responses to cope with global security in the Anthropocene.

References

- Austin, John Langshaw, 1975: *How to Do Things with Words* (Oxford: Oxford University Press).
- Barnett, Jon, 2000: "Destabilizing the Environment-Conflict Thesis", In: *Review of International Studies*, 26,2: S. 271–288.
- Barnett, Jon, 2001: *The Meaning of Environmental Security: Ecological Politics and Policy in the New Security Era* (London–New York: Zed Books).
- Barnett, Jon, 2007: "Environmental Security", in: Collins, Alan (Ed.), *Contemporary Security Studies* (Oxford University Press): 182–203.
- Barnett, Jon; Adger, Neil, 2005: "Security and Climate Change: Towards an Improved Understanding", in: Human Security and Climate Change Workshop, Oslo, 20–21 June 2005.
- Barnett, Jon; Adger, Neil, 2007: "Climate Change, Human Security and Violent Conflict", in: *Political Geography*, 26,6: 639–655.
- Booth, Ken, 1991: "Security and Emancipation", in: *Review of International Studies*, 17,4: 313–326.
- Booth, Ken, 2005: "Critical Explorations", in: Booth, Ken (Ed.), *Critical Security Studies and World Politics* (Boulder, CO: Lynne Rienner): 1–18.
- Booth, Ken, 2005a: *Critical Security Studies and World Politics* (Boulder, London: Lynne Rienner Publishers).
- Booth, Ken, 2007: *Theory of World Security* (Cambridge: Cambridge University Press).
- Born, Camilla; Eklow, Karolina; Mobjork, Malin, 2019: "Advancing United Nations Responses to Climate-Related Security Risks"; in: SIPRI; at: https://www.sipri.org/sites/default/files/2019-09/pb_1909_advancing_un_climate.pdf.
- Bosco, David L., 2009: *Five to Rule Them All: The Un Security Council and the Making of the Modern World* (Oxford: Oxford University Press).

¹⁰ Some chapters extend the analysis to 2021 or 2022 if important developments emerged that year.

- Brauch, Hans Günter; et al. (Eds.), 2009: *Facing Global Environmental Change: Environmental, Human, Energy, Food, Health and Water Security Concepts* (Berlin–Heidelberg: Springer).
- Brauch, Hans Günter; Oswald Spring, Ursula; Grin, John; Scheffran, Jürgen (Eds.), 2016: *Handbook on Sustainability Transition and Sustainable Peace* (Cham: Springer International Publishing).
- Brock, Steve, et al., 2020: “The World Climate and Security Report 2020”, in: *International Military Council on Climate and Security* (Munich: IMCCS); at: https://imccs.org/wp-content/uploads/2021/01/World-Climate-Security-Report-2020_2_13.pdf.
- Brown, Oli; Hammill, Anne; McLeman, Robert, 2007: “Climate Change as the ‘New’ Security Threat: Implications for Africa”, in: *International Affairs*, 83,6: 1141–1154.
- Brown, Oli; Robert, McLeman, 2009: “A recurring Anarchy? The Emergence of Climate Change as a Threat to International Peace and Security”, in: *Conflict, Security & Development*, 9,3: 289–305.
- Brzoska, Michael, 2018: “Weather Extremes, Disasters, and Collective Violence: Conditions, Mechanisms, and Disaster-Related Policies in Recent Research”, in: *Current Climate Change Reports*, 4,4: 320–329.
- Buzan, Barry; Wæver, Ole; de Wilde, Jaap, 1998: *Security: A New Framework for Analysis* (Boulder, CO: Lynne Rienner).
- Campbell, Kurt M.; et al., 2007: *The Age of Consequences: The Foreign Policy and National Security Implications of Global Climate Change* (Washington, D.C.); at: https://csis-website-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/media/csis/pubs/071105_ageofconsequences.pdf
- Center for Naval Analyses, 2007: *National Security and the Threat of Climate Change* (Washington, D.C., CNA); at: https://www.cna.org/cna_files/pdf/national%20security%20and%20the%20threat%20of%20climate%20change.pdf.
- Christoff, Peter, 2016: “The Promissory Note: Cop 21 and the Paris Climate Agreement”, in: *Environmental Politics*, 25,5: 765–787.
- CNA Military Advisory Board, 2014: *National Security and the Accelerating Risks of Climate Change* (Alexandria, VA: CNA Corporation); at: https://www.cna.org/cna_files/pdf/mab_5-8-14.pdf.
- Commission on Human Security (CHS), 2003: *Human Security Now*; at: https://tind-customer-undl.s3.amazonaws.com/c81b2b61-003c-4b62-b3d1-3b701aa3dc64?response-content-disposition=attachment%3B%20filename%2A%3DUTF-8%27%27Humansecuritynow.pdf&response-content-type=application%2Fpdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Expires=86400&X-Amz-Credential=AKIAXL7W7Q3XFWGQKBB%2F20230328%2Feu-west-1%2Fs3%2Faws4_request&X-Amz-SignedHeaders=host&X-Amz-Date=20230328T135430Z&X-Amz-Signature=146fa7345befdc9839a32fd0ed66f3293d13fddff37c86063ac15ca50a14bc8.
- Conca, Ken, 2019: “Is There a Role for the UN Security Council on Climate Change?”, in: *Environment: Science and Policy for Sustainable Development*, 61,1:4–15.
- Corry, Olaf, 2012: “Securitisation and ‘Riskification’: Second-Order Security and the Politics of Climate Change”, in: *Millennium—Journal of International Studies*, 40,2: 235–258.
- Cousins, Stephanie, 2013: “UN Security Council: Playing a Role in the International Climate Change Regime?”, in: *Global Change, Peace & Security*, 25,2: 191–210.
- Crawford, Beverly, 1994: “The New Security Dilemma under International Economic Interdependence”, in: *Millennium*, 23,1: 25–55.
- Crutzen, Paul J.; Stoermer, Eugene J., 2000: “The ‘Anthropocene’”, in: *Global Change Newsletter* 41: 17–18.
- Dalby, Simon, 1992: “Ecopolitical Discourse: ‘Environmental Security’ and Political Geography”, in: *Progress in Human Geography*, 16,4: 503–522.
- Dalby, Simon, 2002: *Environmental Security* (Minneapolis: U of Minnesota Press).
- Dalby, Simon, 2009: *Security and Environmental Change* (Cambridge: Polity).
- Dalby, Simon, 2013: “Climate Change”, in: *The RUSI Journal*, 158,3: 34–43.
- Dalby, Simon, 2020: *Anthropocene Geopolitics: Globalization, Security, Sustainability* (Ottawa: University of Ottawa Press).
- Detraz, Nicole; Betsill, Michele M., 2009: “Climate Change and Environmental Security: For Whom the Discourse Shifts”, in: *International Studies Perspectives*, 10,3: 303–320.

- Deudney, Daniel, 1990: "The Case against Linking Environmental Degradation and National Security", in: *Millennium*, 19,3: 461–476.
- Diez, Thomas; von Lucke, Franziskus; Wellmann, Zehra, 2016: *The Securitisation of Climate Change: Actors, Processes and Consequences* (London: Routledge).
- Dröge, Susanne 2020: *Addressing the Risks of Climate Change: What Role for the Un Security Council?* (Berlin: German Institute for International and Security Affairs); at: https://www.swp-berlin.org/fileadmin/contents/products/research_papers/2020RP06_UNSC_Climate.pdf.
- Dunn Cavelty, M.; Mauer, V., 2010: "Introduction", in: Dunn Cavelty, M.; Mauer, V. (Eds.), *The Routledge Handbook of Security Studies* (Abingdon, Oxon: Routledge): 1–6.
- Dziodosz, A. 2020: "US Halts German Security Council Push for UN Climate Conflict Monitoring"; at: <https://www.cleanenergywire.org/news/us-halts-german-security-council-push-un-climate-conflict-monitoring>.
- Ehrlich, Paul, 1968: *The Population Bomb* (New York: Ballantine).
- Elbe, Stefan, 2009: *Virus Alert: Security, Governmentality, and the Aids Pandemic* (New York: Columbia University Press).
- Eliasson, Jan, 2015: "Deputy Secretary- General. Remarks to the Security Council on Climate Change, 30 June 2015" (New York; UN); at: www.spainun.org/wp-content/uploads/2015/07/Deputy-Secretary-General_CC_201506.pdf.
- Estève, Adrien, 2021: "Preparing the French Military to a Warming World: Climatization through Riskification", in: *International Politics*, 58,4: 600–618.
- Fagan, Madeleine, 2017: "Security in the Anthropocene: Environment, Ecology, Escape", in: *European Journal of International Relations*, 23,2: 292–314.
- Fillion, S. 2021: "Can the Issue of Climate induced Wars Stick to the Un Security Council Agenda? The UK Tries It Out"; at: <https://www.passblue.com/2021/02/18/can-the-issue-of-climate-induced-wars-stick-to-the-un-security-council-agenda-the-uk-tries-it-out/>.
- Fishel, Stefanie R., 2015: *The Microbial State: Global Thriving and the Body Politic* (Minneapolis: University of Minnesota Press).
- Floyd, Rita, 2007: "Towards a Consequentialist Evaluation of Security: Bringing Together the Copenhagen and the Welsh Schools of Security Studies", in: *Review of International Studies*, 33,2: 327–350.
- Floyd, Rita, 2010: *Security and the Environment: Securitisation Theory and Us Environmental Security Policy* (Cambridge: Cambridge University Press).
- Floyd, Rita; Matthew, Richard (Eds.), 2013: *Environmental Security: Approaches and Issues*. Oxon (New York: Routledge).
- Gardiner, Stephen M., 2004: "The Global Warming Tragedy and the Dangerous Illusion of the Kyoto Protocol", in: *Ethics & International Affairs*, 18,1: 23–39.
- Gleditsch, Nils Petter, 2012: "Whither the Weather? Climate Change and Conflict", in: *Journal of Peace Research*, 49,1: 3–9.
- Gleditsch, Nils Peter, 2015: "Climate Change, Environmental Stress, and Conflict", in: Crocker Chester, A.; Osler Hampson, F.; Aall, P. (Eds.), *Managing Conflict in a World Adrift* (Washington D.C.: United States Institute of Peace Press): 147–168.
- Gray, Colin S., 1985: "The Nuclear Winter Thesis and U.S. Strategic Policy", in: *The Washington Quarterly*, 8,3: 85–96.
- Guterres, Antonio, 2019: *Remarks at the Paris Peace Forum* (New York: United Nations); at: <https://www.un.org/sg/en/content/sg/speeches/2019-11-11/remarks-the-paris-peace-forum>.
- Guterres, Antonio, 2021: "Climate Change 'a Multiplier Effect', Aggravating Instability, Conflict, Terrorism: Speech to the United Nations Security Council" (New York: United Nations, 9 December 2021); at: <https://press.un.org/en/2021/sgsm21074.doc.htm>.
- Hardt, Judith Nora, 2018: *Environmental Security in the Anthropocene* (London: Routledge).
- Hardt, Judith Nora, 2021: "The United Nations Security Council at the Edge of Climate Change", in: *Journal Politics and Governance*, 9: 5–15.
- Hardt, Judith Nora; Scheffran, Jürgen, 2019: *Environmental Peacebuilding and Climate Change: Peace and Conflict Studies at the Edge of Transformation* (Tokyo: Toda Peace Institute);

- at: <https://toda.org/policy-briefs-and-resources/policy-briefs/environmental-peacebuilding-and-climate-change-peace-and-conflict-studies-at-the-edge-of-transformation.html>.
- Hardt, Judith Nora; Viehoff, Alina, 2020: "A Climate for Change in the Un Security Council? Member States' Approaches to the Climate-Security Nexus" (Hamburg: IFSH); at: <https://ifsh.de/en/publications/research-report/research-report-005>.
- Harrington, Cameron; Shearing, Clifford, 2017: *Security in the Anthropocene: Reflections on Safety and Care* (Bielefeld: Transcript Verlag).
- Holley, Cameron; et al., 2018: "Environmental Security and the Anthropocene: Law, Criminology, and International Relations", in: *Annual Review of Law and Social Science*, 14,1: 185–203.
- Homer-Dixon, Thomas F., 1994: "Environmental Scarcities and Violent Conflict: Evidence from Cases", in: *International Security*, 19,1: 5–40.
- Hsiang, S.M., Burke, M; Miguel, E., 2013: "Quantifying the Influence of Climate on Human Conflict", in: *Science*, 341,6151: 1235367.
- Ide, Tobias, 2020: "The Dark Side of Environmental Peacebuilding", in: *World Development*, 127,104777.
- Ide, Tobias; et al., 2021: "The Past and Future(S) of Environmental Peacebuilding", in: *International Affairs*, 97,1:1–16.
- Ide, Tobias; Michael, Brzoska; Jonathan F. Donges; Carl-Friedrich, Schleussner, 2020: "Multi-method Evidence for when and how Climate-related Disasters Contribute to Armed Conflict Risk", in: *Global Environmental Change*, 62: 102063.
- Intergovernmental Panel on Climate Change—IPCC, 2014: "Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change" (Geneva, Switzerland: IPCC); at: https://archive.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf.
- IPCC, 2018: "Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the Impacts of Global Warming of 1.5°C above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty" (Cambridge, UK - New York, NY: Cambridge University Press); at: https://www.ipcc.ch/site/assets/uploads/sites/2/2022/06/SPM_version_report_LR.pdf.
- IPCC, 2022: "Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group ii to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change"; at: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_FinalDraft_FullReport.pdf.
- IPCC, 2022a: "Summary for Policymakers. In: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group Iii to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change" (Cambridge, UK–New York, NY: Cambridge University Press); at: DOI <https://doi.org/10.1017/9781009157926.001>.
- Ken, Conca; Carius Alexander; Dabelko, Geoffrey D. (Eds.), 2005: "Building Peace through Environmental Cooperation", in: *State of the World 2005* (New York–London: WW Norton & Company): 144–155.
- Ki-moon, Ban, 2011: "Remarks to the Security Council on the Impact of Climate Change on International Peace and Security" (New York: UN), at: <https://www.un.org/sg/en/content/sg/speeches/2011-07-20/remarks-security-council-impact-climate-change-international-peace>.
- Krause, Keith; Williams, Michael C., 1996: "Broadening the Agenda of Security Studies: Politics and Methods I", in: *Mershon International Studies Review*, 40, Supplement 2: 229–254.
- Krause, Keith; Williams, Michael C., 1997: *Critical Security Studies: Concepts and Cases* (Minneapolis: University of Minnesota Press).
- Lövbrand, Eva; Möbjörk, Malin, 2021: *Anthropocene Securities: Recollections and Reflections 50 Years after the Stockholm Conference on the Human Environment* (Cambridge, MA: MIT Press).
- Maas, Heiko, 2020: "Speech by Federal Foreign Minister Heiko Maas at the Opening of the Berlin Climate and Security Conference"; at: <https://www.auswaertiges-amt.de/en/newsroom/news/maas-conference-climate-security/2356920>.

- Maas, Heiko, 2021: "Statement by Foreign Minister Heiko Maas in the Security Council VTC Open Debate on Climate and Security, February 23"; at: <https://new-york-un.diplo.de/un-en/news-corner/-/2443804>.
- Mach, Katharine J.; et al., 2019: "Climate as a Risk Factor for Armed Conflict", in: *Nature*, 571, 7764: 193–197.
- Maertens, Lucile, 2018: "The Partial Climatisation of Migration, Security and Conflict", in: Foyer, J.; Morena, E.; Aykut, S. (Eds.): *Globalising the Climate. COP21 and the Climatisation of Global Debates* (Abingdon, Oxon: Routledge): 116–134.
- Maertens, Lucile, 2021: "Climatizing the Un Security Council", in: *International Politics*, 58,4: 640–660.
- Mathews, Jessica Tuchman, 1989: "Redefining Security", in: *Foreign Affairs*, 68,2: 162–177.
- Matthew, Richard A., 2010: "Environment, Conflict, and Sustainable Development", in: Lund, M.S.; Mancini, F.; Tschirgi, N. (Eds.): *Security and Development: Searching for Critical Connections* (Boulder, CO: Lynne Rienner): 47–75.
- Matthew, Richard, 2014: "Integrating Climate Change into Peacebuilding", in: *Climatic Change*, 123,1: 83–93.
- McDonald, Matt, 2013: "Discourses of Climate Security", in: *Political Geography*, 33, March 2013: 42–51.
- McDonald, Matt, 2021: *Ecological Security: Climate Change and the Construction of Security* (Cambridge: Cambridge University Press).
- Meadows, D.L.; Meadows, D.H., 1972: *Die Grenzen des Wachstums. Bericht des Club of Rome Zur Lage Der Menschheit* (Stuttgart: Deutsche Verlags-Anstalt).
- Mod  r, Ulrika, 2019: "Why Does the UN Focus on Climate-Related Security Risks?"; at: <https://www.undp.org/content/undp/en/home/blog/2019/why-does-the-un-focus-on-climate-related-security-risks-.html>.
- North Atlantic Treaty Organisation_NATO, 2022: "Climate Change & Security Impact Assessment" (Brussels: NATO); at: https://www.nato.int/nato_static_fl2014/assets/pdf/2022/6/pdf/280622-climate-impact-assessment.pdf.
- Nyman, Jonna; Burke, Anthony, 2016: *Ethical Security Studies: A New Research Agenda* (London–New York: Routledge).
- Oels, Angela, 2012: "From 'Securitization' of Climate Change to 'Climatization' of the Security Field: Comparing Three Theoretical Perspectives", in: Scheffran, J  rgen; Brzoska, Michael; Brauch, Hans G  nter; Link, Peter Michael; Schilling, Janpeter (Eds.): *Climate Change, Human Security and Violent Conflict: Challenges for Societal Stability* (Berlin–Heidelberg: Springer): 185–205.
- Oels, Angela; von Lucke, Franziskus, 2015: "Gescheiterte Versicherheitlichung oder Sicherheit im Wandel: Hilft uns die Kopenhagener Schule beim Thema Klimawandel?", in: *Zeitschrift f  r Internationale Beziehungen*, 22,1: 43–70.
- Parker, Rita; Burke, Anthony, 2017: "The United Nations and Global Security", Burke, Anthony; Parker, Rita (Eds.): *Global Insecurity: Futures of Global Chaos and Governance* (London: Palgrave Macmillan UK): 347–367.
- Permanent Mission of France to the UN, 2020: "UNSC Arria-Formula Meeting on Climate and Security Risks"; at: <https://onu.delegfrance.org/Event-on-Climate-and-Securityrisks>.
- Permanent Mission of the Ukraine to the UN, 2017: "Opening Remarks by Permanent Representative of Ukraine to the UN, Ambassador Volodymyr Yelchenko at the UNSC Arria-Formula Meeting: Security Implications of Climate Change: Sea-Level Rise, 10 April 2017"; at: <https://ukraineun.org/en/press-center/188-opening-remarks-by-permanent-representative-of-ukraine-to-the-un-ambassador-volodymyr-yelchenko-at-the-uns-arria-formula-meeting-security-implications-of-climate-change-sea-level-rise/>.
- Permanent Representation of the Federal Republic Germany to the UN, 2020: "Joint Statement by 10 Members of the UN Security Council (Belgium, Dominican Republic, Estonia, France, Germany, Niger, Tunisia, St. Vincent and the Grenadines, United Kingdom, Vietnam) on Their

- Joint Initiative to Address Climate-Related Security Risks”; at: <https://new-york-un.diplo.de/un-en/news-corner/200622-climate/2355076>.
- Pirages, Dennis C., 1991: “Social Evolution and Ecological Security”, in: *Bulletin of Peace Proposals*, 22,3: 329–334.
- Pörtner, H.-O.; et al., 2022: *Technical Summary* (Cambridge, UK–New York, NY: IPCC); at: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_TechnicalSummary.pdf.
- Raleigh, Clionadh; Henrik, Urdal, 2007: “Climate Change, Environmental Degradation and Armed Conflict”, *Political Geography*, 26: 674–94.
- Ripple, William; et al., 2019: “World Scientists’ Warning of a Climate Emergency”, in: *BioScience*, 70,1: 8–12.
- Rockström, Johan; et al., 2009: “Planetary Boundaries: Exploring the Safe Operating Space for Humanity”, in: *Ecology and Society*, 14,2: 32.
- Rothe, Delf, 2015: *Securitizing Global Warming: A Climate of Complexity* (London: Routledge).
- Salehyan, Idean, 2008: “From Climate Change to Conflict? No Consensus Yet”, in: *Journal of Peace Research*, 45,3: 315–326.
- Scheffran, Jürgen; et al., 2012: “Climate Change and Violent Conflict”, in: *Science*, 336,6083: 869–871.
- Scott, Shirley V., 2015: “Implications of Climate Change for the UN Security Council: Mapping the Range of Potential Policy Responses”, in: *International Affairs*, 91,6: 1317–1333.
- Scott, Shirley V.; Ku, Charlotte, 2018: *Climate Change and the UN Security Council* (Cheltenham: Edward Elgar).
- Searle, John R., 1969: *Speech Acts: An Essay in the Philosophy of Language* (Cambridge: Cambridge University Press).
- Simpson, Nicholas P., et al., 2021: “A Framework for Complex Climate Change Risk Assessment”, in: *One Earth*, 4,4: 489–501.
- Simpson, Nicholas P.; Shearing, Clifford D.; Dupont, Benoit, 2019: “Climate Gating: A Case Study of Emerging Responses to Anthropocene Risks”, in: *Climate Risk Management*, 26: 100196.
- Smith, Dan; Janani, Vivekananda, 2007: *A Climate of Conflict. The Links between Climate Change, Peace and War* (London: International Alert).
- Steffen, Will; Crutzen, Paul J.; McNeill, John R., 2007: “The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature”, in: *AMBIO: A Journal of the Human Environment*, 36,8:614–621.
- Steffen, Will; et al., 2015: “Planetary Boundaries: Guiding Human Development on a Changing Planet”, in: *Science*, 347,6223: 1259855.
- Steffen, Will; et al., 2018: “Trajectories of the Earth System in the Anthropocene”, in: *Proceedings of the National Academy of Sciences*, 115,33: 8252–8259.
- Thunberg, Greta, 2018: *Greta Thunberg Full Speech at UN Climate Change Cop24 Conference* (Katowice: UNFCCC).
- Trombetta, Maria Julia, 2008: “Environmental Security and Climate Change: Analysing the Discourse”, in: *Cambridge Review of International Affairs*, 21,4: 585–602.
- Trombetta, Maria Julia, 2011: “Rethinking the Securitization of the Environment: Old Beliefs, New Insights”, in: Balzacq, Thierry (Ed.): *Securitization Theory* (London: Routledge): 135–149.
- Trombetta, Maria Julia, 2012: “Climate Change and the Environmental Conflict Discourse”, in: Scheffran, Jürgen; Brzoska, Michael; Brauch, Hans Günter; Link, Peter Michael; Schilling, Janpeter (Eds.): *Climate Change, Human Security and Violent Conflict: Challenges for Societal Stability* (Berlin–Heidelberg: Springer): 151–164.
- Trombetta, Maria Julia, forthcoming in 2023: *Handbook of Climate Change and International Security: The Politics of Climate Security* (Cheltenham: Edward Elgar).
- Ullman, Richard H., 1983: “Redefining Security”, in: *International Security*, 8,1: 129–153.
- United Nation, 1992: *United Nations Framework Convention on Climate Change* (New York: UN).
- United Nations Development Programme-UNEP, 1994: *Human Development Report 1994* (New York: Oxford University Press).

- United Nations Environmental Programme, 2011: “Livelihood Security, Climate Change, Migration and Conflict in the Sahel” (Geneva: UNEP); at: <https://reliefweb.int/report/benin/livelihood-security-climate-change-migration-and-conflict-sahel>.
- United Nations Security Council-UNSC, 2007: “5663 Meeting, Tuesday, 17 April 2007, 3 P.M., S/Pv.5663 (Resumption 1)” (New York, NY: UNSC).
- UNSC, 2007: “Letter Dated 5 April 2007 from the Permanent Representative of the United Kingdom of Great Britain and Northern Ireland to the United Nations Addressed to the President of the Security Council” (New York: UNSC); at: https://www.securitycouncilreport.org/atf/cf/%7B65BF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_pv_5663.pdf
- UNSC, 2011: “6587th Meeting, Wednesday, 20 July 2011, 3 P.M., S/Pv.6587 (Resumption 1)” (New York, NY: UNSC); at: <https://www.securitycouncilreport.org/atf/cf/%7B65BF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/CC%20SPV%206587%20RES1.pdf>.
- UNSC, 2013: “Press Conference on Impact of Climate Change on Marshall Islands” (New York: UNSC); at: https://press.un.org/en/2013/130215_ML.doc.htm.
- UNSC, 2017: “Resolution 2349. S/Res/2349” (New York: UNSC); at: [https://undocs.org/S/RES/2349\(2017\)](https://undocs.org/S/RES/2349(2017)).
- UNSC, 2018: “Deputy Secretary-General’s Remarks at Security Council Debate on ‘Understanding and Addressing Climate-Related Security Risks’” (New York: UNSC).
- UNSC, 2019: *Maintenance of International Peace and Security. Addressing the Impacts of Climate-Related Disasters on International Peace and Security* (New York). <https://undocs.org/en/S/PV.8451>.
- UNSC, 2020: *Open Debate (Video Conference) on the Impacts of Climate Change on International Peace and Security* (New York: UNSC); at: <https://undocs.org/S/2020/751>.
- Vivekananda, Janani; et al., 2019: *Shoring up Stability: Addressing Climate and Fragility Risks in the Lake Chad Region* (Berlin: Adelphi)
- von Lucke, Franziskus, 2020: *The Securitisation of Climate Change and the Governmentalisation of Security* (Houndmills Basingstoke: Palgrave Macmillan).
- von Lucke, Franziskus; Wellmann, Zehra; Diez, Thomas, 2014: “What’s at Stake in Securitising Climate Change? Towards a Differentiated Approach”, in: *Geopolitics*, 19,4: 857–884.
- von Uexkull, Nina; Buhaug, Halvard, 2021: “Security Implications of Climate Change: A Decade of Scientific Progress”, in: *Journal of Peace Research*, 58,1:3–17.
- Wagner, Jürgen, 2008: “Die Versicherheitlichung des Klimawandels. Wie Brüssel die Erderwärmung für die Militarisierung der Europäischen Union instrumentalisiert”, in: *IMI Magazin*, 14–16.
- Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen-WBGU, 2007: *Sicherheitsrisiko Klimawandel* (Berlin: Springer-Verlag).
- Zalasiewicz, Jan; Williams, Mark; Haywood, Alan; Ellis, Michael, 2011: “The Anthropocene: A New Epoch of Geological Time?”, in: *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 369,1938: 835–841.
- Zhou, Jiayi, 2017: *National Climate-Related Security Policies of the Permanent Member States of the United Nations Security Council* (Stockholm: SIPRI); at: https://www.sipri.org/sites/default/files/2018-02/p5_climate_security_wp.pdf.

Chapter 2

The Rise of Belgium as a Multilateral Climate-Security Actor: Analysis of Evolving Climate and Security Policies (2009–2021)



Amandine Orsini

Abstract What conditions are necessary for countries to embrace the climate change-security nexus? Under which dynamics and at what scales? This chapter answers these questions by investigating the case of Belgium, as so far no systematic study of the position Belgium occupies in the climate and security nexus exists. In particular, it builds on the theoretical approach of this edited volume which highlights the different security perceptions in Belgium: ecological, human or national. It then presents the actions and responses of Belgium with regards to the climate-security nexus. It shows how security issues related to climate change first appeared in Belgium within its national climate policies, because of its national interest in climate vulnerability. Knowing the collective dimension of climate risks, Belgium progressively included climate change security issues in its international policies too, by promoting bilateral aid towards developing countries for climate change adaptation, especially towards traditional aid partners or fragile regions; and by embracing the climate-security nexus as a key element of its mandate at the United Nations Security Council, especially for conflict prevention. The chapter retraces these different steps by relying on first-hand sources, including official Belgian governmental communications and policy documents on climate and security between 2009 and early 2021.

Keywords Belgian National Climate Commission · Climate vulnerability · Group of Friends on Climate and Security · Security *domino effect*

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2.1 Introduction

To understand how the climate-security nexus was embraced by Belgium, some background information on Belgian climate politics is in order. Belgium, a developed state and active member of the European Union (EU), ticks many boxes in international climate politics. Belgium ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1996, the Kyoto Protocol in May 2002, and the Paris Agreement in April 2017. Within the Belgian government, the environment division of The Federal Public Service Health, Food Chain Safety and Environment, and the National Climate Commission (NCC, see below) are tasked with ensuring the implementation of these UNFCCC agreements. Since 2009, they have produced regular reports to the UNFCCC on climate knowledge, mitigation and adaptation strategies in Belgium. Being a member of the EU helps Belgium reinforce its climate change actions in international policies, the EU being a climate change leader (Oberthür/Groen 2017). With others, Belgium sent its first National Determined Contribution defining Belgium's commitment under the Paris Agreement in October 2015. The Belgian government also follows the recommendations of the Intergovernmental Panel on Climate Change (IPCC) in drafting its national climate change objectives (NCC 2016).

Regarding the national implementation of international climate commitments, Belgium is a federal government, and competencies are therefore distributed between different policy levels. There exists no federal capacity for implementation of climate commitments, and such competency therefore relies on the three regional authorities—the Flemish, Walloon and Brussels Capital regions. This creates difficulties for Belgium in developing state-wide climate policies, the regional authorities having difficulties in agreeing upon a common approach (El Berhoumi/Nennen 2018). While objectives are adopted at the federal level, regions adopt different effort-sharing mechanisms to fulfil targets, different revenue distribution within the EU Emissions Trading System—which is one key mechanism for climate action in the EU and therefore in Belgium—and different policy instruments for medium- and long-term climate action plans. The fragmentation of the institutional system is key contextual background information to fully understand climate politics and policies in Belgium. It is also at the core of broader political discussions.

To improve coherence, and fulfil international and European commitments requiring national reporting, coordination initiatives between the different regions have been put in place. One such initiative is the NCC. Created in 2002, the NCC is composed of representatives from the federal state, and from the three regions. Interestingly, the Commission includes the Deputy Prime Minister and Minister of Internal Affairs and Security of Belgium, which suggests that climate change is also conceived as an internal security issue (see below). The NCC has been active since 2003 and is the focal point for climate change policies in Belgium, entitled to follow up on Belgian commitments at the international level (producing the implementation and review reports within the framework of the UNFCCC and of the EU) and

to follow up climate policies nationally. The NCC is also tasked with the development of Belgium's climate adaptation plans, including the National Climate Change Adaptation Strategy of 2010 and the National Adaptation Plan of 2016.

However, since the mid-2010s, a number of Belgian citizens have been asking for more action and ambition on climate change in the face of the climate emergency, especially concerning greenhouse gas mitigation, creating new internal security concerns on a different front from adaptation plans. Civil society reactions have included several court cases on environmental issues, with a landmark climate case initiated in April 2015 by citizens against the federal government for lack of compliance with climate commitments (the “VZW Klimaatzaak v. Kingdom of Belgium & Others” case, still under way), and a strong involvement of Belgian citizens in demonstrations, including the climate marches, since December 2018. As in other European countries (France and Germany), scientists supported such climate actions (Simon 2019). More recently, climate protests have radicalised, such as that against car producers in January 2020 during which 185 activists were detained by the police (Rossignol 2020). To boost coherency and ambition, a national climate law proposal was discussed in 2019 (Chambre des Représentants de Belgique 2019). The Belgian Constitution already includes the right of Belgian citizens “to the protection of a healthy environment” in Article 23 and refers to sustainable development as a general policy objective in Article 7bis. While the climate law proposal was meant to reinforce these elements, it did not pass the legislative process and was finally rejected (Orsini et al. 2021).

Despite a lack of ambition and coherency, a number of uniting features appear across the country. First, all national implementation and review reports present Belgium as a vulnerable country, especially due to sea level rise. Belgium is vulnerable to climate change and the Belgian government is aware of this issue. According to its 2016 Climate Adaptation Plan that synthesises the most recent climate change simulations, “the sea level at the Belgian coast may rise by 60 to 90 cm by 2100 with a worst-case scenario of 200 cm” (NCC 2016: 12). Belgium is highly vulnerable to flooding as a result of such a rise in sea level: in Flanders, 15% of the surface area is less than 5 metres above the average sea level. Moreover, the Belgian coastline appears to be the most built-up in Europe (MIRA Climate Report 2015). The country is ranked 26th on the RD-GAIN index—meaning it is rather vulnerable to climate change despite its capacities—and it is ranked 23rd on the Notre Dame ND-GAIN (Global Adaptation Initiative) index.

Second, the Belgian population is well aware of climate change and the need for action. Within national climate surveys (see below), the diversity of frames and geographical contexts is striking. Direct global impacts of climate and environmental changes like droughts, floods, weather extremes, sea level rise or new diseases are identified by Belgian citizens as serious issues.

These unifying features are both related to the security agenda: on the one hand, through the issue of climate vulnerability; on the other hand, through the issue of climate as a threat multiplier. And yet, there exists no systematic study of the position Belgium occupies in the climate and security nexus. The ambition of this chapter is to propose one. More precisely, it builds on the theoretical approach of this edited

volume in highlighting the different security perceptions in Belgium: ecological, human and national. Ecological security refers to the protection of the environment; human security to the protection of individuals or communities; and national security to the protection of the state. This chapter, then, presents the actions and responses of Belgium with regards to the climate-security nexus.

Methodologically, I conducted a systematic qualitative textual analysis of all first-hand governmental sources from 2009 to May 2021 mentioning both climate and security issues. Such documents included national climate reports, national adaptation plans and national climate surveys, in which I searched for any references to security issues; and national security reports, speeches at the United Nations Security Council (UNSC), and speeches of Belgian security officials, in which I searched for references to climate change (for a list of these documents, see references). Once identified, the sections of the official documents containing elements on both climate change and security issues were systematically archived and categorised according to the three security perceptions as theorised in this edited volume.

Such systematic analysis enables one to examine which conditions are necessary for countries to embrace the climate change-security nexus, under what dynamics and at what scales. Overall, applying them to Belgium reveals that it first built its climate and security strategy nationally, around the ecological and human security perceptions, before, in 2019, becoming a multilateral climate-security emulator within the UNSC. The chapter is organised into four sections. The second section, after this introduction, analyses the security perceptions one can identify throughout Belgian government documents. The third section presents the response types developed by Belgium to react to its security perceptions. The fourth section explains how, by embracing the climate change-security nexus well beyond its national borders, Belgium has attempted to act as a multilateral climate-security emulator to convince other states to tackle this nexus within the United Nations' institutions. The fifth section concludes.

2.2 Different Security Perceptions in Belgium

This section presents the three security perceptions present in Belgian official documents, in chronological order of appearance. It then provides an intermediary conclusion on such perceptions and their interactions.

2.2.1 Ecological Security

Elements of a climate-security perception based on ecological security, i.e., any modifications of the environment that can pose security threats (see also the Introduction of this edited volume) are found rather early in Belgian official documents.

Since 2005 the The Federal Public Service Health, Food Chain Safety and Environment has regularly organised surveys to test Belgian citizens' knowledge of the climate change issue and of governmental policies. These surveys were conducted in 2009, 2013 and 2017 and show that climate change is seen as an important issue for Belgian citizens: "Belgian people know particularly well the direct consequences of climate change such as, and, in this order, melting ice shields, melting ice cap in the North, sea level rise, increase of heat waves, hurricanes and storms, rain modification and biodiversity impacts (...). To a lesser extent, Belgian people estimate that climate change has (...) a relatively limited impact on the propagation of diseases such as malaria and yellow fever" (Service Public Fédéral Santé Publique 2017: 18, author's own translation). Comparing the three surveys, the diversity of the problematic events caused by climate change recognised by Belgian citizens increases with time, with melting ice, sea level rise and hurricanes mentioned in 2009, while biodiversity impacts, heat waves and rain modifications are added in 2013 and 2017.

Perception of climate effects in these surveys shows that Belgian people, especially those with a longer educational path, are well-informed about climate change. Moreover, within such surveys, nearly the entire Belgian population recognises the responsibility of human activities for climate change. All the ecological impacts of climate change are also well-perceived: impacts on sea level, on biodiversity, on earth temperatures, and on water supplies.

Ecological security perceptions are also evident within governmental reports. The *Federal Public Service Health, Food Chain Safety and Environment* recognises that "climate change has in particular links with food and water supplies, with biodiversity and ecosystem services" (Service Public Fédéral Santé Publique 2017: 23). In NCC reports, climate change is described as an important source of instability in terms of biodiversity loss, land degradation and desertification (National Climate Commission 2009: 125), these last two dimensions adding the land-use issue to the ecological equation. In 2016, the NCC recognised the importance of conducting a risk analysis for alien invasive species, which development is deemed to be related to climate change (NCC 2016: 35).

Overall, processes of global environmental change that are identifiable within official documents such as national surveys and NCC reports include melting ice shields, droughts, wildfires, sea/ocean level rise, hurricanes and storms, floods, extreme events (heavy rain, thunderstorms), alien species, species migration towards the North, new diseases, ozone depletion, heat waves, and biodiversity deterioration.

Regarding the geographies of ecological security, in 2017 Belgian citizens perceived the consequences of climate change as mostly taking place outside Belgium, even if they still recognised that climate change threatens their everyday lives (DG Environnement—du SPF Santé Publique 2017). The trans-boundary characteristic of climate change is mentioned in official documents. For instance, the permanent mission of Belgium to the United Nations recognises that "[c]limate change does not respect national borders, and neither do the more frequent and extreme weather events that it causes" (Kingdom of Belgium 2021: 1).

Ecological security therefore appears to be identifiable as a concern at home (especially sea-level rise) and globally. Climate change is presented as a matter of

extreme events and of vulnerability. Most importantly, it also generates problematic consequences for human security as is developed in the next section.

2.2.2 *Human Security*

The first human security perception, i.e., any human-related negative consequences of environmental changes (see also the Introduction of this edited volume) is visible in Belgian official documents, through the mention of the rise in food security concerns. In a 2009 NCC report, climate change is described as an important source of instability in terms of food security and public health (National Climate Commission 2009: 125). Food security also appears as a concern in 2013 in the Belgian citizens' surveys (see above). As explained recently by the Belgian permanent mission to the United Nations: "We witness climate shocks such as floods and droughts forcing displacement and pushing millions of people to their limits. They endure not only all these shocks at the same time – conflict, violence, climate events, displacement, economic crisis, COVID-19 – but are now even facing the threat of extreme food insecurity and possibly famine" (Kridelka 2020).

Often, problems of energy security and economic development are also highlighted. In 2016, the NCC issued a National Adaptation Plan for the years 2017–2020. Focusing on domestic vulnerabilities, it highlights the need for energy security measures and crisis management (NCC 2016: 35), concluding that "future climate change is projected to slow down economic growth, erode food security, and increase global inequalities" (NCC 2016: 14). According to a DG Environment to the The Federal Public Service Health, Food Chain Safety and Environment report on environmental impacts of climate change (DG Environnement—du SPF Santé Publique 2017: 23): "climate change has in particular links with (...) raw material availability, with energy supply, [and] economic development".

Overall, human security concerns reflecting socio-economic processes, as identifiable in official documents and NCC reports and communications from the Ministry of Defence, include: development cooperation, health (both within and outside the country), global inequalities, loss of economic growth (both within and outside the country), and energy security.

Geographies of human security perceptions are varied. While energy supply and economic growth are considered as national problems, food security is rather seen as threatening developing countries. As explained by the Ministry of Defence, climate change presents a threat both to national and individual security in developing countries as a "large number of people live in poverty, and climate change makes living conditions more difficult" (Belgian Defense 2019: 23). Within the developing countries category, regions in Africa (e.g., the Sahel) as well as Small Island Developing States (SIDS) are particularly referred to.

Finally, a last human security frame has appeared since 2010 in interventions made by Belgium during UNSC meetings: the importance of recognising youth rights and intergenerational equity to solve the environmental crisis. This point would be key

to improving debates at the UNSC and climate-security implications (Hardt 2021). The next section now turns to national security frames.

2.2.3 *National Security*

Climate change administrations were the first to recognise elements of the national security perception of climate change, i.e., any elements that threaten the state's integrity. In several NCC reports, climate change is described as an important source of instability in terms of migration and tensions that could lead to conflict (National Climate Commission 2009: 125). In 2017, a report on the environmental consequences of climate change by the DG Environment to the Federal Ministry of Health, Food Safety and Environment states that: "Climate change has, in particular, links with food and water supplies, with biodiversity and ecosystem services, with raw material availability, with energy supply, economic development, migration, international relations and security" (DG Environnement—du SPF Santé Publique 2017: 23, author's own translation).

Progressively, these claims have been taken up by other government departments tasked with foreign affairs and security issues. Regarding security issues, defence and the military are federal competencies. At the end of 2019, the Defence and Foreign Affairs ministries merged. Didier Reynders was appointed Deputy Prime Minister and Minister for Foreign Affairs and Defence of Belgium. In the different communications produced by these different actors, three main national security threats are associated with climate change. The first relates to developing states being particularly vulnerable to sea-level rise that threatens their very existence; the second to climate change causing instability in developing countries, such instability rebounding on Belgium; and the third to the militarisation of the Arctic region.

On the first direct threat, an intervention during a ministerial meeting of the "Group of Friends on Climate and Security" (see below) summarises the situation well: "climate change is a threat multiplier. This is, for many, the point of departure. It interacts with other risks and threats with direct and indirect implications for international security and stability; rising sea-levels pose a direct threat to existence of the Small Island Developing States" (Belgian Foreign Minister et al. 2018).

On the second direct threat, Belgium has been emphasising the importance of climate change in conflict prevention, especially in countries with high vulnerability, i.e., unstable regions and Least Developed Countries. For these, climate change is said to function as a threat multiplier, and therefore presents direct and indirect implications for international security that need to be addressed. In particular, the Middle East, Central Asia and the Pacific, and the Caribbean islands are described as increasingly unstable and insecure due to climate change (United Nations Security Council 2019). Several speeches by Belgium at the UNSC contain a reference to climate change and security linkages, such as speeches on Somalia (2020), Mali and larger regions such as Central and West Africa, and even the African continent as a whole (Ministry of Foreign Affairs 2019: author's emphasis, confirmed in the official

records of the Permanent Mission to New York). Concerning Somalia, Belgium supports its government's adoption of a national policy on climate change. The implications of climate change on human security are highlighted in relation to migration and instability, which might result in conflicts, terrorism (especially in the Sahel region) and competition for resources (Belgian Defense 2019: 27). On terrorism, Belgian security policy has been strongly focused on the fight against terrorism since the 2016 Brussels attacks. The analysis enables us to identify that a will to prevent specific security threats (terrorism) can be detected at the core of this national security narrative thanks to a better prevention of identified climate risks (for instance droughts).

The Ministry of Defence produced an *Environment and security* review document for the first time in 2019, as a strategic paper. This document presents what can be labelled as a security *domino effect* by which ecological security issues impact on human security problems, that then impact on national security issues. In particular, the review indicates that climate change engenders food security problems that engender migration and state instability, leading to conflicts both within states (terrorism—mentioned in the Sahel) and between states (competition for resources). The Ministry also indicates that ecological threats within developing countries increase migration pressure on Europe due to state instability, especially on the African continent:

In the Mediterranean, Europe has been focused on the flows of migration and refugees. These flows will not disappear, as conflicts around the Mediterranean remain rife, large numbers of people live in poverty, and climate change makes living conditions more difficult. Without major mitigation measures, climate change and urbanization will lead to agricultural output in the southern part of the Mediterranean stagnating or decreasing (...) Both sub-Saharan Africa and southern Asia will be hit very hard by climate change. This will inevitably add to the migration pressure on Europe and undermine efforts to build stable states (Belgian Defense 2019: 27).

Migration and instability facilitate the recruitment within rebel groups, as explained by the Prime Minister in the context of the permanent mission of Belgium to the UNSC:

Today's topic is not abstract, nor is it confined to the virtual walls of the Security Council chamber. As we speak, ever more erratic rain patterns are increasing tensions between herders and farmers in the Sahel. As we speak, droughts are causing displacement and are impacting livelihoods from Somalia and Yemen to Afghanistan. Affected communities become more vulnerable to recruitment by insurgents or they vie for scarcer resources (De Croo 2020).

These claims are still stated by the government, even after Belgium's term as member of the UNSC: "Large-scale climate events cause displacement, economic decline, food insecurity and social discontent. These circumstances are known as root causes of fragility and offer fertile ground for instability and turmoil. They leave young people vulnerable to recruitment by armed groups" (Kingdom of Belgium 2021).

On the third security threat, Belgium recognises the increasing tensions in the Arctic region due to the impact of climate change: "and as we speak, the melting of

polar caps is leading to a militarization of the Arctic” (De Croo 2020). This, certainly, is an important geopolitical concern.

To summarise, national security concepts have been visible in relation to climate change in Belgium, with concepts such as *international security*, *terrorism*, *conflict* and *climate change as threat multiplier*. Overall, climate and security issues are compared by Belgium to other classical major security threats: “furthermore, new challenges are testing our resilience as an international community including the increase in non-State actors threatening our security, the risk of an arms race and climate change and its impact on security” (Pecsteen de Buytsverwe 2020a). I now turn to a short discussion on the different perceptions of security.

2.2.4 *Intermediate Conclusions on Security Perceptions in Belgium*

The thorough qualitative analysis of the official Belgian documents mentioning climate and security issues reveals that the first security perceptions that can be identified are ecological security problems. The analysis reveals that these ecological security issues were recognised as creating human security problems. Finally, human security problems appear to create national security issues. A sort of *domino effect* of security impacts in Belgium is therefore identified.

By identifying such a *domino effect*, two distinctive logics appear. First, there is a logic of scales. While climate change is initially framed at the national level of policymaking, interactions on both the national and the international level of policymaking are increasingly mentioned, with international commitments being used as a driver of national policies. Second, a chronological logic is seen. Ecological security frames are the first to appear, followed by human security frames, followed by national security frames. The double focus on both scales and the chronological evolution taken together reveal interesting trends, and in particular that security issues were first mentioned within national climate change policies before climate issues were being linked to international security policies. What is also visible is the diversity of frames and the geographical contexts in which they are developed, and the fact that all kinds of different actors put forward these different concepts. This means that security perceptions do not appear to be actor-specific in Belgium. Moreover, it means that these actors can mobilise several perceptions at the same time. The next section develops the actions undertaken by the Belgian government as a response to these diverse security perceptions.

2.3 Responses to the Political and Institutional Impacts of Climate-Security Perceptions in Belgium

While analysing Belgian official documents, it was possible to identify three response types adopted by the Belgian government to react to the perceived climate-change nexus. I develop these below, presenting them in the chronological order of their appearance.

2.3.1 Building Climate Adaptation at the National Level to Limit Climate Threats

Belgium has been developing national adaptation measures to counter the ecological and human security threats created by climate change. Such adaptation measures in Belgium include several security dimensions, related to the protection of ecosystems, the population, and ultimately the state. The 2016 National Adaptation Plan includes 11 measures to be adopted at the national level, including one measure for the security of the energy infrastructure, and another for a crisis management plan (NCC 2016: 35). Concerns for coastal areas are also visible in the 2017 government plan for coastal security. In parallel to adaptation to climate change, the NCC also undertook collective initiatives for risk reduction. For instance, in 2014, Belgium participated to a Benelux working group to study transboundary issues including disaster risk reduction, and by 2017 the country had already elaborated clear regional risk assessment studies.

Climate adaptation is also recognised by the Belgian government as an issue beyond Belgium. For instance, the 2009 Belgian 5th National Communication under the UNFCCC and its subsequent 2010 Adaptation Strategy (the quotation being copied/pasted from one document to the other) indicate: “Today, the adaptation aspect also plays a central role in international cooperation for development, security issues and environmental policy” (National Climate Commission 2009: 125, author’s own translation). Development cooperation is a second response type that is elaborated below.

2.3.2 Investing in Development Cooperation and Capacity Building to Limit the Security “Domino Effect”

Another response type to limit the climate-security *domino effect*, that is visible throughout the analysis, is development cooperation. Belgian intervention in developing countries was initially conceived as an emergency aid unit, in case of climate change disasters. An emergency aid team under the umbrella of the Ministry of Defence, B-Fast, created in 2003, immediately provides assistance to countries

affected by natural or man-made disasters. As a cross-departmental unit, it includes *inter alia* the Prime Minister and the Ministry of Foreign Affairs. B-Fast interventions are mobilised within 12 hours and last no longer than 10 days. Intervention requirements include that receiving countries are not able to manage the crisis alone; agree with support; and are not affected by armed conflict (B-Fast Nd).

Progressively, Belgian development cooperation has considered the “fight against climate change” (National Climate Commission 2009: 125) from a different angle and adaptation to climate change has been seen as crucial for foreign and development policy. The need for climate change adaptation projects in developing countries (mostly in Africa) is emphasised (e.g., projects on food and water security) in many reports (National Climate Commission 2009; NCC 2013, 2014, 2015).

More precisely, in 2013, Belgium announced its commitment to climate change-related development projects dealing with food security. It also advertised a project on water security in the Comoros in its 2013 6th Communication to the UNFCCC (NCC 2013: 170). In 2014, in its first biennial report to the UNFCCC, it stated again its engagement in food security for bilateral aid for states such as Malawi, under the Malawi National Programme for Managing Climate Change, whereby 0,165 million euros were already provided in 2014. In this same report, Belgium also refers to a water security project in Uganda, of 102,000,00 in domestic currency, the Great Lakes area being a region where Belgium is, for historical reasons, investing action. The “KLIMOS: Integration of the environmental and climate change themes in the transitions towards sustainable development” project also deals with food security. This is a research platform for climate change and development cooperation by Flemish universities, with the aim of training the Belgian Directorate-General for Development and Cooperation and developing countries’ partners on sustainable development issues, (NCC 2014: 94–95).

In 2015, Belgium’s second biennial report on climate change under the UNFCCC lists numerous initiatives for food security in developing countries as capacity building and technology transfer for climate change adaptation. As reiterated in the document,

in implementation of the Federal Government coalition agreement of 2003, Belgian direct bilateral official development aid targets 18 countries, 13 of which are in Africa. Nine of these countries belong to the group of Least-Developed Countries. The following sectors are given priority: basic healthcare, education and training, agriculture and food security and basic infrastructure (NCC 2015: 122).

According to this report, targeted countries for food security, in 2013, included: Malawi, Kenya, Mozambique, countries in the Great Lakes generally (Belgium is still in close contact with its former colonies in the Great Lakes region, including Rwanda, Burundi and the Democratic Republic of Congo), Benin, Bolivia, Burkina Faso, Burundi, Cambodia, Congo, Madagascar, Mali, Peru, Tanzania, South Sudan and Togo. The report also mentions support to the United Nations Education and Scientific Cooperation Organization for water security as an adaptation strategy in Africa, Asia and Latin America. Finally, one project on human security is mentioned in the Philippines, in the form of a 2010 inter-university programme, “Towards

greater human security in Mindanao by establishing strategic research partnerships to strengthen local governance in land and water management – Philippines” (NCC 2015: 159).

In parallel with development cooperation initiatives, the Ministry of Defence is also increasingly aware of the importance of targeting developing countries. The 2019 *Environmental and Security* review presents capacity building, and especially technology transfer, as a solution for developed countries to tackle climate change abroad. Indeed, a lack of technology can impede developing states from dealing with climate change: “as a result of poverty and bad governance, science and technology are often only applied slowly, to promote sustainable farming, for example, or to mitigate climate change and alleviate water scarcity” (Belgian Defense 2019: 8). The Ministry of Defence is therefore also, since 2019, engaging in more practical solutions based on technology to help developing countries address climate instabilities. In 2019, the Minister for Defence and Minister of Foreign Affairs confirmed development aid as an international stability strategy in a short video posted on the *Climate and Diplomacy* website supported by the German Federal Government: “We are working hard – sometimes with a military presence, sometimes a diplomatic presence – to have a political solution. But also with development aid to fight against climate change” (Reynders 2019a).

Because such capacity building efforts for developing countries require funding, Belgium is active in contributing to climate funds: “Since 2013 Belgium has spent more than 700 million EUR to support climate action in the Global South. We have doubled our contribution to the Green Climate Fund and commit to scaling up our climate finance significantly in the coming years, focusing on adaptation and the Least Developed Countries. Our aim is to reach 100 million EUR a year” (Kingdom of Belgium 2021). However, according to the Belgian government, these efforts are not sufficient and should be supported by other partners, as the Prime Minister reminded other members at the UNSC: “With this in mind, we note with concern however that today globally the ten most fragile countries receive only 4,5% of climate funding” (De Croo 2020). Because funding is lacking, Belgium is aware of the need to mobilise partners and the private sector:

Being innovative requires paying adequate attention to known but intensifying thematic challenges that are closely linked to the pandemic – such as climate and security or mental health – but also to find new ways to secure adequate funding to tackle them – such as exploring further budgetary partnerships with the international financial institutions and the private sector (Kingdom of Belgium 2020a).

These quotations come from Belgian discourses at the UNSC, and Belgium is indeed trying to engage in this international institution to shape a new international security agenda, as explained in the next section.

2.4 Involving the United Nations Security Council to Initiate a Multilateral Climate-Security Response

A third response type identified is the very active role Belgium has played in the UNSC, as a multilateral climate-security response initiator. This response type is particularly interesting in two respects. First, it embraces former response types, and all three security perceptions, by suggesting a comprehensive multilateral security agenda to counter the above mentioned *domino effect*. Second, this response type is not only based on a national strategy, but is meant to engage other states, and has been developed partly in concert with other nations. This gives a much wider visibility to this response type.

Belgium does not have a permanent seat at the UNSC, but has been elected as a UNSC member six times thus far. Belgium's fifth term at the Council was in 2007/2008 and its sixth term in 2019/2020. In its previous UNSC membership (2007–2008), Belgium was already among the supporters of the climate-security nexus during the first-ever debate on the security implications of climate change, held in 2007. Its advocacy for the climate-security nexus re-emerged during its campaign for a 2019/2020 seat at the UNSC.

The Ministry of Foreign Affairs was active on climate change issues from the beginning of Belgium's campaign to get a seat at the UNSC, in September 2018. The Ministry confirmed the other ministries' concerns concerning climate change, presenting climate change as a *threat multiplier* (Belgian Foreign Minister et al. 2018) especially in unstable regions. It has also oriented Belgian actions towards an emphasis on the need to consider climate change for conflict prevention. Belgium became part of the Group of Friends in Climate Security, which aims to enhance actions on climate-related security risks within the United Nations, in 2018.

In the run-up to its election to the UNSC, the Belgian Minister for Foreign Affairs participated in a ministerial meeting in Nauru on 26 September 2018 entitled *GoF (Group of Friends) climate and security*. Belgium confirmed its preoccupation with climate adaptation and sea level rise. Moreover, it started to explain its international strategy, that relies on multilateral measures within the United Nations, in particular the transfer of knowledge and know-how from different institutions, such as the IPCC or the United Nations Environment Programme (UNEP), to the UNSC: "This is certainly not about creating new institutional layers but it is all about finding ways of bringing the know-how together and make it available when addressing security threats. This is fully compatible with a one UN approach" (Belgian Foreign Minister et al. 2018). As is evident in this quotation, Belgium is building on the UN's overall system to consolidate its climate and security approach.

After its election, the Permanent Mission of Belgium in New York officially published its UNSC mandate. This mandate mentions threats related to climate change and explains the perception that such threats need to be taken into account for conflict prevention. Climate change only appears under the prevention section of the official mandate, the other two sections being dedicated to protection and performance:

1. Prevention. Conflict prevention is an essential element of Belgian foreign policy. The UNSC must be able to address alarming situations, which are not yet international conflicts, before they degenerate. Keeping crisis situations on the agenda can also play an important preventive role. Attention to mediation, new threats created by climate change, and the continued commitment to non-proliferation of weapons of mass destruction are also part of this” (Belgium Permanent mission to New York and especially to the United Nations Security Council 2020).

Once elected, Belgium reinforced its links with the Group of Friends in Climate Security, producing joint debates, and participated actively in collective debates such as the 2020 UNSC debate *Maintenance of International Peace and Security: Climate and Security* (Hardt 2021).

Since its accessions to the UNSC, the climate-security nexus has become a key priority of Belgium which aspires to show that “security is not just armed conflicts” and that the consequences of climate change must be addressed (Reynders 2019a). Four different lines of action have been pursued within this response type, that aim to tackle the security “domino effect” at a multilateral level, and not just bilaterally.

First, prevention has taken the shape of advocating for the greening of peacekeeping operations. Since 2019, Belgium has been pushing the idea of *greening* the UN peacekeeping operations and operational consideration of climate risks (Van Vlierberge 2019; United Nations Security Council 2019). During its mandate at the UNSC, Belgium has stated that: “In addition, we believe that work should be carried out to make greater use of renewable energies in peacekeeping operations (reference to Belgian event). We therefore welcome the United Nations climate action plan and the efforts of the United Nations and its staff to ‘green the blue’” (Van Vlierberge 2019). Belgium has also expressed the possibility of including climate risks as a consideration when deciding on renewal of peacekeeping operations: “Belgium attaches great importance to the integration of climate risks into debates concerning countries or regions, including when renewing mandates for peacekeeping operations” (Reynders 2019b).

Second, Belgium has strengthened its cooperation with international institutions from the United Nations system or those working with this system. Belgium expressed support for the UN Climate Security Mechanism (Van Vlierberge 2020; Ministry of Foreign Affairs 2019), a partnership between the United Nations Development Programme, the Department of Political and Peacebuilding Affairs and UNEP, established in 2018 as an inter-agency initiative supported by Sweden, Norway, Germany and the UK, to strengthen the capacity of the UN to address the interlinkages between climate change, peace and security.

Belgium also suggests the involvement of other international institutions in the climate-security nexus. The African continent, and in particular the Sahel region, is a security priority for Belgium because in this region, the interlinkage between climate change, development aid, diplomatic and even military presence is regarded as an important aspect of conflict prevention (Reynders 2019, 2019a, 2019b). Belgium supported the United Nations Office for West Africa and the Sahel (UNOWAS) and highlighted the mission’s important role “in studying the impact of climate change on security, as part of a ‘conflict prevention’ approach” (Pecsteen de Buytswerve

2019). Through its interventions at the UNSC, Belgium also encouraged UNOWAS, which has already integrated reflections on the security impacts of climate change: “UNOWAS also plays another pioneering role: although everyone agrees that climate change is one of the causes of conflict in the Sahel, UNOWAS implements the wish of this Council by studying the impact of climate change in the frame of a ‘conflict prevention’ approach. This is vital work and I encourage the Special Representative to continue this effort” (Pecsteen de Buytswerve 2019). Regarding other parts of the African continent, Belgium underlined the role of the United Nations Regional Office for Central Africa (UNOCA): “UNOCA’s added value lies particularly in its early warning system and its coverage of regional issues – especially climate change and terrorism. In this respect, we would specifically like to applaud UNOCA’s integration of climate security into its conflict analysis” (Belgium Permanent Mission to New York and especially to the United Nations Security Council 2020a).

Belgium also addressed the UN Refugee Agency (UNHCR) at UNSC meetings, asking the agency if it considered the effects of climate change: “What is your assessment of the impact of climate change on the already existing vulnerabilities of refugees and internationally displaced peoples, displaced by conflict? How is UNHCR adapting its work to better take into account the effects of climate change as [an] increasing driver of displacement and conflict?” (Pecsteen de Buytswerve 2020: 2). The International Committee of the Red Cross (ICRC) is another institution that Belgium identifies as a potential tracker of climate change security implications:

We commend the increased attention in the protection of civilians report as well as in reports of ICRC for the particular vulnerability of conflict-affected populations to the consequences of climate change. Indeed, the world’s eight worst food crises are all linked to both conflict and climate shocks, and therefore it is our responsibility as Security Council to gain a better understanding of these linkages (Kingdom of Belgium 2020).

Third, while expressing itself at the UNSC and during official meetings, Belgium asked states within the United Nations to adopt a special clearing house mechanism on climate change and security, to be established under the umbrella of the UNSC. More precisely, Belgium would expect such a clearing house to produce a biannual report, introduced by the UN Secretary General, on climate change and security, to share knowledge on climate change’s environmental, human and security effects and to use such knowledge for conflict prevention. The Foreign Minister confirmed this agenda during a scientific workshop on geo-engineering in 2019: “Belgium has successfully integrated climate and security-related actions in the UNSC mandates for peacekeeping operations in various countries. In addition, our country advocates a ‘clearing house’ mechanism in the field of ‘Climate and Security’, which would play an advisory role for the UNSC” (Reynders 2019).

During the Arria Formula meeting in 2020, which Belgium co-organised, the Belgian Representative recommended: (i) further mainstreaming of climate-related security risks into the mandates of the UN and the UNSC, including their in-country actions and a better equipment of the missions with personnel and training; (ii) the need for improved data and information management in risk assessments was highlighted. Belgium suggested the establishment of a *clearing house* within the UN,

to provide the UNSC with relevant expertise. Accordingly, based on this strengthened information basis, the Secretary General could provide reports to the UNSC on climate-related risk and most-affected regions through, for example, horizon-scanning, and include recommendations for preventive measures. (iii) Finally, Belgium emphasised the importance of the inclusion of civil society and especially the important role of women when looking at those issues (Van Vlierberge 2020).

To promote its agenda, Belgium has been collaborating with other UNSC members. On the international scene, Belgium is known as a small state on the European continent (in terms of its territory), that is however skilful at practising burden-sharing with its partners, including in the security field (Haesebrouck 2021). The Ministry of Foreign Affairs, and especially its permanent mission to the UN, has been looking for allies at the UNSC to better include climate change issues as a preventive strategy through multilateral action. Since its UNSC election, Belgium has followed the efforts made by Sweden and the Netherlands and now works together with Germany and the Dominican Republic to have climate change recognised as a key issue at the UNSC. Looking for international partners, it became one of the 27 UN members joining the Group of Friends on Climate and Security initiative by Germany and Nauru on 1 August 2018. It then became a member of the Council's informal expert group on climate and security in 2020. The Belgian Foreign Affairs and Defence Minister confirmed collaboration between Belgium and Germany,

because Belgium is elected for two years as a non-permanent member of the Security Council, like Germany. And we try to work together to explain it: security is not just armed conflicts. It's more than that. And so we need to take care about the consequence of climate change in different parts of the world. And to be honest, from Belgium we are first of all thinking about Africa – the Sahel – to give an example. (...) And so as foreign affair[s] ministers we are more and more involved in that. The link between security and other issues: migration, but sometimes due to climate change, also poverty, bad governance, human rights. So, we need to take all those issues on board when we are discussing about one region or one country. And to do what? Not only to solve a conflict, but if it's possible, to prevent (Reynders 2019a).

In June 2020, Belgium produced a joint statement on climate security with 9 other members of the UNSC (Permanent Representation of the Federal Republic of Germany at the United Nations 2020).

Fourth, Belgium has been introducing geoengineering security implications as an important and innovative topic. The Belgian Ministry for Foreign Affairs organised an international seminar in October 2019 on “The Security Implications of Emerging Climate Altering Technologies” within the framework of its UNSC mandate. François Gemenne, a Belgian political scientist specialising in environment and security issues said that Belgium wanted to take the opportunity of its presidency of the UNSC in 2020 to bring attention to the potential risks related to geoengineering, and therefore the need for an international governance framework that is currently inexistent. According to him: “by doing that, Belgium is trying to build its specificity, compared to bigger countries such as Germany or the UK (...) The idea is to bring an innovative topic that the UNSC has never tackled so far to mark its singularity as a small country” (De Boech 2019). The Ministry for Foreign Affairs' seminar addressed scientific trends towards “mitigation alternatives through

deliberate and large-scale intervention in the Earth's climate system or 'geoengineering', for example through solar radiation modification" and possible security implications resulting from these emerging climate-altering technologies (Ministry of Foreign Affairs 2019a).

All these four elements (greening peacekeeping operations, collaborating within the UN, suggesting a *clearing-house* mechanism, and warning against geoengineering) form a very comprehensive third response type centred on climate-security multilateralism.

2.5 Conclusion

What conditions are necessary for countries to embrace the climate change-security nexus? Under which dynamics? At what scales? This chapter has attempted to answer these questions by investigating the special case of Belgium, and the process it followed to appear as a climate-security leader within the UNSC.

National climate-security concerns appear as an important matter. Belgium has started, since 2009, by embracing security issues within its national climate policies, because of its important climate vulnerability. Knowing the extent of climate risks nationally, it progressively mainstreamed climate change into its international policies a few years later. Investment in the international sphere was initiated by first promoting bilateral aid towards developing countries for climate change adaptation, especially towards traditional aid partners or unstable regions; and then by choosing the climate-security nexus as a key element of its mandate at the UNSC.

This chapter illustrates how a small European country is embracing the international level of policymaking. Overall, the chapter traces the rise of Belgium as a climate-security leader, first mainstreaming security into national climate policies and then mainstreaming climate change into international policies. After its UNSC mandate, Belgium still recognises the need for a multilateral approach to the climate security nexus. Indeed, after its UNSC mandate, Belgium is continuing to pursue its comprehensive climate and security agenda. Among other things, it restated its objectives at the High-Level Open Debate of the UNSC on *Challenges of Maintaining Peace and Security in Fragile Contexts* in January 2021 and participated actively in the Security Council Open Debate on Climate and Security organised in February 2021. Within these contexts, Belgium has highlighted three priority actions for the Security Council with regard to climate and security: (1) mainstreaming climate risk throughout its agenda; (2) strengthening institutionalisation; and (3) requesting a regular Secretary General's report to improve the information basis.

This chapter also illustrates how the geographies of the climate-security frames and actions used by Belgium are very diverse. Some are situated within Belgium, with the urgent need for climate adaptation; but many are also outside the country, and in particular in SIDS, the Sahel, the Mediterranean, Sub-Saharan Africa and Southern Asia, Somalia and Mali, Central and Western Africa, the African continent as a whole and developing countries more generally. This is due to the unstable situation

in these regions that can impact the European continent more broadly. This diversity of geographies and situations, as recognised by Belgium, confirms the importance of studying the climate-security nexus across as well as within countries.

References

- B-Fast, Nd; at: <https://b-fast.be/en>.
- Belgian Defense, 2019: “Security and Environment Review”.
- Belgian Foreign Minister, Federal Public Service Foreign Affairs, and Foreign Trade and Development Cooperation, 2018: “Intervention During a Ministerial Meeting ‘Gof Climate & Security’”; at: <https://newyorkun.diplomatie.belgium.be/belgium-un/belgian-statements/belgian-statements-2018>.
- Belgium Permanent Mission to New York and Especially to the United Nations Security Council, Ministry of Foreign Affairs, 2020: “Mandate of Belgium at the UNSC (2019–2020)”; at: <https://newyorkun.diplomatie.belgium.be/belgium-unscc>.
- Belgium Permanent Mission to New York and Especially to the United Nations Security Council, 2020a: “Unoca”; at: https://newyorkun.diplomatie.belgium.be/sites/default/files/content/target1_116297fren_20201209_unoca_interventie_bxl_en.pdf.
- Chambre des Représentants de Belgique, 2019: “Proposition De Loi Spéciale Coordonnant La Politique De L’autorité Fédérale, Des Communautés Et Des Régions En Matière De Changement Climatique Et Fixant Des Objectifs Généraux À Long Terme”, at: https://senlex.senate.be/fr/dia/structure/str_62/article/art_1087_fr_2018-07-30/element/el_3431/annotation/anno_13613.
- De Boech, Philippe, 2019: “François Gemenne: La Géo-Ingénierie Pourrait Un Jour Être Utilisée Comme Arme De Guerre (François Gemenne: Geoengineering Could Be One Day Used as War Weapon)”; at: <https://www.lesoir.be/255473/article/2019-10-22/francois-gemenne-la-geo-ingenierie-pourrait-un-jour-etre-utilisee-comme-arme-de>.
- De Croo, Alexander, 2020: *Intervention of Deputy Prime Minister and Minister of Finance and Development Cooperation at the High-Level Open Debate of the UN Security Council on ‘Climate and Security’* (New York: United Nations).
- DG Environnement—du SPF Santé Publique, Sécurité de la Chaîne alimentaire et Environnement, 2017: “Le Climat Dans Le Rapport Sur Les Incidences Environnementales (Climate Change in the Report on Environmental Implications)” (Antwerpen: Tractebel); at: https://climat.be/doc/Guidance_climat_et_impact_environmental.pdf.
- El Berhoumi, Mathias; Nennen, Célia, 2018: “Le Changement Climatique À L’épreuve Du Fédéralisme”, in: *Aménagement-Environnement: Urbanisme et Droit Foncier*, 1,4: 61–76.
- Haesebrouck, Tim, 2021: “Belgium: The Reliable Free Rider”, in: *International Politics*, 58,1: 37–48.
- Hardt, Judith, Nora, 2021: “The United Nations Security Council at the Forefront of (Climate) Change? Confusion, Stalemate, Ignorance”, in: *Politics and Governance*, 9: 5–15.
- Kingdom of Belgium, 2020: *Intervention During the POC Debate* (New York: United Nations).
- Kingdom of Belgium, 2020a: *UNSC, High-Level Open Debate on Pandemics and the Challenges of Sustaining Peace* (New York: UNSC); at: https://newyorkun.diplomatie.belgium.be/sites/default/files/content/unscc-2020.08.12-pandemics_sustaining_peace_-_belgium.pdf.
- Kingdom of Belgium, 2021: *Intervention at the Security Council Open Debate on Climate and Security* (New York: United Nations).
- Kridelka, H.E. Philippe, 2020: *Open VTC at the Security Council on Food Security Risks* (New York: United Nations); at: https://newyorkun.diplomatie.belgium.be/sites/default/files/content/20200917_-_interventie_conflict_and_hunger_-_rdc_jemen_zoedan_nigeria_2.pdf.
- Ministry of Foreign Affairs, 2019: ‘Official Declaration on Website’, *Belgian Statements at the United Nations Security Council* (New York: United Nations).

- Ministry of Foreign Affairs, 2019a: *Security Implications of Emerging Climate Altering Technologies* (Brussels: Royal Military Academy).
- MIRA Climate Report, 2015: “About Observed and Future Climate Change in Flanders and Belgium”; at: <https://climate-adapt.eea.europa.eu/metadata/publications/mira-climate-report-2015-about-observed-and-future-climate-changes-in-flanders-and-belgium>.
- National Climate Commission, 2009: “Belgium’s Fifth National Communication: Under the United Nations Framework Convention on Climate Change”; at: https://www.cnc-nkc.be/sites/default/files/content/nc5_en.pdf.
- NCC, 2013: “Belgium’s Sixth National Communication: Under the United Nations Framework Convention on Climate Change”; at: https://unfccc.int/sites/default/files/resource/bel_nc6_rev_eng.pdf.
- NCC, 2014: “Belgium’s First Biennial Report on Climate Change—Under the United Nations Framework Convention on Climate Change”; at: https://climat.be/doc/Biennal_report_BEL_2014.pdf.
- NCC, 2015: “Belgium’s Second Biennial Report on Climate Change Under the United Nations Framework Convention on Climate Change”; at: <https://unfccc.int/sites/default/files/resource/docs/2016/trr/bel.pdf>.
- NCC, 2016: “Belgian National Adaptation Plan—2017–2020”; at: https://climat.be/doc/NAP_EN.pdf.
- Oberthür, Sebastian; Groen, Lisanne, 2017: “The European Union and the Paris Agreement: Leader, Mediator, or Bystander?”, in: *WIREs Climate Change*, 8,1: e445.
- Orsini, Amandine; Cobut, Loïc; Gaborit, Maxime, 2021: “Climate Change Acts Non-Adoption as Potential for Renewed Expertise and Climate Activism: The Belgian Case”, in: *Climate Policy*, 21,9: 1205–1217.
- Pecsteen de Buytsverwe, Marc, 2019: “Intervention of Ambassador, Permanent Representative at the United Nations Security Council”.
- Pecsteen de Buytsverwe, Marc, 2020: *Intervention of Ambassador, Permanent Representative at the United Nations Security Council, Briefing Par Le Haut-Commissaire Pour Les Réfugiés, Filippo Grandi* (New York: United Nations); at: https://newyorkun.diplomatie.belgium.be/sites/default/files/content/20200618_-_sc_briefing_unhcr_-_intervention_be_-_zoals_uitgesproken.pdf.
- Pecsteen de Buytsverwe, Marc, 2020a: *Intervention of Ambassador, Permanent Representative at the United Nations Security Council, Security Council—Open Debate “Upholding the Un Charter to Maintain International Peace and Security”* (New York: United Nations); at: https://newyorkun.diplomatie.belgium.be/sites/default/files/content/intervention_be_open_debate_un_charter_09_january_2020_2_fr.pdf.
- Permanent Representation of the Federal Republic of Germany at the United Nations, 2020: “Joint Statement by 10 Members of the Un Security Council (Belgium, Dominican Republic, Estonia, France, Germany, Niger, Tunisia, St. Vincent and the Grenadines, United Kingdom, Vietnam) on Their Joint Initiative to Address Climate-Related Security Risks”; at: <https://new-york-un.diplo.de/un-en/news-corner/200622-climate/2355076>.
- Reynders, Didier, 2019: *Didier Reynders Opens Seminar on the Security Implications of Climate Change* (Brussels: Environment & Development Resource Centre); at: <https://brussels-express.eu/didier-reynders-opens-seminar-on-the-security-implications-of-climate-change/>.
- Reynders, Didier, 2019a: “Security Is About Much More Than Just Armed Conflicts”, in: *Climate Diplomacy*; at: <https://climate-diplomacy.org/magazine/conflict/security-about-much-more-just-armed-conflicts-didier-reynders-belgium-foreign-minister>.
- Reynders, Didier, 2019b: *Speech by Deputy Prime Minister and Minister of Foreign Affairs of Belgium, United Nations Security Council* (New York: United Nations).
- Rossignol, Clément, 2020: “Police Detain 185 Climate Protesters at Brussels Car Show”; Reuters; at: <https://www.reuters.com/article/us-climate-change-autos-protests-idUKKBN1ZH0NN>.
- Service Public Fédéral Santé Publique, Sécurité de la Chaîne alimentaire et Environnement, 2017: “Enquête Sur Le Climat. Rapport Final”, in: *Survey on Climate Change. Final Report (city: institution)*.

- Simon, Frédéric, 2019: “Scientists Tell Belgian School Kids on Climate Strike: ‘You’re Right!’”, in: *Euractiv*; at: <https://www.euractiv.com/section/climate-environment/news/scientists-tell-belgian-school-kids-on-climate-strike-youre-right/>.
- United Nations Security Council, 2019: *Statement by Dinh Quy Dang During the UNSC Open Debate on ‘Addressing the Impacts of Climate-Related Disasters on International Peace and Security’* (New York: UNSC); at: <https://undocs.org/en/S/PV.8451>.
- Van Vlierberge, Karen, 2019: *Statement by the Deputy Permanent Representative of Belgium to the United Nations, Arria Formula on the “Protection of the Environment During Armed Conflict”* (New York: United Nations); at: https://newyorkun.diplomatie.belgium.be/sites/default/files/content/arria_milieubescherming_en_conflict_be_interventie_final_en_1.pdf.
- Van Vlierberge, Karen, 2020: *Statement by the Deputy Permanent Representative of Belgium to the United Nations, Virtual Arria Meeting on Climate and Security at the Security Council* (New York: United Nations).

Chapter 3

Climate Security in China: An Issue for Humanity Rather Than the Nation



Juha A. Vuori

Abstract The chapter presents how China has approached the issue of climate change in terms of security by exploring the arenas of high politics, security concepts, state bureaucracies, civil society, and the United Nations Security Council (UNSC). It is based on primary sources and uses a three-fold framework that differentiates between national security, human security and ecological security. China's long-term position has been to emphasise climate as an issue of development and underline the "common but different responsibility" between developing and industrial nations. Over the 2010s though, China's position shifted from regarding climate change as a technical and political issue to one that also concerns security, understood in a "holistic" or integrated manner. Still, the understanding leans more towards the security of humanity rather than the national security of China. At the same time, "harmony between man and nature" has been incorporated into the canonised political line of Xi Jinping, although this is not legitimated with security. Accordingly, China has emphasised that the issue should be resolved through international cooperation rather than unitary measures.

Keywords China · Comprehensive security · Climate security · Climate politics · United Nations Security Council

3.1 Introduction

In this chapter I outline how the People's Republic of China's (PRC) has approached the issue of climate change in terms of security. The focus is on the past couple of decades, but understanding contemporary developments requires looking even further back, into Mao era politics. I structure the chapter through arenas where climate change could be politicised or securitised. Here, I consider politicisation as the inclusion of environmental and climate issues on the political agenda, while securitisation represents placing them into a particular category of policies that makes them urgent and about survival. In instances where the climate is phrased in terms

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of security, I estimate whether the referent objects of the Chinese notions fall within understandings of national, human, or ecological security as outlined in the introduction of this volume (see Chapter 1). As such, securitisation can happen through speech acts within high politics (Buzan et al. 1998), or diffusely through rationales, techniques, and technologies (Huysmans 2014). Therefore, I approach the arenas of high politics, security concepts, state bureaucracies, the military, civil society, and the United Nations Security Council (UNSC) chronologically, in order to highlight moments of possible securitisation in them.

Overall, there has been a dramatic shift in how the environment is considered in the PRC. Mao's China (1949–1976) waged a “war on nature” (Shapiro 2001) that aimed to increase China's population, harness natural resources to serve national reconstruction, and improve China's standing in the world. This militaristic approach manifested in numerous mass campaigns against sparrows and other vermin as well as gigantic projects to conquer the environment, like building the Three Gorges Dam that is the largest in the world. In contrast to working towards victory over nature, the Hu Jintao and Xi Jinping administrations in the 2000s have raised the importance of a clean environment for economic growth, a prosperous society, and even the future of humanity.

Internationally, China has been involved in environmental politics since the United Nations (UN) Conference on Human Nature in 1972 (United Nations 1972). China participated in the Montreal Protocol that aimed to curb ozone depletion, and has had a leading role in climate politics since the Kyoto Protocol was adopted in 1997. Since the 1972 UN meeting, China's main political line in international forums that have dealt with environmental issues has been to emphasise the industrialised/developing nation dichotomy and promote the view that international agreements cannot jeopardise China's sovereignty or economic development. China was also a part of the Kyoto Protocol from its inception. Within that set of agreements, China was considered a developing country, which meant that it was not required to make emission cuts (Chen 2012). China's long-term position has been to emphasise climate as an issue of development and underline the “common but different responsibility” between developing and industrial nations (see, for example National Development and Reform Commission of the People's Republic of China (NDRC) 2012: 24). This has meant that China avoided committing itself to externally-binding agreements on the climate. This changed in 2015, when China committed itself to international emission cuts at the Paris climate summit and supported its continuation, despite the Trump administration's decision to withdraw from it. This signalled a new stance in China's international climate politics, as it has tended to play its moves in relation to the United States (US). Still, China and the Biden administration returned to making joint statements on their climate policies in conjunction with the climate meeting in Glasgow 2021, in the context of the United Nations Framework Convention on Climate Change (UNFCCC) meeting at the Conference of the Parties.

Beyond the arena of specific environmental and climate meetings, climate politics are part and parcel of China's foreign policy (Vuori 2015, forthcoming). China's line here since the late 1970s has been to maintain peaceful relations in order to concentrate on its domestic development (Lanteigne 2020). This has paved the way

for China's return to a great power status. Accordingly, China has been active in its efforts to remain off the security agendas of other states, despite its continuously increasing power capacities (Vuori 2018). During the Xi Jinping administration, China has characterized itself as a responsible great power and aimed to create a new type of great power relationship with the US. This has coincided with reaching the domestic goal of China becoming a moderately prosperous society (Xi 2017a).

Domestically, the effects of climate change have been gradually recognised, both in internal assessments and in policy statements by the party leadership. There has been a strong connection with energy security since the early 1990s, when China became a net oil importer. The concern with maintaining an energy supply to guarantee China's sovereignty has been a greater concern than the reduction of fossil fuel emissions, even though domestic renewable energy sources serve the goal of energy independence (Nyman/Zeng 2016; Trombetta 2018). China's energy mix is still, at the time of writing, highly dependent on its coal production, even though there have been concerted efforts to increase renewable energy and China has been a leading country in the production of wind turbines and solar panels. At the same time, climate and environmental issues have been incorporated into Xi's ideological canon and thereby hold a major position at the highest level of Chinese politics. Climate issues are also included in the political principle of harmony between man and nature which is part of China's comprehensive view of security (Xi 2017a). This formulation is a departure from Mao's combative view on nature, but an elaboration of the more environmentally-conscious line adopted by the Hu Jintao administration.

As part of its international commitments and the development of its domestic climate politics, China has enacted a number of plans and programmes regarding climate change. These have mainly been published by the National Development and Reform Commission (NDRC) which occupies a powerful position within the Chinese political system. Examples of these include the National Climate Change Plan 2014–2020 (NDRC 2014), and policy papers and reports on its policies regarding climate change since 2008 (e.g., National Development and Reform Commission of the People's Republic of China (NDRC) 2012, 2013; Information Office of the State Council of the People's Republic of China 2008). Issues identified in such reports and programmes as either being directly caused by or having a climate change connection in China include: desertification, water shortages, sea level rise, air pollution, mudslides, ocean acidification/loss of marine biodiversity, and zoonotic diseases (i.e., how diseases emerge in animal carriers due to changing environments and subsequently spread to humans). More specifically, glaciers are melting in the Himalayan mountain range (Western China), Eastern and South Eastern coastal region are threatened by rising sea levels and typhoons, coastal regions dependent on the fishing industry for economic sustenance are in difficulty, desertification is taking place in Northern China, and there is both flooding and drought in various regions. China also publishes frequent reports on the state of its environment.

Across this chapter, I evaluate how climate change appears in Chinese political formulations, security concepts, bureaucratic practice, and societal discussions. This analysis derives from the most recent developments in the arenas as well as previous case studies of China's climate securitisation (Vuori 2011, 2015, forthcoming; Bo

2016; Trombetta 2018; Hernandez/Misalucha-Willoughby 2020). The picture that emerges is not clear-cut and contains many elements. For example, reports on the state of the environment concern domestic human security. Internationally, China's current line promotes the view that climate change is a shared concern for humanity. It is still mainly presented as a technical issue that relates to development concerns, though. As such, the threat that climate change poses is viewed more as a threat to humanity and human security, rather than a direct threat to Chinese national security. Since the 1990s, a number of ministries and special commissions have dealt with the climate issue. It has also been incorporated into the current ideological line of the Communist Party, which makes it a top political priority. I outline these developments through the chapter, beginning with the arena of high politics. This is followed by an analysis of security concepts, state bureaucracies, the military, civil society, and finally I focus on China's position on the question of including climate change in the UNSC.

3.2 The Arena of High Politics: Political Line Formation on the Climate

In terms of the political line formation which represents the highest form of politics in China, President Jiang Zemin was the first to mention the environment in a report at the National Party Congress in 1997 (Jiang 1997). Accordingly, he was the first to formally recognise the connection between environmental strain and population growth that Mao's China had denied. President Hu (2007) set the building of an "ecological civilisation" as a goal at the 17th National Party Congress in 2007. It was added to the Constitution of the Communist Party at the 18th National Party Congress in 2012, and environmental damage and ecological benefits became assessment criteria for state officials (Hu 2012). Xi Jinping has continued the line of promoting an ecological civilisation in China as a major strategic goal, with green development a crucial part of this. The Green Gross Domestic Product (GGDP) initially tried out by Jiang was re-launched in 2015 (Gongsheng et al. 2015) as part of this policy line of a "new era of socialist ecological civilisation". In this vision, nature is to be guarded rather than fought, and indicates that the Maoist tradition with regard to the environment has been abandoned in the China of the 2010s, and China under Xi has continued to emphasise a "community of a shared future of mankind" (人类命运共同体, *rénlèi mìngyùn gòngtóngtǐ*) in regard to climate issues (Hu 2012; Xi 2017b).

Xi's line has been to mitigate the dire impacts of climate change without making it a matter of security at the international level. Crucially, in the 2013 report on climate change (NDRC 2013: 2), climate change was incorporated into the main Chinese policy line which has become the mainstay of Xi's ideological formulation of "socialism with Chinese characteristics" that entails many societal aspects:

We must prioritize ecological development and incorporate it into the 'five in one' arrangement for socialism with Chinese characteristics, which includes economic,

political, cultural, and social development, with a focus on promoting green, cyclical and low-carbon development. These actions will increase the strategic position of combating climate change in China's overall economic and social development.

In other words, environmental concerns should be incorporated into all aspects of Chinese society, economy, and politics, and into the main ideological concept of Xi Jinping's thought. Protecting the environment and harmony between human and nature are thus part of socialist civilisation in this new ideological formulation.

Beyond Chinese society, Xi has also emphasised the "common aspirations" of all nations with regard to the climate issue (NDRC 2013: 3): "The global impact of climate change has become increasingly prominent and posed the most severe challenge to the world. As the global awareness of climate change is gradually increasing, it has become the common aspiration of all nations to tackle climate change". This formulation has been expanded into the notion of "a community with a shared future for mankind", of which tackling climate change is a major part (Xi 2017a: 53).

Indeed, Xi has made environmental issues a major part of his policy stance. The 19th CPC National Congress in 2017 was where he solidified the concept of the "beautiful China initiative" and emphasised "global ecological security" as the mainstay of his second term (Xi 2017a). Indeed, noting the progress made in building an ecological civilisation was among the first categories he reported on in the speech. Beyond China's domestic efforts, Xi noted that China has taken the "driving seat in international cooperation to respond to climate change" and "become an important participant, contributor, and torchbearer in the global endeavor for ecological civilization" (Xi 2017a: 4).

Furthermore, "ensuring harmony between human and nature" is a part of "socialism with Chinese characteristics in the new era", as is a "holistic approach to national security" that includes elements such as "traditional and non-traditional security, and China's own and common security" that aim to "foster new thinking on common, comprehensive, cooperative, and sustainable security" (Xi 2017a: 20–22). Climate change is also listed among the common uncertainties and destabilising factors faced by humanity (Xi 2017a: 52): "unconventional security threats like terrorism, cyber-insecurity, major infectious diseases, and climate change continue to spread". To "build a community with a shared future for mankind", "we should be good friends to the environment, cooperate to tackle climate change, and protect our planet for the sake of human survival" (Xi 2017a: 53). To make sense of such formulations, it is necessary to examine the arena of China's overall security concepts.

3.3 The Arena of Security Concepts: Human rather than National Security

Despite its long-time opposition to presenting climate change in terms of security, particularly at the UNSC (see below), China has not been oblivious to the global

security claims that have concerned the climate, and has maintained the crucial role of the Intergovernmental Panel on Climate Change (IPCC). In the post-Cold War period, China has emphasised that it is working under a “new concept of security” that was introduced with the initiation of the Shanghai Cooperation Organization (then still the Shanghai Five) in 1996. China began to publish White Papers on its national defence in 1998, and environmental pollution was mentioned among threats to international security in the very first of these (Information Office of the State Council of the People’s Republic of China 1998). The new concept was a departure from previous notions in that what China pursued was, to a large extent, the security of its “sustained development”, or its “comprehensive national strength” (综合国力, *zōnghé guóli*) on a range of battlegrounds (*inter alia* in military, political, economic, and technological areas). The new security concept thereby contained political, defence, diplomacy, economic, energy, transnational crime, and environmental issues, as well as geopolitical, ethnic, and religious ones amongst others (cf., Information Office of the State Council of the People’s Republic of China 2004, 2006). Indeed, environmental disasters were included among “increasingly prominent” issues in China’s National Defence White Paper for 2008 (Information Office of the State Council of the People’s Republic of China 2008, 2008a), and climate change was included in a list of “security threats posed by ... global challenges” for the first time in that for 2010: “Security threats posed by such global challenges as terrorism, economic insecurity, climate change, nuclear proliferation, insecurity of information, natural disasters, public health concerns, and transnational crime are on the rise” (Information Office of the State Council of the People’s Republic of China 2011).

In Chinese conceptualisations of comprehensive security, climate change is not simply a direct threat. It has vital implications through its indirect effects in other security-related fields. These include social stability, which is already under stress from the major health issue of air pollution, which is monitored hourly in some Chinese cities (Rohde/Muller 2015). This was a major impetus for Premier Li Keqiang’s declaration of a “war on pollution” in 2014 (Martina et al. 2014). As such, ecological security (生态安全, *shēngtài ānquán*) was included in the national security system for the first time in the inaugural meeting of the Central National Security Commission (Xinhua 2014). In its entirety, Xi’s “holistic” (or integrated), “overall security outlook” or “national security path with Chinese characteristics” listed 11 issue areas of concern which included ecological security and covered “the spheres of politics, territory, military, economy, culture, society, science and technology, information, ecology, nuclear, and natural resources” (Xinhua 2014). These have since been expanded to cover 16 separate security items.

The connection between climate change and China’s domestic security concerns has also been vocalised in China’s report of its actions to the UNFCCC, where “China’s domestic needs for sustainable development in ensuring its economic security, energy security, ecological security, food security as well as the safety of people’s life and property and to achieve sustainable development” are presented as key (NDRC 2015). This requires that China maintain a “sense of responsibility to fully engage in global governance, to forge a community of shared destiny for

humankind and to promote common development for all human beings” (NDRC 2015). The National Climate Change Plan (NDRC 2015) has a similar tone, as it states that “climate change has a bearing on the overall situation of China’s economic and social development, and is essential for maintaining China’s economic security, energy security, ecological security, food security, and the safety of people’s lives and property”.

In Xi Jinping’s speech at the 19th Party Congress (Xi 2017a), ecology and the conservation of nature and the fight against various forms of pollution are mentioned in several sections. Still, national security and military issues continue to have their own separate sections. Indeed, the presentation of the most vital national security issues does not explicitly mention the climate: “We must put national interests first, take protecting our people’s security as our mission and safeguarding political security as a fundamental task, and ensure both internal and external security, homeland and public security, traditional and non-traditional security, and China’s own and common security” (Xi 2017a: 20–21). Xi’s speech remains the most authoritative policy line formation until the next Party Congress in 2022. It is therefore important to emphasise that climate change is positioned as a concern for shared human survival, but not directly tied to China’s national security. This would seem to indicate that climate change is recognised as a security issue, but the analysis shows that the referent object is humanity rather than the Chinese nation. This is also the reason why China has suggested that climate change should be tackled via international efforts, where China is also increasing its leadership role. China’s national security focus is still premised on the issues of political security, separatism, and terrorism. At the same time, ecological civilisation has become an integral part of the overall ideology of “socialism with Chinese characteristics”. While this may be the result of security-oriented thinking, it is not legitimated with national security speech in the same manner as domestic national security issues have been (cf. Vuori 2011).

That the climate issue has gained in prominence, both in ideological formulations of the highest order and official security formulations, has meant that the issue has also become more prominent within the bureaucracies involved in implementing policies. It is important to be aware that China is a party-state, where the Communist Party dominates the state, and where official political formulations such as those put forth by Xi Jinping still have a bearing on the implementation of climate policy. I outline the institutional impacts of such formulations next.

3.4 The Arena of State Bureaucracy: Development and Impacts

A defining feature of the Chinese political system is how policy lines developed at the highest levels of politics trickle down the bureaucratic system. Part of the political culture in China is to interpret the at times vague or formalistic slogans and terms into practical implementations that may serve more parochial local interests, which can

diverge greatly from what the central policy aims at. This may provide opportunities for diffuse securitisation (Huysmans 2014) that brings security logics into implemented practice even without a policy line phrased in terms of security. At the same time, securitisation moves at higher levels of policy require their implementation (Vuori 2011).

The Chinese discourse on climate change gradually shifted during the 2010s from developmental concerns toward considering the issue in security terms, with intensification in the latter half of the decade. In 2008, the White Paper on Climate Change published by the Information Office of the State Council indicated that China was more willing to align itself with the general trend on issues of climate change by phrasing it in terms of “threat” rather than mere “impact” as had been the line before. The proposed means to tackle it were still within the regular handling of international affairs, even though the issue was expressed as a major concern for humanity (Vuori 2011: 141–153). For example, in the Foreword to the White Paper, the issue is presented as a global “concern”: “Global climate change and its adverse effects are a common concern of mankind”. However, the responsibility for these “challenges to the survival and development of human society” is placed on the activities of developed nations. China was depicted as a developing nation, which is thereby being adversely affected by climate change, which threatens its “natural ecosystems as well as the economic and social development” (Information Office of the State Council of the People’s Republic of China 2008).

The suggested measures in China’s National Plan for Coping with Climate Change were not extraordinary or exceptional in the way security politics tends to be understood, for example according to Buzan et al. (1998). They were in accordance with the then-prominent foreign policy line of “harmonious development” (Vuori 2015). Thereby, the Chinese authorities did not advocate or seek to legitimise any “breaking of rules” of either domestic or international politics via the issue of global climate change (Vuori 2011). Emphasis was put on the UNFCCC and the Kyoto Protocol as “the legal foundation for international cooperation in dealing with climate change” that also “reflect the common understanding of the international community” (Information Office of the State Council of the People’s Republic of China 2008). According to the Chinese authorities, a solution to the issue would require international economic, technological and legal cooperation, rather than uni- or multilateral security measures.

In 2012 China connected the dire effects of climate change to its domestic environmental degradation and presented itself as among the states most vulnerable to the adverse effects of climate change: “weather and climate disasters have impacted China’s economic and social development as well as people’s lives and property in a large degree” (National Development and Reform Commission of the People’s Republic of China (NDRC) 2012: 2). Accordingly, the government attached great importance to the issue in the “mid- and long-term plans for economic and social development”, and made domestically binding decisions to “reduce energy consumption”, “and raise the proportion of non-fossil fuels in the overall primary energy mix” (National Development and Reform Commission of the People’s Republic of China (NDRC 2012: 2). Emission cuts were seen here as the means to guarantee the

continued growth of China's economy and the prosperity of its communities. The environment had previously been sacrificed to produce economic growth, yet this top priority was now seen as being negatively impacted by climate change.

China avoided using explicit security terminology to characterise the climate issue. Nevertheless, it implemented measures that would meet the needs of other countries who framed climate change as a security issue. For example, China had already assumed the leading position in the manufacture and deployment of wind and solar energy power production (Chen 2012). Still, the measures were not legitimated with security logic, but with an emphasis on the reduction of the "negative impact of climate change on economic and social development, production and the people's welfare" (National Development and Reform Commission of the People's Republic of China (NDRC) 2012: 11). This is also the overall image when we look deeper into specific bureaucracies that have been tasked with the climate issue.

3.4.1 The Arena of Climate Bureaucracy: Increasing in Prominence

Climate-related bureaucracies, both in terms of their number and influence, have followed the gradual shifts in the overall attitude towards the environment at the highest level of policy. China established a leading small group for environmental protection under the State Council in 1971 as it joined the UN, launched its first environmental regulations in 1973, set up an Environmental Protection Office in 1974, and included environmental protection in the Constitution in 1978 (Ross 1999: 298–299). Article 26 of the current Constitution of the People's Republic of China (2018) reads: "The state protects and improves the environment in which people live and the ecological environment. It prevents and controls pollution and other public hazards".

The climate change issue was initially considered a technical and scientific issue by the State Council, which was reflected in the establishment of the National Coordination Group on Climate Change under the State Council's Environmental Protection Committee in 1990, to provide support for the negotiation of the UNFCCC. This group was instrumental in forming China's position in the UNFCCC and the Kyoto protocols. It also made the political link between energy consumption and climate change, which turned the issue into one of development and strategic energy interests as China became a net oil importer at the same time. The national group gained more prominence in 1998 when it was renamed the National Coordination Group on Climate Change Strategy (NCGCCS) and moved to the State Development Planning Commission that in 2003 became the National Development and Reform Commission. In 2004 the NCGCCS was elevated to the National Leading Group on Climate Change, headed by Premier Wen Jiabao (Qi/Wu 2013: 303). In 2008 the State Environmental Protection Administration was redesignated the Ministry

of Environmental Protection, which in 2018 became the Ministry of Ecology and Environment.

On the central level, China's policy has been guided by the National Leading Group for Addressing Climate Change (formerly the National Coordinating Committee on Climate Change), and administered by the National Development and Reform Commission (NDRC 2013: 5–6) that has also handled energy security-related matters since 1993 (Nyman/Zeng 2016: 303). Indeed, while there have been many ministries and state bureaucracies involved with the handling of the issue, none of these include those that are generally thought to deal with matters of security. The only exception here is the Ministry of Civil Affairs, which has revised the National Emergency Plan on Natural Disaster Relief. This plan has focused on early warning systems, drought relief, transition relief, and emergency response systems (National Development and Reform Commission of the People's Republic of China (NDRC) 2012: 15, 2013: 27–29). The China Meteorological Administration has raised the climate issue in terms of “climate security” since at least 2014, yet the NDRC maintained the upper hand in viewing the status of the issue as one of development (Bo 2016: 104–105). The Ministry of Ecology and Environment established in 2018 is a new addition to the bureaucratic mix, and has gained more prominence for the issue and it is in charge of publishing the reports on China's climate policy and actions.

The same trend of climate issues gaining in prominence is also evident in China's Five Year Plans (FYP) that have been developed into broader planning programmes. These overall plans outline the broad strokes of China's economy in the tradition set by the Soviet Union's planned economy model. It is therefore beneficial to examine how the issue is presented in China's FYPs.

3.4.2 The Arena of Five Year Plans: Adaptation, Mitigation, but not Security

China's Five-Year Plans have outlined national policies to cut carbon emissions, and invest in renewable/green energy and sustainable economic development. The Ninth Plan in 1996 presented sustainable development as a national goal, the 11th Five-Year Plan (2006–2010) presented a “big change in the relationship between the environment and development” and noted that “economic growth is not the equivalent of economic development”, and the Twelfth Plan set goals for domestic emission cuts, and presented plans for a carbon tax and a domestic emission trade system (Kopra 2016: 238–241). This shows how the weight of the climate issue has shifted in China. Indeed, the 12th FYP (2011–2015) was really the first to make climate change an explicit national objective and can be considered a landmark in China's domestic climate politics (Qi/Wu 2013: 304). The plan had an entire chapter on concrete plans of action on low-carbon development (The State Council 2011).

The Thirteenth FYP (2016–2020) stated that China is working “hard to both adapt to and slow down climate change”, “take active steps to control carbon emissions, fulfill our commitments for emissions reduction, increase our capability to adapt to climate change, and fully participate in global climate governance, thus making a contribution to the response to global climate change” (National People’s Congress & Chinese People’s Political Consultative Conference 2016). While it mentions national security issues that range from ideological security to cybersecurity, and that China will “establish sound systems for ecological risk prevention and control, and improve capabilities to respond to ecological and environmental emergencies in order to keep China ecologically secure”, and while mitigation of and adaptation to climate change are major themes, the notion of climate security as such does not feature in the FYP (National People’s Congress & Chinese People’s Political Consultative Conference 2016).

The current Fourteenth FYP positions climate change adaptation and mitigation as a central focus of Chinese developmental policies for the period 2021 to 2025 (National People’s Congress 2020). Here, China emphasises its goal of reducing CO₂ emission by 2030 and achieving carbon neutrality by 2060. It is unclear what the effects of COVID19 will be here. While various aspects of maintaining national security and defence are specific sections in the plan, the climate issue is presented in terms of development rather than security.

In line with this, while the Chinese military has been tasked with, for example, relief efforts, it does not have a major role in dealing with climate change politics in China. It is none the less appropriate to gain some sense of the People’s Liberation Army’s approach to the climate issue, as the military is a potential diffuse securitising actor.

3.5 The Military Arena: Disaster Relief

The People’s Liberation Army (PLA) is the Communist Party’s military, and even though it has undergone continuous modernisation and professionalisation since the mid-1980s, it is still headed by the party leadership. Xi Jinping has instigated major reforms in the military. Both the military and climate politics have been included in Xi’s concentration of power into his hands, in the form of new central level commissions (Hernandez/Misalucha-Willoughby 2020). While the military has had an expert committee on climate change since 2008 (Bo 2016: 105) that consists of experts from the NDRC, the Ministry of Foreign Affairs, the Ministry of Science and Technology, the China Meteorological Administration, the State Bureau of Oceanography and the National Natural Sciences Foundation Commission (Freeman 2010: 21), it has not been very vocal, beyond disaster relief issues (Brzoska 2012). Indeed, the PLA has been explicit in not linking climate issues and national security (Freeman 2010: 22), and resisted the inclusion of other non-traditional security within its remit until the early 2010s (Ghiselli 2021). As such, the PLA was against accepting missions beyond protecting China’s territory and political sovereignty until the 2010s. Despite

its resistance, the military has a role in dealing with major natural disaster relief efforts, and has been tasked with planting trees to fight desertification and climate issues.

While the Chinese party-state is in a dominant position with regard to Chinese society, the climate issue has also been discussed in the Chinese public sphere, which could potentially voice the issue in terms of security. Here too, though, the issue has not been framed in terms of national security. I turn to this arena next.

3.6 The Arena of Civil Society and Expert Communities: Raising Awareness

While China's civil society and expert community have much greater freedom compared to Mao's China, both are still controlled and surveilled by the party to a great degree. Nevertheless, civil society and non-governmental organisations are active in the environmental field, mainly concentrating on raising awareness of the issue of climate change. China's first environmental non-governmental organisation (NGO) was established in 1994 (the Academy for Green Culture, later renamed the Friends of Nature) and today these NGOs number in the thousands (including the China Youth Climate Action Network, The Environmental and Development Institute, and Global Village Beijing). The China Civil Climate Action Network is an umbrella organisation that brings them together. While these associations are important in raising awareness about climate change and other environmental issues, their political capacity is limited, as with other non-governmental organisations. Indeed, while there is a "green public sphere" in China, its effect on climate policies is very limited and international environmental NGOs are under state supervision, like NGOs in other fields (Zhang/Orbie 2021: 7–10). Traditional and new media are crucial for the dissemination of views from this public sphere. Both remain effectively censored, though (Vuori and Paltemaa 2015; Paltemaa et al. 2020), which partly explains the limited role public opinion has had on policy formation thus far (Zhang/Orbie 2021: 8–9).

For example, a study of Weibo, the largest micro-blogging service in China, during the 2015 Paris climate negotiations, showed that institutions, state media, and international actors were the prime posters, while Chinese NGOs and intellectuals were mostly absent. Urban areas dominated the discussion, and awareness-raising regarding climate change was the main point of discussion. In terms of threats, climate change appeared as a global danger that had hardly any connection to China's national context (Liu/Zhao 2017). Still, a significantly larger proportion of Chinese college students accepted anthropogenic climate change and supported entering into an international agreement for combating it than their US counterparts in a comparative survey (Jamelske et al. 2015). A survey (Yu et al. 2013) on the Chinese public's attitude towards climate change showed that some are willing to act individually

against climate change and trust that the government is handling the issue, while others are not willing to commit to acting themselves.

When it comes to the effect of epistemic communities, some Chinese academics have raised the issue of climate change in their publications. Most of this discussion has been engaged in by meteorologists (Freeman 2010), yet the field of International Politics has also been featured here. For example, Zhang (2010) suggested that climate change presents four national security concerns for China: rise of sea levels, endangerment of livelihoods, national defence and strategic projects and construction, and international climate commitments circumscribing sovereignty. The Chinese academic discussion on energy as a security issue is fairly recent, and the main concern here has been about the survival of the People's Republic (for a review, see Nyman/Zeng 2016: 305) rather than global, environmental, or human security concerns. Accordingly, the risks which the reliance on oil imports brings for China in terms of geopolitics is the greatest concern in this literature (Trombetta 2018: 190), but the connection between fossil fuel consumption and the threat of climate change are becoming more widely discussed here too (Nyman/Zeng 2016: 306).

The division between domestic environmental and international climate politics is quite evident in the Chinese academic discussion that specifically focuses on environmental security issues. A nationalistic worry here is that the international securitisation of climate change may work to contain China geopolitically and undermine economic development, while domestic concerns focus on issues such as the sustainability of environmental systems, and food and water security (Nyman/Zeng 2016: 307). Overall, the role of such academic discussions has been to provide the vague political concepts developed at the highest echelons of the Party with more concrete interpretations, which provides for some potential for impact at the level of implementation (Zhang/Orbie 2021: 8). The hesitancy to present climate change in terms of security rather than development is quite evident in China's position on the issue in the UNSC too, which is the final arena I discuss here.

3.7 The Arena of the UNSC: From Overall Opposition to Recognition of the Issue for Some

As a permanent UNSC member China opposed the presentation of climate change as a security issue at the UN Security Council meeting in 2007. China considered it a matter of sustainable development and argued that the Security Council did not have the "professional competence" to deal with the matter, and suggested there should be no follow-up to the discussion (United Nations Security Council 2007). Climate change was discussed as possibly having security implications at the UN General Assembly in 2009, yet China retained its position that the issue was one of development, and that the UNFCCC was the key instrument for dealing with it (United Nations General Assembly 2009). The Security Council returned to the debate in

2011, which resulted in a presidential statement that presented climate change as a threat multiplier (UNSC 2011). China still retained its stance on development as the fundamental issue and noted that the UNSC did not have the “means and resources” for addressing it. In 2013, together with Russia, China boycotted the discussion of the issue at the UNSC, when it was again presented by the United Kingdom. China retained this position during the later meetings/debates at the UNSC.

There was a major change to this position at the meeting of the UNSC in 2019, where the Chinese representative explicitly framed the issue as undermining peace and stability (UNSC 2019). Specifically, the representative stated that “climate change is a major challenge that affects the future and destiny of humankind” because it “induces natural disasters, wreaks havoc in many parts of the world and poses grave threats to food security, water resources, the ecological environment, energy, human life and property” (UNSC 2019). Crucially, these issues are “disruptive factors in certain regions” that are “undermining peace and stability” (UNSC 2019). Accordingly, the suggestions made by the representative of China were legitimated with the need to maintain “international peace and security” (UNSC 2019), which is a clear departure from China’s previous positions on the issue. Leaning more towards the security of humanity than national security, China underlined the necessity to “uphold multilateralism and foster a sense of community and shared future for humankind” (UNSC 2019) rather than to try to go at the issue alone. Sustained development should inform the readjustment of development imbalances, which should be addressed “through common development” in climate change-related issues such as “food insecurity, humanitarian crises and mass migration” (UNSC 2019). Finally, China promoted upholding the Paris Agreement and emphasised the role of the UNFCCC, while still retaining “the principles of equity and common but differentiated responsibilities and respective capabilities” (UNSC 2019). Such efforts work towards what the Chinese representative framed as “a world of lasting peace, universal security, common prosperity, openness and inclusiveness – a world that is clean and beautiful” (UNSC 2019).

The UNSC held a keynote Debate on Climate Change and Security in 2020. In this discussion China maintained its long-term line in the UNSC in relation to climate change: the issue should be resolved through international cooperation where countries have common but differentiated responsibility, and work within the UNCFCC framework (UNSC 2020). Furthermore, the Chinese representative framed climate change as an issue of development rather than security: “Climate change is, in essence, a development issue rather than a security issue; there is no direct linkage between the two. The solution to climate change lies in sustainable development. Progress on the development front is conducive to effectively addressing climate change and security risks exacerbated by climate change” (UNSC 2020). Still, the Chinese representative suggested that the UNSC could consider climate change as a security issue for individual countries:

The Security Council, as the organ handling international peace and security issues, should act in line with the mandates of the relevant resolutions, analyse security challenges and the security implications of climate change for the countries concerned and discuss and handle relevant issues on a country-specific basis (UNSC 2020).

China's attitude remained the same in the 2021 UNSC High Level Debate, where it also emphasised its commitment to achieving its national CO₂ emissions peak by 2030 and achieving carbon neutrality by 2060 (UNSC 2021). This suggests that, despite the significant change in the 2019 meeting where China was willing to let the UNSC examine climate change as a security issue on a country-by-country basis, China's overall line on climate change and international security within the UNSC is still to keep the issue away from security terminology and maintain it within the frame of international cooperation and bargaining.

3.8 Conclusions: An Issue for Humanity, not China's National Security

As I have showed in this analysis above, the climate change issue has shifted from a technical political issue to a major element of the leading political position in China. This shift has not been legitimated with specific national security speech, though. Nevertheless, environmental and climate issues are included in the list of 16 areas of concern that make up the Chinese holistic or integrated notion of security today. As such, the official security concept is broad indeed, and contains many elements of human security, in addition to the traditional political and military core. Indeed, climate security in China is framed as a human security issue that concerns the whole of humanity rather than only Chinese national security. Here, the concern is with a humanity that shares a common future rather than a specific group of vulnerable individuals somewhere. At the same time, China has been reluctant to use security vocabulary in international organisations like the UN. This has been in line with China's overall reluctance to bind itself into international commitments in the climate field.

This reluctance coheres with the country's overall approach to international politics over the last 40 years. Chinese leaders have emphasised China's need to concentrate on its internal development and the creation of a peaceful zone around its borders. This has enabled China's rise and return to being a major power in world politics. The aim here has been to make sure that international organisations are not used against Chinese interests, and that China can affect the creation of international norms, which is termed "discourse power" by the Chinese leadership (The People's Daily 2016). As China is dependent on foreign oil imports, it has been more concerned with energy security and sustained development than with the growing issue of climate change. As China's overall foreign policy line has shifted towards aiming at the goal that China be recognised as a major power with "responsibilities" (Kopra 2016), its approach to the international climate agreements has also changed.

Until the mid-2010s, sovereign, development, and energy concerns trumped climate security in China. In the past five or so years, though, China has committed itself to internationally-binding climate actions, as long as they are not externally imposed. This has happened in tandem with a change in China's overall foreign policy

stance, where it portrays itself as more of a responsible great power than a developing nation. It still maintains the principle of equity, and common but differentiated responsibilities respective to capabilities when it comes to responding to climate change, as it did in the most recent UNSC debates in 2020 and 2021. China has committed more to domestic climate actions than to international ones, and it made domestically-binding decisions on emission cuts before pursuing them internationally.

Even after conceding that climate change can undermine peace and stability, the measures China has proposed in the UNSC do not securitise the issue. The measures are neither extraordinary nor exceptionalist. Rather, they emphasise cooperation, multilateralism, development, and peace as the way forward. In a new development, China appears willing to let the UNSC deal with climate change in terms of security for individual country cases. As such, environmental issues, including climate change, have become more and more prominent in China's overall policy doctrines and ideology since Hu Jintao's administration, and are even more deeply integrated into Xi Jinping's ideological guidelines. As Xi Jinping has removed term limits from his leadership positions, this trajectory will most likely continue with him as the leader past 2022.

References

- Bo, Yan, 2016: "Securitization and Chinese Climate Change Policy", in: *Chinese Political Science Review*, 1, 1: 94-112.
- Brzoska, Michael, 2012: "Climate Change and the Military in China, Russia, the United Kingdom, and the United States", in: *Bulletin of the Atomic Scientists*, 68, 2: 43-54.
- Buzan, Barry; Wæver, Ole; de Wilde, Jaap, 1998: *Security: A New Framework for Analysis* (Boulder, CO: Lynne Rienner).
- Chen, Gang, 2012: *China's Climate Policy* (London: Routledge).
- Constitution of the People's Republic of China, 2018; at: <http://www.npc.gov.cn/englishnpc/constitution2019/201911/1f65146fb6104dd3a2793875d19b5b29.shtml>.
- Freeman, Duncan, 2010: "The Missing Link: China, Climate Change and National Security", in: *BICCS Asia Paper*, 5, 8.
- Ghiselli, Andrea, 2021: *Protecting China's Interests Overseas: Securitization and Foreign Policy* (Oxford: Oxford University Press).
- Gongsheng, Pan; Jun, Ma, Zadek, Simon, 2015: "Establishing China's Green Financial System. Final Report of the Green Finance Task Force" (Beijing: Bank of China - UNEP); at: www.unep.org/resources/report/establishing-chinas-green-financial-system.
- Hernandez, Ariel Macaspac; Misalucha-Willoughby, Charmaine, 2020: "Securitization of Climate and Environmental Protection in China's New Normal", in: *Decision-Making in Public Policy & the Social Good eJournal*.
- Hu, Jintao, 2007: "Hold High the Great Banner of Socialism with Chinese Characteristics and Strive for New Victories in Building a Moderately Prosperous Society in All Respects", in: *China Daily*; at: https://www.chinadaily.com.cn/china/19thcpconationalcongress/2010-09/07/content_29578561.htm.
- Hu, Jintao, 2012: "Firmly March on the Path of Socialism with Chinese Characteristics and Strive to Complete the Building of a Moderately Prosperous Society in All Respects"; at: http://www.china-embassy.org/eng/zt/18th_CPC_National_Congress_Eng/t992917.htm.
- Huysmans, Jef, 2014: *Security Unbound: Enacting Democratic Limits* (London: Routledge).

- Information Office of the State Council of the People's Republic of China, 1998: "China's National Defense" (Beijing: Waiwen chubashe).
- Information Office of the State Council of the People's Republic of China, 2004: "China's National Defence in 2004" (Beijing: Waiwen chubashe).
- Information Office of the State Council of the People's Republic of China, 2006: "China's National Defence in 2006" (Beijing: Waiwen chubashe).
- Information Office of the State Council of the People's Republic of China, 2008: "China's National Defence in 2008" (Beijing: Waiwen chubashe).
- Information Office of the State Council of the People's Republic of China, 2008a: "China's Policies and Actions for Addressing Climate Change" (Beijing: Waiwen chubashe).
- Information Office of the State Council of the People's Republic of China, 2011: "China's National Defence in 2010" (Beijing: Waiwen chubashe).
- Jamelske, Eric; et al., 2015: "Examining Differences in Public Opinion on Climate Change between College Students in China and the USA." in: *Journal of Environmental Studies and Sciences*, 5, 2: 87-98.
- Jiang, Zemin, 1997: "Hold High the Great Banner of Deng Xiaoping Theory for an All-Round Advancement of the Cause of Building Socialism with Chinese Characteristics' into the 21st Century", in: *Beijing Review*; at: http://www.bjreview.com.cn/document/txt/2011-03/25/content_363499.htm.
- Kopra, Sanna, 2016: "With Great Power Comes Great Responsibility? China and the International Practice of Climate Responsibility" (Tampere: University of Tampere, School of Management, International Relations).
- Lanteigne, Marc, 2020: *Chinese Foreign Policy: An Introduction* (London: Routledge).
- Liu, John Chung-En; Zhao, Bo, 2017: "Who Speaks for Climate Change in China? Evidence from Weibo", in: *Climatic Change*, 140,3: 413-22.
- Martina, Michael; Hui, Li; Stanway, David; Reklev, Stian, 2014: "China to 'Declare War' on Pollution, Premier Says", Reuters; at: <https://www.reuters.com/article/us-china-parliament-pollution/china-to-declare-war-on-pollution-premier-says-idUSBREA2405W20140305>.
- National Development and Reform Commission of the People's Republic of China (NDRC), 2012: "China's Policies and Actions for Addressing Climate Change", at: <http://www.ncsc.org.cn/yjcg/cbw/201307/W020180920484675924333.pdf>.
- National People's Congress, 2020: "Proposal of the Central Committee of the Chinese Communist Party on Drawing Up the 14th Five-Year Plan for National Economic and Social Development and Long-Range Objectives for 2030"; at: https://cset.georgetown.edu/wp-content/uploads/t0237_5th_Plenum_Proposal_EN-1.pdf.
- National People's Congress & Chinese People's Political Consultative Conference, 2016: "The 13th Five-Year Plan for the National Economic and Social Development of the People's Republic of China (2016-2020)" (Beijing, China: Central Compilation & Translation Press); at: <https://en.ndrc.gov.cn/policies/202105/P020210527785800103339.pdf>.
- NDRC, 2013: "China's Policies and Actions for Addressing Climate Change"; at: <http://www.ncsc.org.cn/yjcg/cbw/201311/W020180920484676540025.pdf>.
- NDRC, 2014: "National Climate Change Plan (2014-2020)" (Beijing: Department of Climate Change National Development and Reform Commission of China); at: <http://faolex.fao.org/docs/pdf/chn186560.pdf>.
- NDRC, 2015: "Enhanced Actions on Climate Change: China's Intended Nationally Determined Contributions"; at: <http://www.law.uh.edu/faculty/thester/courses/Climate%20Intention%20Law%202019/China's%20First%20NDC%20Submission.pdf>.
- Nyman, Jonna; Zeng, Jinghan, 2016: "Securitization in Chinese Climate and Energy Politics", in: *WIREs Climate Change*, 7,2: 301-13.
- Paltemaa, Lauri; Vuori, Juha A.; Mattlin, Mikael; Katajisto, Jouko, 2020: "Meta-Information Censorship and the Creation of the Chinanet Bubble." in: *Information, Communication & Society*, 23,14: 2064-80.

- Qi, Ye; Wu, Tong, 2013: "The Politics of Climate Change in china", in: *WIREs Climate Change*, 4,4: 301-13.
- Rohde, Robert A.; Muller, Richard A., 2015: "Air Pollution in China: Mapping of Concentrations and Sources", in: *PLOS ONE*, 10,8: e0135749.
- Ross, Lester 1999: "China and Environmental Protection, in Economy", in: Oksenberg, Elizabeth; Oksenberg, Michel (Eds.): *China Joins the World. Progress and Prospects* (New York: Council on Foreign Relations Press): 296–325.
- Shapiro, Judith, 2001: *Mao's War against Nature: Politics and the Environment in Revolutionary China* (Cambridge: Cambridge University Press).
- The People's Daily, 2016: "Improve China's Institutional Discourse Power in Global Economy Governance", in: *The People's Daily*; at: <http://opinion.people.com.cn/n1/2016/0219/c1003-28134857.html>.
- The State Council, 2011: "Circular of the State Council on Printing out and Distribution of the National '12th Five-Year Plan' for Environmental Protection"; at: http://english.mee.gov.cn/Resources/Plans/National_Fiveyear_Plan/201606/P020160601356854927248.pdf.
- Trombetta, Maria Julia, 2018: "Fueling Threats: Securitization and the Challenges of Chinese Energy Policy" in: *Asian Perspective*, 42, 2: 183-206.
- United Nations, 1972: "Report of the United Nations Conference on the Human Environment, Stockholm 5–16 June 1972" (New York: United Nations); at: <https://www.un.org/en/conferences/environment/stockholm1972>.
- United Nations General Assembly, 2009: "UNGA Resolution A/Res/63/281" (New York: UN, GA); at: <https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/res%2063%20281.pdf>.
- United Nations, Security Council (UNSC), 2007: "Security Council Holds First-Ever Debate on Impact of Climate Change on Peace and Security (SC/9000)" (New York: United Nations, Security Council); at: <https://www.un.org/press/en/2007/sc9000.doc.htm>.
- UNSC, 2011: "Statement by the President of the Security Council" (New York: UN, SC); at: www.securitycouncilreport.org/un-documents/document/cc-sprst-2011-5.php.
- UNSC, 2019: "Security Council, 74th Year : 8451st Meeting" (New York: UN, SC); at: https://digitallibrary.un.org/record/1663251/files/S_PV.8451-EN.pdf.
- UNSC, 2020: "Statement by the Permanent Representative China to the United Nations, Zhang Jun" (New York: UN, SC); at: https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_2020_751.pdf.
- UNSC, 2021: "Climate Change 'Biggest Threat Modern Humans Have Ever Faced', World-Renowned Naturalist Tells Security Council, Calls for Greater Global Cooperation" (New York: United Nations, Security Council); at: <https://www.un.org/press/en/2021/sc14445.doc.htm>.
- Vuori, Juha A., 2011: "How to Do Security with Words. A Grammar of Securitisation in the People's Republic of China" (Tampere: University of Turku, Department of Political Science and Contemporary History).
- Vuori, Juha A. , 2015: "Climate Politics in Chinese Foreign Policy", in: Cheng, Joseph Y. S.; Siika, Marita (Eds.): *New Trends and Challenges in China's Foreign Policy* (Hong Kong: City University of Hong Kong Press): 227-250.
- Vuori, Juha A., 2018: "Let's Just Say We'd Like to Avoid Any Great Power Entanglements: Deseuritization in Post-Mao Chinese Foreign Policy Towards Major Powers" in: *Global Discourse*, 8, 1: 118–136.
- Vuori, Juha A., forthcoming: "Climate Change and Security in China", in: Trombetta, Maria Julia: *Handbook of Climate Change and International Security* (Cheltenham and Camberley: Edward Elgar).
- Vuori, Juha Antero; Paltemaa, Lauri, 2015: "The Lexicon of Fear: Chinese Internet Control Practice in Sina Weibo Microblog Censorship", in: *Surveillance & Society*, 13, 3/4: 400-21.
- Xi, Jinping, 2017: "Secure a Decisive Victory in Building a Moderately Prosperous Society in All Respects and Strive for the Great Success of Socialism with Chinese Characteristics for a

- New Era”; at: http://www.xinhuanet.com/english/download/Xi_Jinping's_report_at_19th_CPC_National_Congress.pdf.
- Xi, Jinping, 2017a: “Work Together to Build a Community of Shared Future for Mankind”, Xinhua News Agency, at: http://www.xinhuanet.com/english/2017-01/19/c_135994707.htm.
- Xinhua, 2014: “Xi Jinping: Adhere to the Overall National Security Concept and Take the Road of National Security with Chinese Characteristics”; at: http://www.xinhuanet.com/politics/2014-04/15/c_1110253910.htm.
- Yu, Hao; et al., 2013: “Public Perception of Climate Change in China: Results from the Questionnaire Survey”, in: *Natural Hazards*, 69, 1: 459-72.
- Zhang, Haibin 2010: “Climate Change and China’s National Security” (Beijing: Shishi Press).
- Zhang, Yunhan; Orbie, Jan, 2021: “Strategic Narratives in China’s Climate Policy: Analysing Three Phases in China’s Discourse Coalition”, in: *The Pacific Review*, 34, 1: 1-28.

Chapter 4

Dominican Republic: Security Perspective from Disaster Risk Management and Climate Change Policies



Ana Sofia Ovalle

Abstract In the last decade, the vulnerability to climate change impacts has motivated a shift in the Dominican Republic's legislation, turning climate change matters into a political concern. This chapter reviews the country's perceptions of human, ecological and national security in relation to climate change for the time period 2000–2020. In the Dominican Republic, human security is a well-developed concept, as the country prioritises protecting the lives and physical integrity of the people in the national territory, the productive structure, goods, and the environment in the face of possible events, as stated in its disaster risk policy. In terms of ecological security, the country strives to protect its natural resources, key ecosystems, and biodiversity, and implement measures for environmental management and reduction of CO₂ emissions. The country has many legal tools regarding ecological and human security which will be analysed in this paper. In contrast, the national security debate is less common, yet has become more important in recent years, especially in relation to the country's border with Haiti and expected climate-driven migration. Fundamentally, Dominican Republic faces climate change with a series of instruments to enhance disaster risk management, promote climate change adaptation and mitigation, protect resources and livelihoods, and build resilience as this Caribbean nation lays the foundations for evolving towards sustainable development.

Keywords Adaptation · Climate change · Risk management · Immigration · Natural resources

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4.1 Introduction

Due to its status as a Small Island State and a Developing State (SISD), its geographical position, and its social and economic dynamics, the Dominican Republic is highly vulnerable to climate change impacts. Of its estimated population of 10 million, 60% is based in urban areas and in coastal zones at high risk of receiving the effects of extreme hydro-meteorological events (Oficina Nacional de Estadística 2014).

The country is exposed to a variety of natural disasters such as hurricanes, earthquakes, floods, droughts, and landslides, and is facing serious threats to key socio-economic sectors such as water, tourism, agriculture, food security, human health, biodiversity, forests, coastal and marine resources, infrastructure, human settlements, and energy (Rathe 2008). Some studies have identified that the island has already felt the effects of climate change, given the increased intensity and frequency of tropical storms in the last couple of decades, and the noticeable changes in average annual rainfall (U.S. Agency for International Development et al. 2019).

The interactions between poverty, environmental degradation, and exposure to disasters exacerbate the situation of vulnerability for households with lower incomes. In 2007, for example, storms Olga and Noel hit the Dominican Republic, affecting more than 70% of the country's population. According to records, 90% of the 75,000 direct victims were below the poverty line in the provinces with the lowest Human Development Index (HDI) (Programa de las Naciones Unidas para el Desarrollo 2012).

Considering the nature of climate change's impacts on human and natural systems, the definitions of climate security may vary broadly. The literature (see also Chap. 1 of this book) mainly distinguishes three approaches, depending on the values to be protected from different kinds of threats (see McDonald 2021; Diez et al. 2016). Thus, *national security* refers to the protection of the state, its territorial integrity, national sovereignty, and stability, primarily by military means, and is widely associated with hard security notions. *Human security* refers to the protection of people, safety, human rights, and food and water security, through actions such as conflict prevention, human development and governance, sustainable resource management, and prevention and management of climatic hazards. Meanwhile, *ecological security* refers to the protection of ecosystems, biodiversity, and environmental services—for instance, through measures for sustainable development, environmental protection, reforestation, and climate change mitigation.

For the Dominican Republic, climate change impacts endanger institutional, economic, social, and environmental development, whose vulnerabilities to extreme weather events have increased in recent decades (USAID 2019). Assuming this challenge, climate change management has been established as a cross-cutting issue regarding national policies and administration, primarily from a human and ecological security perspective. In that sense, since 2008, with the creation of the National Council for Climate Change and Clean Development Mechanism (CNCCMDL) through Decree No. 601-08 during the administration of Leonel Fernandez, the country has embarked on an important process of strengthening its public policies

and legal framework to face climate change. It has incorporated the issue in its Constitution in an exhaustive and explicit way, and it has also been mandated and made visible with objectives and indicators in Laws 1-12 of the National Development Strategy 2030 (Ministerio de Economía 2022a).

With the National Development Strategy (NDS) 2030, released in January 2012 by President Fernandez, the country began the process of construction of a new paradigm in its vision of development, facing needs and goals that required a change in production patterns and consumption, through policies, programmes and actions for adaptation and mitigation, to decrease the risks associated with variability and climate change, and to reduce greenhouse gas (GHG) emissions, thus moving towards climate-compatible, low emission development. In particular, the NDS is the legal framework to which the state and institutional policies and work plans will respond in the coming years, articulating public action under a vision of sustainable and climate-resilient development.

Climate change compromises natural resources, livelihoods, water, food, health, human populations, infrastructure, and economic development for present and future generations. Therefore, the issue is approached through a disaster risk management perspective, defining policy guidelines to reduce existing risks, assure better security conditions for the population and protect their economic, social, environmental and cultural patrimony (Comisión Nacional de Emergencia 2011). The Ministry of Economy, Planning and Development is the main actor working in the mainstreaming of risk and climate change management in development planning, although the issue is sectorised into several government agencies. Meanwhile, the National Council for Climate Change is responsible for formulating, implementing, and enforcing climate change policies and projects under the President's office (currently Mr Luis Abinader, elected from 2020 to 2024); the Council also coordinates climate change efforts across different ministries.

Even if the national security approach is not explicitly mentioned in relation to climate change in the Dominican Republic's legal framework at the time, the institutional arrangements placed clearly show the vision of sustainability, disaster risk management and climate change mitigation and adaptation as a central element in the national planning, being directly linked to human and ecological security conceptions. Through this chapter, I discuss the country's perceptions of security (human, ecological, national) in relation to climate change, reviewing how these have influenced public policies and national planning instruments.

For this chapter, the methodology primarily consists of a literature review and analysis, ranging from the national legal framework to relevant publications by national authorities, from 2000 to 2020, with a significant input of empirical data from national experts. The chapter's approach is based on the linkage between security perception, particularly human and ecological security, with the main legal and normative developments in the national context, through a chronological narrative.

4.2 Climate Change as a Threat to Human Security: Integrating Climate Change into Key Laws and Risk Management Strategies

Given the high vulnerability of its population and economy (due to geographic and socio-economic factors), the Dominican Republic has above all perceived climate change as a threat to human security. This perception has influenced the development of national frameworks, achieving the incorporation of climate change as a transversal issue in development and risk management policies. The ultimate goal is to guarantee physical security, food security and infrastructure integrity (Ministerio de Medio Ambiente y Recursos Naturales et al. [2016](#); COE [2022](#))

Located in the central area of the Antilles, in the Caribbean Sea, the Dominican Republic occupies the central and Eastern section of the island of Hispaniola, which it shares with Haiti, considered one of the poorest nations in the Americas, with a deplorable natural resources situation (Navarrete [2015](#); Ceara-Hatton [2017](#)). The Dominican Republic is characterised by great biodiversity, as well as a high level of endemism consistent with its insular condition. The prevalent environmental features, along with topographic and orographic variables, results in a variety of ecosystems, and rich natural resources that constitute the basis of livelihoods and economic activity in the country (Ministerio de Medio Ambiente y Recursos Naturales et al. [2016](#)).

However, this is also a nation with great vulnerability to climate change impacts, as its history of weather-related disasters and emergencies shows. The interaction between its geographical position, the topographic conditions, and environmental, social, and economic characteristics define the country's susceptibility to extreme weather events (Ministerio de Medio Ambiente y Recursos Naturales et al. [2016](#)).

For example, an significant proportion of the population of the Dominican Republic is settled in coastal areas, exposed to a high risk in the event of extreme hydro-meteorological events (Sistema Único de Beneficiarios [2019](#)). While the country plans for land use, infrastructure construction, use of hydrographic basins, and access to the national energy matrix, among other productive activities, it faces the growing threat posed by exacerbated climate change.

From a human security perspective, actions have been put in place to provide safety to human populations, and manage water and food security and disaster risk, especially from extreme weather events. Human security is a well-developed approach in the Dominican Republic, as the country has the priority of protecting the lives and physical integrity of the people in the national territory, the productive structure, the goods, and the environment in the face of possible events. The main driver of the disaster risk policy is to avoid or reduce the loss of life and damage to public goods, materials, and environments due to climate change. For the Dominican Republic, human security is a risk- and disaster management matter, and this is better understood by analysing the evolution of the country's legal framework in recent years in relation to this subject.

The continuous impacts of natural disasters, along with the need to protect its natural resources, made the country realise the necessity of a legal framework to guide national actions regarding climate change, risk and environmental management. The development of laws and policies is driven by the interested actors based on the information available, and includes public consultations, analysis and validation of the sectors involved before its submission to the Senate of the Republic. Once a law is approved, the public sector includes its mandates as a part of their strategic planning, mobilising economic and human resources to implement the actions. Ultimately, the laws serve as the main instruments that will guide national development. More than the concepts of human security or climate change, natural disasters have been the primary drivers of this legal framework.

There are several legal instruments and entities related to the national emergency response, given the country's high vulnerability to natural disasters such as hurricanes, cyclones, drought, earthquakes, landslides, and floods. In 2002, under Hipólito Mejía's administration, the country established a risk management system through Law 147-02 on Risk Management, which created the National System for Prevention, Mitigation and Response to Disasters, the National Risk Management Plan, the National Emergency Plan and the National Integrated Information System in the Dominican Republic, with the objective of protecting lives, goods and infrastructure. Among other things, the system functions to

[a]rticulate the environmental policy and the risk management policy, so that preventive environmental management contributes to the protection of the environment and to risk reduction, and design efficient mechanisms for the coordination and orientation of reconstruction and sustainable recovery processes (COE 2022).

In addition, there is a system that assigns its operation to the National Emergency Commission (CNE), created in 2001 under Mejía's presidency, a commission responsible for leadership in the country's natural disaster politics. The CNE is composed of several entities: some of these institutions are the Ministry of Defence, the Ministry of the Environment, and the Ministry of Health, among others. Moreover, Law 147-02 creates a more operational body called the Operation Emergency Centre (COE). The COE's objective is to integrate all the related institutions in the preparation for and answer to a national emergency with a crosscutting perspective. In the case of an extreme event, this office, which operates under executive power, will be the country's voice. These actions complement the Civil Defence office which was created in 1966 via law 257-66 as the institution to give support in case of a natural disaster (COE 2022).

However, as the Dominican Republic experienced some extreme weather events in 2007, legislation shifted to include climate change concerns in all major sectors of development, not only in risk management issues. That year, Dominican Republic was affected by two extreme tropical storms, Olga and Noel, within a four-month period. Storm Olga alone accounted for 170% of normal rainfall volume. According to the United Nations Economic Commission for Latin America and the Caribbean (CEPAL) study, this huge increase in rainfall was due to climate change. Both tropical storms heavily impacted the country's economy, producing a deficit of 439 million

dollars corresponding to 1.3% of the country's GDP for 2007. Other impacts included the deaths of 85 people, 80,000 internally displaced persons and more than 100 isolated communities (Comisión Económica para América Latina y el Caribe 2008).

Subsequently, in September 2008, the government of the Dominican Republic created the National Council for Climate Change and Clean Development Mechanisms (CNCCMDL) through Decree 601-08. The CNCCMDL is an inter-institutional body under the power of the executive, which formulates and coordinates national policies to address climate change with a crosscutting governmental view. It is chaired by the President of the Dominican Republic, currently, Mr Luis Abinader, and is made up of the holders of several Ministries, such as the Ministry of the Environment; the Ministry of the Economy, Planning and Development (MEPyD); and the Ministry of Agriculture, among others. Moreover, the CNCCMDL includes some civil society institutions, as well as representatives of the private sector, such as the National Council of Private Enterprise (CNCCMDL 2022). The creation of the CNCCMDL and the recognition of Hispaniola as an island increasingly vulnerable to storms and weather events strongly linked to climate change, showed that governmental policies at the time began including climate change as a national concern.

Later, in 2010, the Dominican Republic embarked on a constitutional amendment process. Since the CNCCMDL was created to make public policies regarding climate change, the CNCCMDL, as well as local environmental groups, brought the issue to Congress members attention through public consultations and several open discussions. After several considerations, the proposal that climate change mitigation and adaptation practices were a fundamental element of national urban and environmental planning was incorporated into the constitutional amendment in Article 194. Article 194 asserts: "The formulation and execution, through law, of a plan of territorial ordering that ensures the efficient and sustainable use of the natural resources of the Nation, in accordance with the necessity of adaptation to climate change, is a priority of the State". In addition, Article 67 holds that "[p]reventing contamination, protecting and maintaining the environment for the enjoyment of present and future generations constitute duties of the State" (Constitución Política de la República Dominicana 2010).

It is important to note that the Dominican Republic is one of the few countries with this term in its constitution. This means that climate change is considerate as an important threat, and that the issue must be mainstreamed in all development sectors.

Another crucial Law, promulgated in 2012, was the National Development Strategy (END), or Law 1-12, which also evidenced climate change as a concern to national authorities. This National Strategy is the nation's long-term vision, with specific objectives, strategic lines of action, indicators, and goals for achievement by 2030. It is composed of four main strategic axes; however, the two most essential regarding climate change are the third and fourth axes (Ministerio de Economía 2022a), which clearly highlight the human security implications of climate change in the Dominican Republic:

In our condition of small tropical island state, we are more prone to the effects of climate change, to which is added the vulnerability associated with the geographic location and the situation of poverty that affects an important part of the population. That is why the imperative arises to promote production patterns and consumption consistent with environmental sustainability and to develop effective systems for risk management and adaptation to climate change. (Ministerio de Economía 2022a)¹

This argument drives the fourth strategic axis: “A society with a culture of sustainable production and consumption, which manages fairness and effectiveness risks and protection of the environment and resources and promotes adequate adaptation to climate change” (Ministerio de Economía 2022a). This is also an example on how human security and ecological security are often treated in an integrated manner in the politics of the Dominican Republic. This fourth axis holds two main objectives with a view to disaster risk management and climate change. These objectives established that the Dominican Republic must have effective risk management and adequate climate change adaptation through expanding public institutions, implementing national risk management plans, and developing early warning systems, among other things.

Furthermore, besides strategic axes related to climate change and disaster risk, this END proposed seven crosscutting policies two of which refer to incorporation criteria of an integrated risk management, and environmental sustainability. Hence, promulgation of Law 1-12 as the National Development Strategy 2030 (Ministerio de Economía 2022a) contains clear evidence of the nation’s vision for tackling the country’s vulnerability to a climate change disaster risk event. The Ministry of Economy, Planning and Development (MEPyD) is the institution responsible for the implementation and promotion of the transversal national policy of disaster risk management, as established by Law 1-12 of the National Development Strategy 2030 and its application regulations.

In 2011 the CNCCMDL developed the Strategic Plan for Climate Change 2011–2014 (PECC). This is a national institutional planning document for addressing climate change for the next twenty years. Among its objectives, it contemplates achieving high capacities for climate change adaptation, based on community knowledge. It is made up of three strategic axes (institutional, adaptation and mitigation) and divides each axis into components or sectors, while establishing lines of action for each one. The second axis is focused on adaptation of vulnerable sectors with a risk disaster perspective, such as water resources, food security, marine resources (focused on tourism), infrastructure, health, biodiversity, and energy (Consejo Nacional para el Cambio Climático y Mecanismo de Desarrollo Limpio (CNCCMLD 2011).

In the same year, based on Risk Disaster Law 147-02, the CNE elaborated the Integrated Risk Management National Plan. Its purpose is to define policy and main principles in public and private sector institutions, as well as social organisations, with the objective of reducing the risk of disasters, guaranteeing better security conditions for the population and protecting its economic, social, environmental, and cultural

¹ Translated by the author.

heritage. The term “climate change” is touched on in several parts of the documents as an issue that is increasing the Dominican Republic’s extreme events possibilities: “This document comes to meet an urgent need to contribute to the development of the country, given the multiple threats that frequently affect it. Scientific evidence suggests that weather events are becoming more frequent and intense as a result of climate change” (Comisión Nacional de Emergencia 2011).

This Integrated Risk Management National Plan includes the country’s outlook, presenting its resilience to a natural disaster as shown and acknowledging climate change as a severe impact. “In the case of climate change, extreme and erratic events are expected, which for the Dominican Republic [are] very dangerous because its main threats are related to hydrometeorological processes”. The four strategic axes addressed risk management issues such as reduction, prevention, and mitigation of climate events, early warning systems and post-disaster dimensions. With the aim of providing the capacity to increase the levels of protection and security of life, property and livelihoods of citizens in the face of natural and anthropic phenomena with potential to cause disasters, the Integrated Risk Management National Plan engaged the term “security” as population vulnerability in all its four axes (Comisión Nacional de Emergencia 2011).

Most recently, the Dominican Republic has reaffirmed its commitment to achieving the objectives of the Paris Agreement under the UNFCCC. In the process of improving and updating the Nationally Determined Contribution 2020 (CNCCMDL 2020), the country includes mechanisms to understand and manage the impact and scope of the losses and damage generated by hydro-meteorological events. The Dominican Republic government, along with the World Bank, has made estimates that show that damages associated with climatic shocks over the years have left impacts that require significant recovery efforts. Between 1961 and 2014, the economic impact of disasters caused by natural phenomena is equivalent to 0.69% of the Gross Domestic Product (GDP). One of the key goals regarding loss and damage is to generate better information by strengthening the System of Compilation and Evaluation of Damages for the Dominican Republic (SIREN-RD).

The Dominican Republic is committed to the SENDAI Framework for Risk Reduction with the National Emergency Commission as its focal point. In consonance with this framework, the Vice-President’s office under Margarita Cedeño’s leadership, along with United Nations Development Programme’s (UNDP) efforts elaborated the National Protocol for social protection against climate shock. This protocol created the Vulnerability Index against Climate Shock (IVACC). This index responded to the need to reduce the impact of climatic shocks and disasters for the most vulnerable populations, through the actions of social institutions before, during and after disaster events (Vice-Presidencia de la República Dominicana/Programa de las Naciones Unidas para el Desarrollo 2018).

Recently, two directorates were created to mainstream risk management with a climate change focus in public institutions. In 2021, Mr. Miguel Ceara Hatton, the Minister of Planning, Economy, and Development (MEPyD), created the Directive on Disaster Risk Management and Climate Change. This directive aims to define a strategy for mainstreaming disaster risk and climate change management in the

planning instruments developed by public institutions such as Institutional Strategic Plans, the Pluriannual National Plan, and land use and development plans—all key instruments in municipal planning.

At the same time, the Ministry of the Environment, Mr Jorge Orlando Mera, created the Directive on Fiscalisation and Risk Management. This unit's objective is to mainstream risk management with a climate change component along all ministry areas which influence the entire territory of the Dominican Republic. While MEPyD's directive is more focused on a central government approach, the Ministry of Environment's directive is focused on a territorial risk management implementation.

The Dominican Republic is a country with a high vulnerability to climate change effects such as hurricanes, storms, landslides and floods, which are expected to increase in frequency and intensity. As this threatens lives, infrastructure, economy, and the overall development of the country, climate change is perceived as a human security issue. To address this, the state has formulated certain political tools to drive disaster risk management, as a way to avoid or reduce the observed and expected impacts of climate change. Ultimately, the purpose of all these laws and frameworks is to operationalise disaster risk management with a climate change focus and protect lives, hence aiming for human security.

4.3 Climate Change as a Threat to Ecological Security: Strengthening Environmental Protection and Mitigation Policies

In general terms, the Dominican Republic relies on its ecological assets to sustain livelihoods, its economy and development. Environmental protection and management are the main strategies that the state has implemented to reach ecological security and maintain healthy ecosystems that can support agriculture, industry and tourism, which account for a significant fraction of the gross domestic product. Healthy ecosystems also guarantee food and water security and increase resilience, and therefore contribute to human security. Natural resources and well-preserved habitats are key to resilience and human development. Thus, both ecological and human security approaches are closely linked, since each supports the other, and this relationship manifests in the Dominican Republic's legal frameworks, as will be seen later.

4.3.1 Ecological Security in Domestic Politics

In terms of ecological security, the country strives to protect its natural resources, key ecosystems, and biodiversity, and implement measures for reduction of CO₂ emissions, reforestation, and environmental management. The most significant actions

implemented are those regarding watershed management, protected areas, coastal and forest ecosystems, with Law 64-00 being the principal instrument for environmental protection and management, and thus reaching ecological security for the county. However, having the legal framework is only the first step, as the mechanisms to implement the laws must be enabled.

The General Law of Environment and Natural Resources 64-00 was promulgated in 2002 at the Dominican Republic's Congress, under Mejía's administration. This promulgation creates a Secretary of State for the Environment and Natural Resources (Ministry since 2010), as the governing body for the management of the environment and natural resources.

Is from this legal framework that the country has created various regulations on air quality, pollution and emissions control, water quality, and waste and environmental management procedures, among others (Ministry of Environment and Natural Resources 2000). Moreover, this legal framework will later be used to address climate change issues.

The Ministry of Environment works along with the National Environmental Protection Services (SENPA), an institutional body under the Ministry of Defence with the purpose of monitoring, detecting, preventing, and controlling environmental crimes throughout the national territory (Servicio Nacional de Protección Ambiental 2022). This particular setting responds to the fact that the environmental attorney needed a surveillance body to pursue environmental felonies, and the Ministry of Defence already had troops deployed, with high territorial presence and relevant capacities, to guard the natural resources as a public good. This could be considered the only direct example regarding the nexus between hard security concepts and climate change in the country.

Another important framework, developed by CNCCMDL in 2010 due to international agreements, was the Economic Development Plan Compatible with Climate Change (Plan DECCC). This plan was developed with funds from the German Government and the technical guidance of the Coalition for Nations with Tropical Forests. Plan DECCC is a fundamental strategic tool that established the GHG reduction goals and served as the basis for mitigation actions. Since the Dominican Republic's GDP is very vulnerable to extreme events, Plan DECCC aimed to double GDP while reducing GHG emissions by 65% by 2030. For this reduction, the electricity, transport, and forestry sectors are established as essential sectors – both in terms of abatement of carbon and of economic and social development (CNCCMLD and Ministerio de Economía 2011).

In 2016, the Dominican Republic formulated its National Adaptation Plan for Climate Change (PNACC RD), coordinated by the CNCCMDL, the Ministry of the Environment and Natural Resources, and the United Nations Development Programme with the support of the Plenitud Foundation for the period 2015–2020. The plan's vision is “a country resilient to climate change” through increased adaptation capacity to extreme weather events, according to the END:

By 2030, the Dominican Republic will have improved its capacities for adaptation and resilience to climate change and variability, reducing vulnerability, improving people's quality of life and the health of ecosystems, and will have contributed to the stabilization

of greenhouse gases without compromising its efforts to combat poverty and its sustainable development, promoting the transition towards growth with low carbon emissions. (Ministerio de Medio Ambiente y Recursos Naturales et al. 2016)

The plan outlines the reorganisation of the current system and includes local communities as well as border stakeholders within the risk management. The incorporation of adaptation measures in infrastructure and capital investment (social and economic), as well maintenance operations, is envisaged (Ministerio de Ambiente, CNCCMDL, GEF, PNUD 2016).

This being the primary instrument for climate change adaptation planning, the sectors prioritised for climate change adaptation in PNACC RD were: (1) Water & food security, (2) Climate resilient cities, (3) Healthy and Resilient Communities, (4) Ecosystems, biodiversity, and forests, (5) Tourism, and (6) Coastal-marine resources – all touched on from a risk-disaster perspective. Thus, the PNACC seeks to reduce the country's vulnerability to climate risks, planning the response to extreme weather events with a climate adaptation approach.

In 2016, the Ministry of Economy, Planning and Development and the National Council for Climate Change created the National Climate Change Policy to establish future actions for the Council's members. Among its objectives were to incorporate adaptation to climate change as a transversal issue, and to promote a political and institutional framework favourable to a development low in greenhouse gas emissions and resilient to climate change (Ministerio de Medio Ambiente y Recursos Naturales et al. 2016).

The National Strategy for Adaptation to Climate Change in the Agricultural Sector of the Dominican Republic establishes the necessary elements to identify, articulate and guide the policy instruments, as well as the actions and measures necessary to strengthen the adaptation capacities of the agricultural sector. This document, produced in 2014 by the Ministry of Agriculture along with the Climate Change Council, defines and promotes “agricultural research and innovation processes through the use of a model that make it possible to adjust, reduce and achieve a greater resilience capacity of production systems in the face of vulnerability and effects of climate change” (PLENITUD et al. 2014).

There is also a National Plan for Food and Nutrition Sovereignty and Security (2019–2022), which aims to guide the execution of strategic actions conceived and defined by the sector's institutions, following the political guidelines on food and nutritional security for a period of four years, initially 2019–2022 (PLENITUD et al. 2014).

The country is currently working on the project of a Law of Climate Change, with the purpose of establishing the regulatory framework and the general principles on which the policies, strategies, provisions, and instruments will be designed to prevent and mitigate the greenhouse gas emissions that cause global warming. This legislation will seek to improve response and coordination among institutions that have functions related to environmental sustainability and climate change impacts in the national territory. This legislation will contribute to the ecological security approach by helping to protect ecosystems, services, and natural resources from climate threats.

4.4 The Dominican Republic's Engagement in the International Climate Regime from an Integrated Approach of Human and Ecological Security

These developments highlight the relevance given to the climate change issue within the national and international policies assumed by the country in different sectors such as environmental, planning, development, and disaster response. Most of these legal frameworks were put in place because of the Dominican Republic's ratification of the United Nations Framework Convention on Climate Change (UNFCCC) in 1998 and the Kyoto Protocol in 2002, since it was necessary to carry the international commitments to the national agenda. Later, the Dominican Republic also endorsed the Paris Agreement (2015) which, based on consensus-building, allows for voluntary and nationally determined targets for deeper emission reductions than Kyoto Protocol. Because the Dominican Republic has been part of climate change negotiations, this has had implications for the production of documents such as national communications and the National Action for Adaptation Plan (Nachmany et al. 2015, US Agency for International Development 2015).

Another international commitment in which the Dominican Republic is involved is the Sustainable Development Goals. In 2015 the country was part of the Sustainable Development Summit which approved Agenda 2030, with 17 objectives of universal impact such as climate change. Furthermore, the Dominican Republic created by Decree No. 23-16 the High Level Inter-Institutional Commission for Sustainable Development (CDS). This commission recognises the scope, significance, and national alignment of Agenda 2030 and is based on national instruments; it will work to complement ongoing national instruments. The CDS has several institutions such as MEPyD, the Executive Office, the Ministry of the Environment, the Foreign Affairs Ministry, and CNCCMDL, among others. The Commission for Sustainable Development is another example of national recognition of climate change as an issue (Ministerio de Economía 2022).

In their updated Nationally Determined Contribution 2020 (NDC-RD 2020), the country establishes climate commitments by 2030, increasing its climate ambition by committing to reduce GHG emissions by 27% with respect to BAU (business as usual) by 2030. This target will be achieved with 20% conditional on external finances and 7% unconditional (using domestic finances), with this 7% being distributed 5% to the private sector and 2% to the public sector. In addition, even though it is not demanded by UNFCCC, the Dominican Republic includes an extensive adaptation component to address its vulnerability issues to climate change as an extremely vulnerable island (CNCCMDL 2020).

The NDC RD 2020 identifies 46 mitigation options (distributed across the energy, industrial processes, agriculture, and waste sectors) and 37 adaptation measures (distributed across sectors including coastal-marine resources, ecosystems, and biodiversity). This is how the country manifests its commitment to contribute to

mitigation of climate change, adapt to it, build resilience, and protect the environment and natural resources to accomplish ecological security towards sustainable development.

Recently, in the UN's 2021 General Assembly, Mr Luis Abinader, the President since 2020, affirmed that the Dominican Republic, as a small island developing state, is one of the countries that emits the least greenhouse gases, but one that suffers the most from the effects of climate change. He emphasised that the investment to restore natural resources affected by global warming must be made by the countries that have generated the most CO₂. He also highlighted the progress made by Dominican democracy and the government's efforts aimed at institutional strengthening in terms of climate change (Presidence of Dominican Republic 2021). As an example of these efforts, the Dominican Republic promulgated a Decree (No. 41-20) in 2020. This Decree creates a National Measurement Reporting and Verification (MRV) system for greenhouse gases, a massive step forward in climate change transparency.

As previously stated, the position of the Dominican Republic in foreign affairs, especially in climate change international scenarios such as the UNFCCC or the SENDAI Framework, directly reflects on the legal and institutional frameworks at the national level. All the Dominican Republic actions towards climate change are a reflection of their position on international scenarios. It would be accurate to say that international frameworks drive climate action as the country develops laws, policies, programmes, and strategies to face the matter and strives to transition into a sustainable economic model that provides prosperity and safety for all.

4.5 Climate Change as a Threat to National Security and the Dominican Republic's Role in the UNSC

Of the three studied perspectives of security in relation to climate change, national security is the most lagging. It is important to note that the Dominican Republic shares the island of Hispaniola with Haiti, the poorest country in America, and is subject to strong migratory currents that put great pressure on the Dominican Republic's government and development. Furthermore, the relations between both countries are full of historical conflicts, political tensions, and deep socio-economic problems. Thousands of Haitian citizens cross the borders illegally every day, running away from political instability, poverty, environmental degradation, and natural disasters.

Haiti is the fourth-most affected country for extreme events according to a 2019 Germanwatch study. In the case that Haiti is affected with an extreme weather event, its population could migrate to the Dominican Republic and create a national security issue with possible disturbance. This is a reason why the Dominican Republic should evaluate the effects of climate change as a matter of security and territorial integrity.

However, only recently, with the Dominican Republic's participation in the United Nation's Security Council (2019–2020), has the vision of climate change as a national security issue begun to be discussed by the Dominican Republic's authorities. During

its first presidency, the country initiated an open debate in January 2019 on addressing the impacts of climate-related disasters on international peace and security. In the concept note to the debate, the Dominican Republic highlighted the need to include climate change in the Council's agenda as it represents "one of the most urgent challenges to the maintenance of international peace and security" and as addressing these risks goes beyond the mandate of the UNFCCC, they "fall under the responsibility of the Security Council" (United Nations Security Council [UNSC] 2019). Thus, during the debate, the Dominican Republic highlighted its own vulnerability to extreme weather events and the need to address the challenges collectively and through the inclusion of the whole UN system (UNSC 2019, 2019a).

In the recent Arria Formula meeting in 2020, the Dominican Republic's representative underlined the need for the full attention of the UNSC on this non-conventional threat because of its impacts on vulnerability, poverty, the economy, displacement, and insecurities—especially in developing countries. He further stated that "for many of us, it is a matter of existence. In the Caribbean the effects of climate change are not one of the major factors for social and economic challenges, it is the factor that creates multiple threats for economies and our livelihoods." Accordingly, solidarity, moral sharing and responsibility are required to hinder climate change becoming a direct cause of conflict as it is the "greatest global challenge facing humanity" (Dang 2020). The Dominican Republic highlighted the need to consider climate change in the Council's agenda, including operations on the ground. Therefore, the strengthening of its expertise on the matter is seen as a necessity, through, for example, "tools to systematically assess the relationship between the effects of climate change and conventional risks, particularly in vulnerable areas" (Dang 2020).

During the Dominican Republic's UNSC membership, the Foreign Affairs Ministry represented the country in the Council and promoted the climate change perspective as a national security issue. This is based on the argument that the Dominican Republic-Haiti border situation could be a hard security issue if a natural disaster affects Hispaniola Island, shared by both countries, causing a massive influx of Haitian migrants to the Dominican Republic:

The Dominican Republic ranks tenth among the countries most affected by extreme weather-related disasters over the past 20 years, and our neighbour, Haiti, ranks second ... Extreme weather events and disasters can compound existing grievances and stress overburdened governance systems. In Haiti, a long sequence of natural disasters, with nine significant floods and eight storms since the devastating earthquake that occurred in 2010, has led to protracted displacement. The vicious cycle of political instability and vulnerability to natural hazards has not only affected us as that country's neighbor, but also resulted in extensive and expensive international engagement. (United Nations Security Council [UNSC] 2019)

With climate change exacerbating hydro-meteorological events, this scenario will worsen, and Haitian migrants might even be considered climate refugees, forced to flee due to disasters and other weather events.

The Dominican Republic has always been one of the first countries to support Haiti to deal with natural phenomena and political crises. For example, in August 2020, the Ministry of Foreign Affairs reported actions to give humanitarian aid to Haiti after the attacks of the earthquake and Storm Grace that shocked Haiti in that month,

delivering medicines, medical supplies and food to the Haitian Government, and providing air transport to make preliminary damage assessments and transfer injured people from isolated areas to Port-au-Prince. “This support is essential, as Haiti prepares to mitigate the impact of the storms and hurricanes expected in the coming weeks and months. The threat of other natural disasters that aggravate the impact of this latest earthquake is significant, and requires urgent action and support” which “must be provided according to needs and coordinated with national authorities and humanitarian officials,” the representative stated (Ministerio de Relaciones Exteriores 2020, 2020a).

In 2020, in a meeting of the Permanent Council of the Organization of American States, Ambassador Josué Fiallo reiterated that the Dominican Republic’s socio-economic system is not prepared to endure the instability in the neighbouring country alone: “Ladies and gentlemen, the Dominican Republic will do everything in its power to achieve the recovery and full development of Haiti. However, it must also be clearly clear that our nation, our country, will never be a solution for the prolonged Haitian odyssey”² (Ministerio de Relaciones Exteriores 2020).

In comparison to the other dimensions of climate security, the national security perspective is still underdeveloped in the Dominican Republic’s national debate, and the country has only recently begun to discuss this connection, especially in relation to the Haitian-Dominican border. There is not much information on this matter in the national sphere, which has been treated in the Binational Commission of Development, in terms of security and development in the borders. The Dominican Republic is far from recognizing Haitians as climate refugees, and this issue will surely fuel discussions between both countries. This is a case study that will have to be followed by citizens and the international community over the following years. There is no doubt that of the three security perceptions, national security is that which needs to be further developed in the Dominican Republic in order to comprehensively deal with the security implications of climate change for the country and the region.

4.6 Conclusion

This chapter reviews how the Dominican Republic’s perception of human and ecological security has influenced the development of a legal and institutional framework regarding climate change, disaster prevention and environmental protection, based on a review of the main laws—including the constitution—passed from 2000 to 2020.

The Dominican Republic is highly vulnerable to natural disasters such as hurricanes, storms, floods, and other extreme events, and this vulnerability is expected to intensify due to climate change impacts. Having been affected by such events, particularly the tropical storms Olga and Noel in 2007, the legislation of the country shifted, turning climate change into a political concern. Since climate change endangers many of the assets on which the population and the state rely to thrive, including natural

² Translated by the author.

resources, human settlements, water and food production, and tourism, among others, the state has put several legal instruments and entities related to disaster management and climate adaptation into place.

International frameworks such as the United Nations Framework Convention on Climate Change, SENDAI, The Paris Agreement, and others, have also impacted the country's approach to climate change matters in a very significant way, boosting local actions to increase adaptation and mitigation on the local level.

Thus, the state is taking several actions to mainstream disaster risk management and climate action in public management. For example, it has created an inter-institutional body under the executive power, which formulates and coordinates national policies to address climate change and coordinates efforts across different Ministries (National Council for Climate Change). In 2010 the country even amended the political Constitution and included territorial ordering and climate change adaptation as a national priority. And, more recently, the Dominican Republic has increased its climate change ambition through reviewed and updated Nationally Determined Contributions.

For this nation, the vision of security in relation to climate change so far has been narrowly related to human and human and ecological security; hence most of the strategies introduced are concentrated on creating efficient disaster risk management, the protection of natural resources, CO₂ emissions mitigation, vulnerability reduction, resilience for human and natural systems increments and protection of livelihoods. As stated in their National Development Strategy, public politics creates the enabling framework to accomplish the vision of a "society with a culture of sustainable production and consumption, which manages with equity and effectiveness risks and protection of the environment and natural resources and promotes adequate adaptation to climate change"³ (Ministerio de Economía 2022). In the following years, all state planning will respond to the need to fulfil international commitments, but also to mainstream climate change in all the sectors involved in the nation's economic development, primarily through increased resilience and response capacity for facing unpredictable weather.

As shown with regards to the tensions over aid and migration with Haiti, the national security approach needs to be further developed. In recent years, the Dominican Republic has established a very clear position in front of the international community: climate change is one of the most serious threats for humanity and particularly for Small Island States and Developing Countries, such as the Dominican Republic itself, as stated during the country's membership of the UNSC. The situation becomes aggravated since the country shares Hispaniola Island with Haiti, the poorest country in the Americas, which could present enormous pressures in the event of a climate crisis, leading to a national security concern. However, this nexus is starting to develop, and the national debate around this issue needs to be followed over the coming years.

Even though the country's strategic actions do not (yet) reflect a strong nexus between climate change and hard security such as the military, and due to the

³ Translated by the author.

country's high socio-economic and geographical vulnerability, climate change has become a relevant matter in national and international affairs and as an issue of human and ecological security in the Dominican Republic.

References

- Ceara-Hatton, M., 2017: "Haití Y República Dominicana: Divergencia, Población Y Migración [Haiti and the Dominican Republic: Divergence, Population and Migration]", in: *Ciencias de la Administración, Económicas y Jurídicas*, 1,2: 10–27.
- Consejo Nacional para el Cambio Climático y Mecanismo de Desarrollo Limpio - CNCCMDL, 2020: "Contribución Nacionalmente Determinada República Dominicana 2020 [Nationally Determined Contribution Dominican Republic 2020]"; at: <https://unfccc.int/sites/default/files/NDC/2022-06/Dominican%20Republic%20First%20NDC%20%28Updated%20Submission%29.pdf>.
- CNCCMLD, 2011: *Plan Estratégico Para El Cambio Climático (Pecc) 2011–2030 En La República Dominicana* [Strategic Plan for Climate Change 2011–2030 in Dominican Republic] (Santo Domingo); at: https://www.preventionweb.net/files/61012_planestrategicopecc20112030.pdf.
- CNCCMLD, and Planificación y Desarrollo (MEPyD) Ministerio de Economía, 2011: *Plan Económico Compatible Con El Cambio Climático* [Economic Development Plan Compatible with Climate Change] (Santo Domingo); at: <https://ark.cambioclimatico.gob.do/plan-deccc/>.
- CNCCMDL, 2022: "Decreto No. 601-08 Que Crea E Integra El Consejo Nacional Para El Cambio Climático Y Desarrollo Limpio (Decree No. 601-08 Which Creates and Integrates the National Council for Climate Change and Clean Development Mechanism)"; at: <https://cambioclimatico.gob.do/phocadownload/SobreNosotros/MarcoLegal/dec-no-601-08.pdf>.
- COE, 2022: *Ley No. 147-02 Sobre Gestión De Riesgos* [Law No. 147-02 About Risk Management]; at: https://www.coe.gob.do/phocadownload/SobreNosotros/MarcoLegal/Ley_147-02_Sobre_Gestion_de_Riesgos.pdf.
- Comisión Económica para América Latina y el Caribe, 2008: *Evolución Del Impacto De La Tormenta Noel En República Dominicana* [Dominican Republic: Evolution of the Socioeconomic Impacts of Storm Noel] (Mexico City: CEPAL México); at: <https://www.cepal.org/es/publicaciones/25862-evolucion-impacto-la-tormenta-noel-republica-dominicana>.
- Comisión Nacional de Emergencia, 2011: *Plan Nacional De Gestión Integral Del Riesgo De Desastres* [National Plan for Comprehensive Disaster Risk Management] (Santo Domingo); at: <https://faolex.fao.org/docs/pdf/dom146528.pdf>.
- Constitución Política de la República Dominicana, 2010: *Political Constitution of the Dominican Republic* (Santo Domingo); at: <https://www.acnur.org/fileadmin/Documentos/BDL/2010/7328.pdf>.
- Dang, Dinh Quy 2020: "Statement During the Unsc Arria-Formula Meeting on Climate and Security Risks." (New York: UNSC); at: https://digitalibrary.un.org/record/3847743/files/S_2020_30-EN.pdf?ln=en.
- Diez, Thomas; von Lucke, Franziskus; Wellmann, Zehra, 2016: *The Securitisation of Climate Change: Actors, Processes and Consequences* (London: Routledge).
- McDonald, Matt, 2021: *Ecological Security: Climate Change and the Construction of Security* (Cambridge: Cambridge University Press).
- Ministerio de Economía, Planificación y Desarrollo, 2022: *Decreto No. 23-16 Que Crea La Comisión De Alto Nivel Para El Desarrollo Sostenible* [Decree No. 23-16 Which Creates High Level Inter-Institutional Commission for Sustainable Development]; at: <https://mepyd.gob.do/mepyd/wp-content/uploads/archivos/transparencia/base-legal/decreto-23-160002.pdf>.

- Ministerio de Economía, Planificación y Desarrollo, 2022a: *Ley De Estrategia Nacional De Desarrollo 2030 End* [Law no. 1-12, 2012: National Development Strategy 2030]; at: <https://mepyd.gob.do/mepyd/wp-content/uploads/archivos/transparencia/base-legal/decreto-23-160002.pdf>.
- Ministerio de Medio Ambiente y Recursos Naturales, Consejo Nacional para el Cambio Climático y Mecanismo de Desarrollo Limpio, Global Environment Facility, and Programa de las Naciones Unidas para el Desarrollo, 2016: *Plan Nacional De Adaptación Al Cambio Climático 2015–2030 Pnacc* [National Adaptation Plan for Climate Change in the Dominican Republic 2015–2030] (Santo Domingo); at: [https://cambioclimatico.gob.do/phocadownload/Documentos/cop25/Plan%20Nacional%20de%20Adaptaci%C3%B3n%20para%20el%20Cambio%20Clim%C3%A1tico%20en%20la%20Rep%C3%ABlica%20Dominicana%202015%20-%202030%20\(PNACC%20-%20RD\).pdf](https://cambioclimatico.gob.do/phocadownload/Documentos/cop25/Plan%20Nacional%20de%20Adaptaci%C3%B3n%20para%20el%20Cambio%20Clim%C3%A1tico%20en%20la%20Rep%C3%ABlica%20Dominicana%202015%20-%202030%20(PNACC%20-%20RD).pdf).
- Ministerio de Relaciones Exteriores, 2020: “Grupo Consultivo Especial Sobre Haití Del Ecosoc De La Onu Llama a Comunidad Internacional a Reaccionar Ante Daños Sufridos En Ese País Tras Fenómenos Naturales” [Special Consultative Group on Haiti of the UN ECOSOC Calls on the International Community to React to the Damage Suffered in That Country after Natural Phenomena].
- Ministerio de Relaciones Exteriores, 2020a: “República Dominicana Destaca Ante La Oea Ayuda Humanitaria Que Ofrece a Haití Luego De Desastres Naturales Recientes” [Dominican Republic Highlights before the Oas Humanitarian Aid That It Offers to Haiti after Recent Natural Disasters]; at: <https://mirex.gob.do/republica-dominicana-destaca-ante-la-oea-ayuda-humanitaria-que-ofrece-a-haiti-luego-de-desastres-naturales-recientes/>.
- Nachmany, Michal; et al., 2015: “Climate Change Legislation in Dominican Republic” (London, UK: London School of Economics and Political Science, Grantham Research Institute).
- Navarrete, Bernardo, 2015: “Factores Explicativos De Una Oleada Migratoria. El Caso De Haití” in: *Revista de Ciencias Sociales* (Ve), 21,1: 97–107.
- Oficina Nacional de Estadística, Ministerio de Economía, Planificación y Desarrollo, 2014: *Informe General. IX Censo Nacional De Población Y Vivienda 2010* [General Report. IX National Population and Housing Census 2010] (Santo Domingo); at: <https://www.one.gob.do/media/ohbh0mih/informegeneral-censo-2010.pdf>.
- PLENITUD; et al., 2014: *Estrategia Nacional De Adaptación Al Cambio Climático En El Sector Agropecuario De La República Dominicana 2014–2020* [National Strategy for Adaptation to Climate Change in the Agricultural Sector of the Dominican Republic] (Santo Domingo).
- Presidence of Dominican Republic, 2021: *Presidente Abinader Plantea En La Onu Acciones Urgentes En Materia De Cambio Climático, Facilidad Crediticia Y Crisis Haitiana* [President Abinader Raises Urgent Actions at the Un on Climate Change, Credit Facilities and the Haitian Crisis]; at: <https://presidencia.gob.do/noticias/presidente-abinader-plantea-en-la-onu-acciones-urgentes-en-materia-de-cambio-climatico>.
- Programa de las Naciones Unidas para el Desarrollo, 2012: *Documento De Proyecto. Programa Nacional Sombrilla* [Project Document. National Umbrella Program]; at: https://info.undp.org/docs/pdc/Documents/DOM/00062216_PRODOPPEI-REGATTA FIRMADO.pdf.
- Rathe, Laura, 2008: *Pana Rd, Plan De Acción Nacional De Adaptación* [National Adaptation Action Plan] (Santo Domingo).
- Servicio Nacional de Protección Ambiental, 2022: *Decreto No. 1194 Que Crea El Servicio Nacional De Protección Ambiental* [Decree No. 1194-00 Which Creates National Environmental Protection Service].
- Sistema Único de Beneficiarios, 2019: *Índice De Vulnerabilidad Ante Choques Climáticos Siuben-Sistema Único Beneficiarios* [Index of Vulnerability to Climate Shocks—Single System Beneficiaries] (Santo Domingo: Gabinete de Coordinación Políticas Sociales); at: <https://siuben.gob.do/ivacc/>.
- U.S. Agency for International Development, et al., 2019: *Final Report: Planning for Climate Adaption Program* (Santo Domingo).

- United Nations Security Council (UNSC), 2019: “Letter Dated 2 January 2019 from the Permanent Representative of the Dominican Republic to the United Nations Addressed to the Secretary-General” (New York: UNSC); at: <https://undocs.org/en/S/2019/1>.
- United Nations Security Council (UNSC), 2019a: “Statement by Miguel Vargas During Unsc Open Debate” (New York: UNSC). <https://undocs.org/en/S/PV.8451>.
- U.S. Agency for International Development, 2015: “Integrating Climate Change into Usaid Activities: An Analysis of Integration at the Solicitation Level” (Washington, D.C.: USAID); at: https://pdf.usaid.gov/pdf_docs/PA00KN7C.pdf.
- Vice-Presidencia de la República Dominicana, and Programa de las Naciones Unidas para el Desarrollo, 2018: Protocolo Nacional De Actuación Para La Protección Social Frente a Choques Climáticos [National Action Protocol for Social Protection against Climate Shocks] (Santo Domingo).

Chapter 5

Securitisation of Climate Change in Estonia: Widening Security Concepts in National Strategies and Foreign Policy Activities



Ramon Loik and Evelin Jürgenson

Abstract On 1 January 2020, Estonia became a rotating member of the United Nations Security Council (UNSC) for 2020–2021. Amongst other priority security-related topics – human rights protection, conflict prevention and ensuring cybersecurity – Estonia’s UNSC agenda prioritised the interconnection between climate change and international security developments. This included expanding the mandate of the UN Secretary-General in this domain of rising global safety and stability concerns. Estonia also emphasised the increase in widespread irregular migration, especially from territories under strong demographic pressure and associated insecurities due to climate change, as a substantial transnational impact factor. Regardless of public attention to national environmental conditions, “climate change” as a security issue was not visible in Estonia’s strategic thinking and main security strategies until joining the European Union (EU) and the North Atlantic Treaty Organisation (NATO) from 2004 onwards. This chapter discusses how being a member of international organisations and sharing the challenges more widely than only with regional security communities, with globalised security thinking – including climate change impact, and especially energy security and irregular migration – has been steadily securitised and adapted into Estonia’s national strategies and foreign policy activities. The transition indicates the overall shift towards a wider understanding of climate change as a risk-magnifying factor and “threat multiplier” in Estonia’s security thinking.

Keywords Estonia · UN Security Council · EU climate policy · Security transitions · Threat multiplier

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5.1 Introduction

Estonian public attention and community-level sensitivity to national environmental conditions – such as protection of forests and waters, or protests against pollution as important markers of safety, health protection and quality of life – have been high since late 1980s. The country has not been particularly vulnerable to direct climate change-related processes so far. Since 1991, there have been only a couple of significant natural disasters in Estonia, which could be categorised as possible climate change-related disasters. One was large-scale flooding in the littoral area city of Pärnu¹ in January 2005, when the seawater level reached 2.95 metres, marking the highest level ever recorded there (Sagris et al. 2005: 23). The other disaster was snowstorm Monica in 2010, which trapped approximately 300 cars with about 600 people in Padaorg valley² for more than 24 hours (Ortu et al. 2018: 6–7). Both cases demanded state-level crisis-management efforts, including local evacuation, large-scale rescue operations and significant mobilisation of national crisis-response resources. One could argue that due to these considerable natural disasters, the climate change-related security dimension moved into public awareness and threat perceptions and that these disasters influenced government-level civil preparedness and crisis management planning approaches in Estonia by pushing the country to broaden the national security agenda to include ecological risks.

Particularly, the 2015–2020 National Internal Security Development Plan³ emphasised the need to improve rescue capacity and crisis management. This was to be better prepared for increasing risks triggered by climate change, such as more extreme weather conditions, more frequent forest fires, larger floods, more intense storms, and other possible natural disasters. Therefore, climate change adaptation in national contingency planning – primarily risk mitigation and the need to improve readiness for climate change impacts by strengthening civil protection and resilience – was expected to get more attention (Estonian Government 2015: 47, 59, 72). The Climate Change Adaption Development Plan until 2030 also creates a visible link between climate change and security challenges by pointing out the most vulnerable areas in Estonia, such as densely populated coastal areas and areas around inland water bodies, where risks are connected to a sudden rise in water levels. Also, energy and security of supply and storms that are more likely to endanger coastal areas of Estonia bring together a rise of sea level and possible floods (Ministry of Environment 2017: 5–6, 11–12, 27–29). These examples from national strategies indicate growing political attention to climate change as an important (new) dimension of various security challenges.

The sustainability of energy supply as the most important vital service and critical infrastructure (Juurvee/Loik 2021) is one of the climate change-related key frameworks for Estonia from a national security perspective. In 2017, the Estonian Parliament (*Riigikogu*) adopted a low-carbon national strategy, officially titled “General

¹ Population (2020) approximately 40,000; area 32.22 km².

² Lääne-Viru County, in North-Eastern Estonia.

³ *Riigi Teataja* (State Gazette) RT III, 3 March 2015, 5.

Principles of Climate Policy until 2050” (abbreviated as GPCP 2050). This consists of the policy guidelines for the economy as sectoral guidelines for the mitigation of climate change impacts for energy and industry, transportation, agriculture, forestry and land use (Parliament 2017). Principles and guidelines in the GPCP 2050 have to be taken into account when renewing and implementing cross-sectoral and sectoral strategies, as well as national development plans (Ministry of Environment 2018a). On 3 October 2019, the Estonian Government approved a supportive position on Europe’s long-term goal to achieve carbon neutrality by 2050 for the entire EU (Estonian Government 2019). The government has also developed a strategy for moving towards a long-term emission reduction target, which seeks to reduce the emission of greenhouse gases (GHG) by 80% compared to 1990 emission levels.⁴

In parallel, one key objective of Estonia’s 2030 National Energy and Climate Plan (see Ministry of Economic Affairs and Communications 2019) is to ensure energy security by keeping the rate of dependency on imported energy, especially from hostile actors, as low as possible.⁵ Among other lines of strategic action, such an objective means further electrical grid development and synchronisation with the Central European electricity system. Developing international connectivity and preparedness by synchronisation of the electrical system with the Central European frequency band are specific security-related Estonian (and wider regional) policies and measures contributing to the Internal Energy Market dimension of the EU Energy Union.⁶ Climate change-related international dynamics, associated rising security challenges and ambitious EU climate policies are the main external variables and “game-changers” for Estonia’s domestic strategy-building, which has cross-sectoral impact and long-term effects.

In this chapter, we focus on how climate change-related security developments have shaped Estonia’s security concepts in national strategies and foreign policy activities. We are specifically interested in how the global climate-security nexus has arisen and become steadily securitised in Estonian domestic politics and been internationally addressed during Estonia’s UNSC membership in 2020–2021. For this analysis in a process-tracing manner, we draw on observation of topical documents and some characteristic national cases. We evaluate Estonia’s climate change-related security agenda via the most topical speeches officially addressed to the UNSC by Estonian political leaders. The theoretical framework is informed by Hardt et al. (the introductory chapter of this book) and relies on the differentiation between human security, state security and ecological security. For the sake of conceptual traceability, it should be clarified that in referring to “state security”, traditional (national) and mainly *hard security* policies are involved. The term “ecological security” is used when the main concern is securing the environment and sustainable development.

⁴ According to Estonia’s National Inventory Report (2022: 11), from 1990 to 2020, the country’s emissions from Land Use, Land-Use Change and Forestry (LULUCF) decreased by 65%.

⁵ See the regulatory bases and, additionally, Estonia’s Communication to the European Commission under Article 3(1) of Regulation (EU) No 1013/2018, final version, 19 December 2019.

⁶ See European Commission, Energy Union; at: https://ec.europa.eu/energy/topics/energy-strategy/energy-union_en (15 March 2021).

“Human security” involves societal security aspects such as employment conditions and livelihoods in times of fast sectoral transitions.

The chapter consists of seven sections. First, we focus on how climate change entered public threat perceptions in Estonia and gradually developed as a *security issue* in public opinion. Second, we describe the main ecological security and environment protection characteristics, in parallel with the milestones of Estonia’s climate policy since 2016. Also, we briefly present two characteristic cases – construction of the *Rail Baltica* network and development of wind turbine generation systems – as examples of intertwined and colliding interests, which needed additional political efforts to achieve compromise between various stakeholders. The third section traces the evolution of Estonia’s major security concepts and integration of the international climate change agenda into national strategic thinking. We argue that climate change has appeared as a threat-multiplying topic in national security strategies. The fourth section opens the energy supply challenges as the main concern of national security, followed by the human security domain that characteristically concerns economic transformation of the Russian-speaking community-dominated Ida-Viru industrial region in Estonia. The sixth and seventh sections discuss the framing international influence on the climate change *securitisation* process and evaluate the representation of Estonia’s climate security agenda at the UNSC.

5.2 Dynamics of Climate Change in Public Opinion and Threat Perceptions

Until recently, public awareness about *climate change* challenges has been quite moderate in Estonia. A topical research project was commissioned by the Estonian Environmental Research Centre in 2015 to assess the impact of climate change and adaptability measures for the economy and society. The research, based on the Eurobarometer surveys from 2009 and 2014 and implemented by researchers from University of Tartu (Sotsiaalteaduslike rakendusuuringute keskus 2015: 26–28), found Estonians to be only slightly interested in climate change issues in comparison with other EU countries. According to the Special Eurobarometer 513 about climate change, in 2011, 63% respondents in Estonia (below the EU average of 78%) held the position that “climate change is a very serious problem.” 76% of respondents (below the EU average of 87%) agreed that tackling climate change and environmental problems should be a priority to improve public health. Also, that the cost of the damage due to climate change is much higher than the investment needed for a green transition (75%, similar to the EU average of 74%). Eighty three percent of respondents (vs the EU average of 88%) in Estonia think it is important that both their government and the EU set “ambitious targets to increase the amount of renewable energy by 2030” (European Commission 2021). According to the European Investment Bank’s

(EIB) Climate Survey (2022)⁷ only a tiny majority (53%) of Estonian respondents believe that their quality of life would improve due to the green transition policies (EU average is 61%); and only 46% of Estonians believe that these policies will have a net positive impact on the country's employment conditions.

Non-governmental organisations such as the Estonian Fund for Nature,⁸ the Estonian Green Movement⁹ and the Estonian Environmental Law Centre (EELC)¹⁰ emphasise on their homepage "Climate change" sections (Kliimamuutus 2020) that climate change is also a security issue in addition to the environmental protection, economy and societal domains involved. According to the longitudinal public opinion and national defence trend survey (2015/2016–2020),¹¹ the spread of epidemics (86%), cyber-attacks (85%), refugee migration to Europe (84%), the global economic crisis (84%), the spread of disinformation and "fake news" (81%), terrorism (81%) and global climate change (81%) were the highest priorities among Estonian public threat perceptions in 2020 (see Fig. 5.1).

Public perception of climate change as a security issue has gradually increased during the period 2015–2020 (see Fig. 5.2). Whereas 65% of respondents felt that climate change was a security concern in 2015, the same topic reached 81% by 2020.

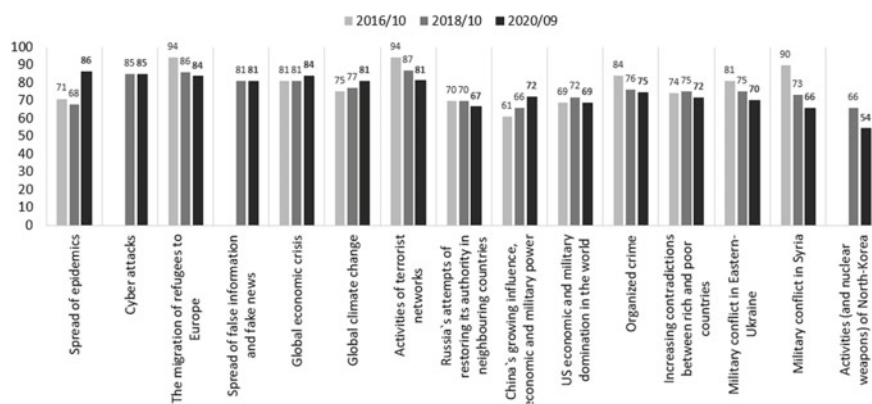


Fig. 5.1 Threat perception priorities 2016–2020, Estonia (% of survey responses). *Source* Established and analysed by the authors based on data from the following documents: Estonian Ministry of Defence, National Defence and Society; at: <https://www.kaitseministeerium.ee/en/objectives-activities/national-defence-and-society> (10 May 2021); "Public Opinion and National Defence" (2021: 30; 2020: 30; 2019: 29; 2018a: 23; 2018b: 21; 2017a: 21; 2017b: 21; 2016a: 21; 2016b: 21; 2015: 22)

⁷ EIB Climate Survey; at: <https://www.eib.org/en/press/all/2022-148-estonians-sceptical-the-green-transition-will-benefit-people-and-the-economy> (25 June 2022).

⁸ Estonian Fund for Nature; at: <https://elfond.ee/> (31 May 2021).

⁹ Estonian Green Movement; at: <https://roheline.ee/meist/> (5 June 2021).

¹⁰ Estonian Environmental Law Center (EELC); at: <https://k6k.ee/eelc/about-us> (5 June 2021).

¹¹ Estonian Ministry of Defence, National Defence and Society; at: <https://www.kaitseministeerium.ee/en/objectives-activities/national-defence-and-society> (10 May 2021).

The percentage of those respondents who were definitely (certainly) convinced that climate change is a security issue increased from 21% in 2015 to 40% by 2020. Hence, climate change has steadily become a securitised domain in Estonian public opinion and threat perceptions.

The next sections will discuss the characteristic features of climate change-related ecological, national, and human security aspects in Estonian society, domestic policies, and international cooperation. It is assumed that described dynamics of public opinion and threat perceptions around the climate change issue reflect the complex interplay of global security dynamics, international climate policies and adaptive reflections in correspondent domestic politics.

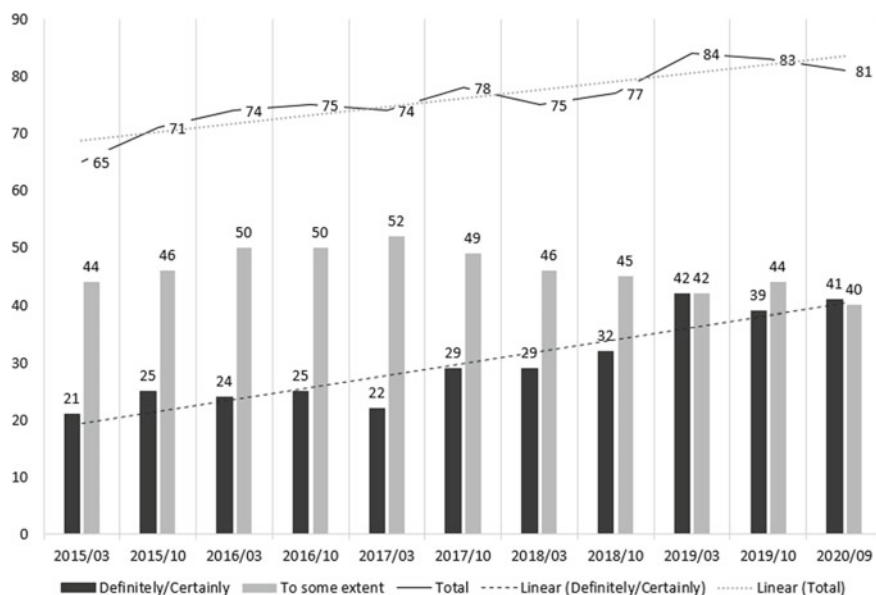


Fig. 5.2 Dynamics of climate change as security issue perception 2015–2020, Estonia (% of survey responses). *Source* Established and analysed by the authors based on data from the following documents: Estonian Ministry of Defence, National Defence and Society; at: <https://www.kaitseministeerium.ee/en/objectives-activities/national-defence-and-society> (10 May 2021); “Public Opinion and National Defence” (2021: 30; 2020: 30; 2019: 29; 2018a: 23; 2018b: 21; 2017a: 21; 2017b: 21; 2016a: 21; 2016b: 21; 2015: 22)

5.3 Ecological Security, Environment Protection and Climate Change

Forest covers over half of Estonia's 45,227 km² territory, which is mostly open to the Baltic Sea. Estonia's coastline is 3,794 km long.¹² A total of 18.5% of Estonian land territory, 27% of territorial waters and 28% of the aquatic area is under environmental protection. Considering both land and water areas, 22.2% of Estonian territory is environmentally protected (Linder 2017: 36). There are also EU Natura 2000 sites in Estonia, which are regulated according to Nature Conservation Act¹³ as areas under environmental protection (e.g., landscape protection areas, national parks, nature conservation areas) or as species-protection sites or limited-conservation areas. Strategic priorities concerning both EU and national investments in Natura 2000 (see Ministry of Environment 2018b: 14–16) are also linked to support climate change mitigation and adaptation activities in Estonia.

Article 5 of the Estonian Constitution¹⁴ states that “The natural wealth and resources of Estonia are national riches which must be used sustainably”, and Article 53 stresses that “Everyone has a duty to preserve the living and natural environment and to compensate for damage he or she causes to the environment. The procedure for compensation shall be provided by a law” (The Constitution of the Republic of Estonia 1992). Hence, the protection of the environment as everyone's duty is one of Estonia's constitutional values. It is also worth remembering that the widening societal protest against Soviet occupation in the mid-1980s acquired new public impulses by means of the so-called Phosphate War (*Fosforiidisõda*) during 1987–1988, over Moscow's intention to open and exploit environmentally dangerous phosphate mines in North-East Estonia. Such plans and attempts at reckless Soviet-style chemical industrialisation were seen as an existential threat to the country and nation at that time (see, among others, Miljan 2015: 371). Hence, not surprisingly, the use of natural resources and environmental protection are demanding public issues under quite careful political scrutiny.

From the perspective of domestic politics, as the Chamber of Estonian Environmental Unions – an apolitical, independent cooperation network¹⁵ – pointed out (Eesti Keskkonnaühenduste Koda [EKO] 2019), political parties presented environmental issues more soundly before the 2019 general elections than in previous electoral campaigns. Increasing political attention to ecological security and climate change was due to growing electorate interest in environment protection issues and ambitious cross-sectoral policy adoption (see Table 5.1), with widespread approval of Estonia's support for the EU's long-term goal of achieving climate neutrality by 2050.

¹² Estonia; at: <https://Estonia.ee> (12 November 2021).

¹³ *Riigi Teataja* RT I 2004, 38, 258; at: <https://www.riigiteataja.ee/en/eli/ee/527012021002/consolide/current> (30 May 2021).

¹⁴ Entry into force on 3 July 1992. *Riigi Teataja* RT 1992, 26, 349; at: <https://www.riigiteataja.ee/en/eli/ee/530122020003/consolide/current> (30 September 2021).

¹⁵ Chamber of Estonian Environmental Unions; at: <https://eko.org.ee/et> (6 June 2021).

Table 5.1 Estonia's climate policy milestones since 2016

Date	Policy adoption
26 October 2016	Parliament (<i>Riigikogu</i>) ratified the Paris Agreement (Parliament 2016)
2 March 2017	Government adopted the national strategy “Climate Change Adaptation Development Plan until 2030”. The plan's main objective is to increase the readiness and capacity at state, regional and local levels to adapt to the effects of climate change (Ministry of Environment 2018)
5 April 2017	Parliament adopted a Resolution on low carbon strategy, officially named “General Principles of Climate Policy until 2050” (abbreviated as GPCP 2050). It consists of sectoral policy guidelines for energy and industry, transportation, agriculture, forestry and land use to mitigate climate change impacts (Parliament 2017). The strategy aims to move towards a long-term emission reduction target, which is set to reduce the emission of GHG by 80% by 2050 compared to 1990 emission levels. Section IV of the strategy also highlights the need to contribute to the cross-border mitigation of climate change. Additionally, the climate policy emphasises that adaptation should ensure the operation of the economy and energy sector infrastructure, as well as of other sectors, in the event of any climate incident in such a way that ensures the availability of vital services. Principles and guidelines in the GPCP 2050 have to be taken into account when renewing and implementing cross-sectoral and sectoral strategies, and national development plans (Ministry of Environment 2018a)
3 October 2019	Government approved a supportive position of the EU's long-term goal to achieve climate neutrality by 2050 for the entire Union (Estonian Government 2019). To achieve this goal, all relevant stakeholders from the private and public sectors should contribute. Changes both in production and consumption sectors are required (Stockholm Environment Institute Tallinn Centre 2019: 3)

Source Compiled by the authors

In parallel with climate policy developments, the private sector has increasingly become aware of interconnections between business activity, environmental protection, ecological security, and climate change challenges. PricewaterhouseCoopers (PwC) conducts the Annual Global CEO (Chief Executive Officer) Surveys (see PricewaterhouseCoopers [PwC] 2019). At the same time, PwC Estonia has conducted similar surveys in all three Baltic states – Estonia, Latvia, and Lithuania. The 2020 survey concluded that awareness amongst Estonian chief executives about environmental and climate risks increased from 45% to 70% between 2019 and 2020. The comparative 2020 figures for Latvia were 38% and Lithuania 49% (PricewaterhouseCoopers [PwC] 2020: 23, 35). The trend indicates that nearly two-thirds of Estonian CEOs hold a position that environment and climate change-related issues are on the list of considerable risks when they plan their business activities. The following case-studies about the construction of the *Rail Baltica* project and development of wind turbine generation systems characterise the convergence of ecological (environmental) and national security interests. This convergence may lead to friction from different perspectives and require additional political efforts to broker a compromise between various stakeholders.

5.3.1 Construction of Rail Baltica

This is the largest and most modern ongoing infrastructure project in the Baltic region over the past century (Baltic News Service 2020). *Rail Baltica* is planned to be an environmentally-friendly railway connecting the three Baltic states to the Central European railway network. The project includes five EU countries – Poland, Lithuania, Latvia, Estonia, and indirectly also Finland (Rail Baltica 2018, 2021; Baltic News Service 2020). Passenger trains are expected to travel at speeds of up to 240 km/h, with the maximum speed of freight trains planned to be 120 km/h. The total length of the route is 870 km, and the Estonian section is approximately 200 km. *Rail Baltica* is mainly an economic and ecological investment project. However, it will also be an important investment for national security allowing the development of an environmentally-friendly economy, and improvement of defence mobility across the Baltic states by adapting regional infrastructure for better movement of NATO troops if needed (15min 2020; Baltic News Service 2020).

Although the project is environmentally-friendly and supports the strengthening of the defence dimension in the Baltic region, green groups have mounted several protests against *Rail Baltica*. Initially, a public discussion concentrated on the route in Estonia, where the plan is to build a new railway from Tallinn through Pärnu to Riga in Latvia. But some active interest groups have requested that the route be built beside the existing railroad (Tallinn–Tapa–Tartu–Valga), to lessen environmental damage (Cavegn 2017; Adamson 2020). The second hotly-debated issue has been the poor level of community involvement/consultation during the planning process. One reversal of judgement appeal has also been filed with Estonia's Supreme Court.¹⁶

Related to the *Rail Baltica* project, the option to build an approximately 80 km-long underwater tunnel between Finland and Estonia has also been under discussion for several years (David 2018). In 2018, the tunnel issue arose again more seriously when Finnish and Estonian ministers discussed how these two infrastructure projects, *Rail Baltica* and the Helsinki-Tallinn tunnel, could ensure a fast connection with Central Europe (Eestinen 2018). On 26 April 2021, the Finnish Minister of Transport and Communications and the Estonian Minister of Economic Affairs and Communications signed a memorandum of understanding between the two governments on a common transportation initiative, including the optional Helsinki-Tallinn tunnel project. The governments also pointed out that *Rail Baltica* is a pre-condition for establishing a tunnel between Helsinki and Tallinn (Ministry of Economic Affairs and Communications 2021; Eesti Rahvusringhääling 2021a). The construction of *Rail*

¹⁶ Supreme Court of Estonia (*Riigikohus*); at: <https://www.riigikohus.ee/et/laheidid/?asjaNr=3-18-529/137> (6 June 2021). The non-governmental organisation (NGO) ARB and the Estonian Society for Nature Conservation disputed decisions by the Minister of Public Administration regarding the location of the *Rail Baltica* track in Pärnu and Rapla counties. The criticism referred to poor public involvement, with claims that the consultation/publication period was too short, and that it took place during vacations and public holidays. Opponents of the project also pointed out that the principles stipulated by the Aarhus Convention were not considered. The petition also raised environmental issues, such as protection of *Natura*-areas and negative impact on wildlife.

Baltica exemplifies how a mainly ecological security perspective involves national security aspects, including also potential risks of foreign direct investments in such large infrastructure projects (see, among others, Roonemaa et al. 2019).

5.3.2 Development of Wind Turbine Generation Systems

Oil shale-based electricity production has traditionally been an important guarantee of energy autonomy for Estonia. However, electricity production from shale is CO₂-intensive and, according to international climate agreements, Estonia's energy sector needs restructuring. Thus, the need to balance social, environmental, economic and energy security considerations will guide the gradual transformation of the Estonian oil shale industry in coming decades (International Energy Agency 2019: 12).

One of the viable solutions is to produce more renewable energy, including the use of wind power. The National Security Concept (NSC) also points out the need for measures that enable the increase in renewable energy sources (Parliament 2017a). Currently (year 2020), 145 wind turbines in Estonia can generate a total power of up to 319.96 MW (Tuuleenergia Assotsiatsioon 2021). However, the development of wind parks in Estonia has certain national security-related limits, including avoiding disruption to national defence construction, such as the operational areas of military radars. The case even reached the Supreme Court of Estonia (*Riigikohus*), which ruled that limitations connected to national defence construction do not conflict with constitutional law (*Riigikohus* 2021). To solve the problem, the government decided to improve defence early warning capabilities to enable wind turbine park construction in coastal areas (Ministry of Economic Affairs and Communications 2021). With increasing economic interest in developing wind parks in Estonia, agreement for an offshore wind farm in the Gulf of Riga has been concluded. According to publicly available information (see Eesti Rahvusringhääling 2021), its capacity will be 1–2 GW with an estimated production of up to 8 TWh of renewable energy.

5.4 Evolution of National Security Concepts and the Climate Change Agenda

After restoration of independence from Soviet occupation in 1991 and adoption of the Constitution of the Republic of Estonia by referendum in 1992, joining Western democratic institutions and key European/trans-Atlantic security organisations – especially the EU and NATO – became a primary strategic goal for Estonia (and other Baltic states). In 1993 Estonia became a full member of the Council of Europe and in 1995 the Free Trade Agreement with the EU came into effect. Estonia became a member of the United Nations (UN) in 1991 (Ministry of Foreign Affairs 2019) and

signed the Kyoto Protocol on 3 December 1998.¹⁷ Estonia has also been a member of the World Trade Organization (WTO) since 13 November 1999. The 1990s and the early 2000s could be characterised as a very intensive transition period back to the democratic West, and away from the unstable and authoritarian Russian Federation that became the successor state for the dissolved Soviet Union.

By 2001, the international security environment was dominated by new challenges such as transnational terrorism, organised crime, and proliferation of weapons of mass destruction (WMD), as well as economic challenges due to Estonia's close integration with the world economy. Hence, in addition to the aforementioned security threats, from 2001 the National Security Concept (NSC) of the Republic of Estonia also paid attention to the risks of over-reliance on one country to provide strategic resources (Männik 2013: 27). From the internal security perspective, the fight against Russian (former Soviet)-originated organised criminal networks defined the 1990s and subsequent decade in Estonia and other Baltic states (Loik/Smith 2015). However, from the *hard security* perspective, revanchist Russia has continuously been the main potential existential threat to Estonia's sovereignty and nationhood (Estonian Foreign Intelligence Service 2020: 4). As the Estonian Foreign Intelligence Service predicted,¹⁸

Considering that Russia's policies in the neighbouring region remain unchanged and do not contribute to establishing democratic principles and free elections, the coming years will highly likely bring new crises in the region, creating both direct and indirect security threats for Estonia and more broadly for Europe (Estonian Foreign Intelligence Service 2021: 7).

Estonia's most important security strategic goals were fulfilled by becoming a member of NATO on 29 March 2004, and a member of the EU on 1 May 2004. On 21 December 2007, Estonia also joined the Schengen Area. Estonia has also been a member of The Organisation for Economic Co-operation and Development (OECD) since 9 December 2010. Since 1 January 2011, the Euro has been the currency of Estonia (Eurydice 2017). The country's overall strategic course has been a proactive foreign and security policy supported by active membership in international organisations. Estonia is a member of 303 international organisations.¹⁹ The "Estonian Foreign Policy Strategy 2030" (Foreign Policy Strategy 2020: 11) states that increasingly tense security dynamics and changes in international relations require even closer cooperation with allies and partners in international organisations, as well as bilaterally and in regional formats. Among other issues, international cooperation on environmental and climate problems is listed as one of the priorities for Estonian foreign policy:

¹⁷ The Estonian Parliament ratified the Kyoto Protocol on 3 September 2002 (Act RT II 2002, 26, 111; RT I 2004, 43, 298). The Estonian Ministry of the Environment reports that the country has successfully met the obligation, set by the Kyoto Protocol, to reduce emissions by 8% during 2008–2012 compared to 1990 emissions; at: <https://www.envir.ee/en/kyoto-protocol> (30 May 2021).

¹⁸ Estonian Foreign Intelligence Service (Välisluureamet) Annual Report; at: <https://www.valisluureamet.ee/doc/raport/2021-en.pdf> (20 June 2021).

¹⁹ Estonian Foreign Policy Strategy 2030; at: https://vm.ee/sites/default/files/Estonia_for_UN/Rasmus/estonian_foreign_policy_strategy_2030_final.pdf (21 June 2022).

There is a growing need to address global challenges (including environmental and climate problems, terrorism, poverty, economic and social inequality, pandemics, irregular migration, etc.). All this necessitates closer relations with our immediate neighbours in Europe and more distant countries and calls for a greater contribution to crisis prevention, prompt cooperation and certainly also development cooperation and humanitarian aid (Foreign Policy Strategy 2020: 12).

Estonia signed the Paris Agreement in November 2015 (Ministry of Environment 2017a)²⁰ and joined the European Climate Pact²¹ on 3 October 2019 (Estonian Government 2019). As shown in Sect. 5.2, ecological security is an important aspect of international and European climate politics. In the following sections, we outline the different dimensions of how climate change-related challenges are included in national security strategies. We concentrate particularly on the widening of Estonia's (traditional) security agenda in parallel with international (global) security dynamics and foreign policy activities.

5.4.1 *Emergence of Climate Change in National Security Strategies*

Several parliamentary Acts have shaped Estonian defence and security policy. The first one after re-independence was adopted in 1996 as a basis for the main directions of Estonian defence policy (Parliament 1996). The next one followed in 2001, and already defined a wider scope and guidance for national security policies, including the main challenges and principles of environmental safety (Parliament 2001). The next security policy documents were adopted in 2004 and 2010. These two Acts are quite similar, though the latter is more elaborate. However, “climate change” as a security challenge appeared more visibly by the time of the 2004 Act (Parliament 2004), which included sub-sections about “dangers due to human activity and the forces of nature” and “strengthening environmental security”. Still focused on ecological security as an environmental protection concern, the 2004 Act defined environmental degradation as the “result of global environmental threats and may be linked to climate change, ozone depletion and the depletion of natural resources” (sub-Sect. 5.3.1). In this regard, the 2004 Act emphasises that “Estonia is mainly threatened by natural disasters, by storms and floods, which can cause emergencies”.²²

The current (until February 2023) NSC of the Republic of Estonia was adopted in 2017. The NSC specifies that as a small state, Estonia follows a *broad* security and

²⁰ The Estonian Parliament ratified the Paris Agreement on 26 October 2016 (Act RT II, 1 November 2016: 2).

²¹ The European Commission set the vision for a climate-neutral EU by 2050 in November 2018 in accordance with the Paris Agreement goals. On 14 March 2019 the European Parliament endorsed the objective of achieving net-zero GHG, and on 12 December 2019 the European Council agreed on the goal of a climate-neutral EU by 2050.

²² Unofficial translation by the authors.

comprehensive national defence concept,²³ which involves development of both military and non-military capabilities, activities and resources from the public and private sectors and the engagement of civil society actors. To facilitate consistent and effective functioning of national defence, Estonia developed six pillars: military defence, civilian support for military defence, international action, domestic/internal security, maintenance of the continuous operation of the state and society, and psychological defence. Estonia's national defence is based on an initial individual defence system and NATO's collective defence mechanism (Parliament 2017a).

Amongst the main goals, principles and trends of security policies, the NSC from 2017 already emphasises "climate change" as a security challenge in several sections (Parliament 2017a). As a framework document underpinning other national development and action plans, the NSC importantly states that Estonia addresses its security as a part of wider international security, including the responsibility to deal with climate change impacts:

The international security environment is tense. Threats and risks that emerged in connection with globalization still exist and their influence has somewhat sharpened [...] Europe's security is influenced by migration flows – a problem that has been exacerbated by the slow and inefficient resolution of international conflicts. Ideological and religious extremism have taken greater hold globally and are increasingly attacking the democratic world and its foundations. Humanitarian crises are more common in today's world than before, and it is increasingly difficult for the international community to counter them. The state of the global economy is still uncertain; the impact of climate change and inequality impinges on everyday life and development (Parliament 2017a: 3–4).

The NSC also recognises (Parliament 2017) that people are more aware of the challenges and climate change that can lead to conflict together other security concerns:

Estonia's future and security are clearly also connected to global trends. People have started to understand better the challenges to the global sustainability, and their multiple facets and interconnections. Poverty, and the inequality and limited access to education it causes, rapid growth of the global population, and demand for vital resources necessary for life – fresh water, arable land, food, energy – and climate change, as well as other changes in the environment brought about by human activity, may exacerbate tensions and lead to conflict. All of this generates global instability (Parliament 2017a: 6).

Furthermore, according to the NSC, Estonia "takes measures to monitor climate change, neutralize its risks and deal with the consequences on the local, regional, and national level" to reduce vulnerabilities. The most effective results could be achieved through "international cooperation and the balanced development of conservancy and environmental protection, the economy and [the] social sphere" (Parliament 2017a: 18). In addition to national and local government, as the NSC emphasises, the private sector and non-governmental sectors as well as research facilities need to be involved to tackle climate change-related security concerns successfully. Hence, the effects of these measures could be achieved in the manner of multi-level governance and cross-sectoral involvement. To explain this further, we should consider the adaptive effects

²³ Also, the terms *whole-of-government* or *whole-of-society* are used interchangeably to characterise a *broad* or *comprehensive* security approach.

of climate change as a cross-sectoral security issue in European and international politics.

5.5 Energy Transition as the Main Concern of National Security

From Estonia's perspective, it is especially important to emphasise the link between climate policies and national energy security. Answering the survey question "Which state-level objects and services have the highest importance in your daily life?", 80.5% of Estonian respondents ($n = 1028$) said *energy* in October 2020. This was followed by *health sector* (62.8%) and *drinking water supply* (57.6%) (Juurvee/Loik 2021a: 137). As an important policy response to the energy transition challenge, Government of Estonia approved the Estonian Energy Development Plan (EEDP) until 2030 on 19 October 2017 (see Ministry of Environment 2019). The EEDP 2030 is aimed at ensuring an energy supply that is available to consumers at a reasonable price and effort, and with an acceptable environmental condition while observing the terms and conditions established in the long-term energy and climate policy of the EU. The plan also drafts the benchmarks for renewable energy, energy efficiency operational programs and the vision for the renovation of buildings (Ministry of Environment 2019: 37). The EEDP 2030 also includes regional cooperation plans, especially with neighbouring Latvia and Lithuania, in terms of achieving security of energy supply (Ministry of Environment 2019: 38).

In 2018, the EU member states were tasked with establishing a 10-year integrated national energy and climate plan according to regulation (EU) 2018/1999 of the European Parliament and the Council.²⁴ These plans are published on the European Commission homepage²⁵ (European Parliament and the Council of the European Union 2018a). Based on the referenced EU regulation and policy guidance, the Estonian National Energy and Climate Plan (NECP) until 2030 (Ministry of Economic Affairs and Communications 2019) stresses that electric power and gas supply reliability has been improved through different joint projects. However, it is still a problem as the networks of the Baltic states have not been fully integrated with Central European electricity grids (Ministry of Economic Affairs and Communications 2019). The NECP also refers to the agreement between the Baltic states, Poland and the European Commission denoting that Estonia, Latvia and Lithuania will be synchronised with continental European networks by 2025. The roadmap on the synchronisation of the Baltic states' electricity networks with the Continental European Network, signed in Brussels on 28 June 2018, emphasises:

Estonia, Latvia and Lithuania are the only Member States of the European Union whose electricity networks are still operated in a synchronous mode with the Russian and Belarusian

²⁴ Approved on 11 December 2018.

²⁵ European Commission, National Energy and Climate Plans (NECPs); at: <https://ec.europa.eu/energy/en/topics/energy-strategy/national-energy-climate-plans> (10 May 2021).

systems; the synchronization of the Baltic States with the continental European networks is a key political priority and important to ensure secure, affordable and sustainable energy for the eastern Baltic Sea region, in line with the Union's energy policy objectives, particularly ensuring the functioning of the EU internal electricity market (European Union 2018: 2).

Subsequently, after the 2019 general elections, the Estonian Government approved the action plan (Estonian Government 2019a) that sets the aim of connecting the national electricity system with EU electricity grids to increase energy security.

These developments should be traced in parallel with Estonia's GPCP 2050, which sets the long-term GHG emissions reduction target and policy guidelines for adapting to the impact of climate change and ensuring the preparedness and resilience to react to the impacts of climate change. Principles and guidelines set in the document apply when renewing and implementing the cross-sectoral and sectoral strategies and national development plans in place. The general sectoral policy guidelines and principles of GPCP 2050 include ensuring energy security and security of supply with a gradual, wider exploitation of domestic renewable energy sources in all sectors (Ministry of Environment 2019: 36).

To summarise, the main security-related topics of cross-border and transnational relevance for Estonia's energy sector are (i) joining the synchronisation frequency band of Continental Europe; (ii) ensuring sufficient production capacity in the region and integration of the electrical system supply market; and (iii) ensuring security of gas supply by additional integration of the gas market (see Ministry of Economic Affairs and Communications 2019: 14–15). These policy goals follow the logic of supply-chain sustainability with a sufficiency guarantee and diversity of investment to mitigate dependency risks from one or very few providers.

5.6 Human Security – Economic Transformation of the Ida-Viru Industrial Region

Estonia has used oil shale in the energy industry since 1924. The availability of shale enables Estonia to use mainly domestic electricity with no considerable need for imports (Bulakh et al. 2016: 3). At the same time, the consumption of shale makes the Estonian economy carbon- and energy-intensive. The shale sector makes up approximately 4% of gross domestic product and accounts for approximately 1.5% of all Estonian employment (The Organisation for Economic Co-operation and Development [OECD] 2017: 12). Whilst shale consumption causes more than 80% of Estonian GHG emissions, the use of shale is expected to stop by 2035. The GPCP 2050 (Parliament 2017a) establishes that the country's long-term target is to reduce GHG emissions by 80% by 2050, compared to 1990 emission levels. The energy sector is the most significant source of GHG (88.76% in 2017) in Estonia (Ministry of Economic Affairs and Communications 2019: 30). Emission of GHG was 21 million tonnes in 2017, and it should be 8 million tonnes by 2050 (Gnadenteich 2019).

The direction of climate policy will directly affect the economic structure of Ida-Viru County in North-East Estonia, where 11.2% of the mainly Russian-speaking population is employed in the energy sector (The Organisation for Economic Co-operation and Development [OECD] 2017: 13). Because the county's economy depends on companies working in the shale sector, the declaration of commitment to achieve climate-neutrality by 2050 has already influenced and will shape the region significantly. As one of the topical reports notes:

5,800 people work in the core companies of the oil shale sector in Ida-Viru County and a total of nearly 16,000 people live in the households of those employed in the sector. However, the number of employees in the sector has significantly decreased, especially in the last few years (2018–2020), and more than 1,000 people left the oil shale sector in 2020 (Michelson et al. 2020).

Andrei Belyi argues that extensive energy transition towards climate neutrality may also imply that the whole economic system and industrial base of Ida-Viru County in Estonia will have to be transformed (Jermalavičius et al. 2022: 37). With regards to historical context, which includes quite a difficult integration process of Estonia's Russian-speaking minority, Russia can target the rising social costs of Ida-Viru's economic reconstruction, combined with local ethnic sensitivities, to incite political turbulence and destabilise the region. There is evidence that Russian-based portals such as Baltnews.com regularly criticise Estonia's plans to phase out the shale industry, which causes rising unemployment among the Russian-speaking population in Ida-Viru County (Jermalavičius, et al. 2022: 38). To address these concerns, the Estonian Government decided in February 2021 to allocate 340 million euros from the EU's Just Transition Fund to Ida-Viru County (Kulikov 2021). Arrangements for the investments are ready: for instance, a high-tech power production plant is planned for the border city of Narva by 2025. According to the Estonian Ministry of Economic Affairs and Communications (2021), the investment is approximately 200 million euros, which should create around 700 new jobs in the region to alleviate the described human (societal) security risks.

5.7 International Impact on Climate Change Securitisation in Estonia

As shown above, climate change challenges could be categorised as a “new” cross-labelled set of security problems, which widens understanding of interconnected security areas. Climate change as a defined domain started to appear in Estonia's insecurity perceptions alongside thematic developments in the EU's political agenda. The first-ever European Security Strategy (ESS), adopted by the European Council in

2003,²⁶ referred to global warming, competition for natural resources and the spread of poverty as increasingly being potential causes of conflict. Furthermore, the Report on the Implementation of the ESS (Council of European Union 2008), pinpointed climate change and related energy insecurity as global challenges and key threats, along with WMD proliferation, cross-border organised crime and transnational terrorism (Zwolski 2012: 70). Thus, the concept of climate change was emerging as a new focal point for global security debates, gradually interconnecting many other security risks and challenges.

Developed throughout the 1990s, climate security-related topics were soon included in the security agendas of major international organisations. In 2007, climate change and its implications for international security were discussed by the UNSC, and on 30 November 2007 the Organization for Security and Co-operation in Europe (OSCE) adopted the Madrid Declaration on Environmental Security.²⁷ The EU's broad approach to the security implications of climate change – defined as a “threat multiplier”, which “exacerbates existing trends, tensions and instability”, poses human security risks, and gives rise to serious political and security consequences directly affecting the EU – was further developed by the Joint Report of the European Commission and the High Representative on “Climate Change and International Security” (2008).²⁸ Also in 2008, the NATO Security Science Forum on Environmental Security organised a major conference, which was followed by the adoption of climate security into the 2010 NATO Strategic Concept²⁹ (Zwolski 2012: 72), stating that:

Key environmental and resource constraints, including health risks, climate change, water scarcity and increasing energy needs will further shape the future security environment in areas of concern to NATO and have the potential to significantly affect NATO planning and operations (North Atlantic Treaty Organization [NATO] 2010: 13).

After the large-scale 2015–2016 migration crises in the EU, illegal/irregular immigration has been securitised as one of the major vulnerabilities as perceived by the public and policymakers (Léonard/Kaunert 2019). Retrospectively, the Joint Report of the European Commission and the High Representative on “Climate Change and International Security” (2008) showed foresight, emphasising that continuous climate change “could trigger a vicious circle of degradation, migration and conflicts

²⁶ “A Secure Europe in a Better World – European Security Strategy.” Council of the European Union. Brussels, 12 December 2003; at: http://www.cvce.eu/obj/european_security_strategy_a_secure_europe_in_a_better_en-1df262f2-260c-486f-b414-dbf8dc112b6b.html world_brussels_12_december_2003- (27 November 2021).

²⁷ OSCE; at: <https://www.osce.org/files/f/documents/b/a/29550.pdf> (31 May 2021).

²⁸ Paper from the High Representative and the European Commission to the European Council; at: https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/reports/99387.pdf (31 May 2021). See also: Climate Change and Security: Recommendations of the High Representative on follow-up to the High Representative and Commission report on Climate Change and International Security; at: https://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/reports/104895.pdf (31 May 2021).

²⁹ North Atlantic Treaty Organisation (NATO); at: https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_publications/20120214_strategic-concept-2010-eng.pdf (1 June 2021).

over territory and borders that threatens the political stability of countries and regions”, and that “such migration may increase conflicts in transit and destination areas.” Considering that some of the regions most vulnerable to climate change are in Europe’s close neighbourhood (e.g. North Africa and the Middle East), irregular migratory pressures at the EU’s borders could increase conflicts and political instability. In addition, these developments could also have a “significant impact on Europe’s energy supply routes”. Due to this, the EU must expect substantially increased migratory pressure, and the international security architecture will come under increasing strain (European Commission 2008: 4–6). Similar concerns about climate change-related security challenges and its threat-multiplying effects are expressed in Estonia’s 2017 NSC.

Also, significantly for foreign policy-making, the Council of the EU Conclusions on Security and Defence from 10 May 2021 highlighted “the impact that environmental issues and climate change have on security and defence” and called for the comprehensive implementation of the Joint Climate Change and Defence Roadmap in line with the Council Conclusions on Climate and Energy Diplomacy of 25 January 2021. In this regard, the Council reaffirmed the “need for close cooperation with Member States and pursuing closer cooperation opportunities with relevant international partners such as the UN, NATO, the OSCE and the African Union” (Council of European Union 2008: 5). Becoming a UNSC rotating member in 2020 gave Estonia the opportunity to shape and manage the international security agenda, including the complex climate change domain, at a global level.

5.8 Estonia’s Climate Security Agenda at the UNSC

On 1 January 2020, Estonia became a UNSC rotating member for 2020–2021 with four other newly-elected countries.³⁰ Among other concerns, the climate-security nexus was one of the priorities on Estonia’s UNSC agenda (Ministry of Foreign Affairs 2019a). Climate change has been discussed within the UNSC since 2007 but it has not been officially adopted and recognised as a security threat (Haugevik et al. 2021: 14). In parallel, the UNSC has tackled international crises endangering international security due to climate change (United Nations Security Council [UNSC] 2021: 3–4). Assessing conceptual approaches to the climate-security nexus from various positions and a joint statement by 10 UNSC member-states in 2020, Hardt (2021: 11) finds that despite the seemingly divergent (and partly opposing) positions of the UNSC members, they do in fact share certain climate-security concerns. Within the UNSC 2020, some agreement did exist on the climate-security concept. As the joint UNSC statement proves, the members acknowledged the demand to include more issues concerning climate-related security risks in the Security Council’s agenda.³¹

³⁰ Those countries were Niger, Tunisia, Vietnam, and Saint Vincent and the Grenadines.

³¹ Joint Statement by 10 UNSC members (Belgium, Dominican Republic, Estonia, France, Germany, Niger, Tunisia, Saint Vincent and the Grenadines, United Kingdom, Vietnam) on their

Newcomers, especially if they are smaller states, find it quite challenging to add new topics to the UNSC agenda, where military conflicts traditionally dominate (Haugevik et al. 2021: 4). However, amongst other security-related priority topics – such as human rights protection, conflict prevention and ensuring cyber-security – Estonia’s UNSC agenda prioritised the link between climate change and international security developments, including the position of expanding the mandate of the UN Secretary-General in this domain.³² Stressing that “climate change has a direct effect on the preservation of the territories of several states, and the provision of water and food to many regions”, and that these challenges “require coordinated cooperation between states across the world,” the Estonian Government pointed out two more climate change-specific dimensions with particular consequences for security in its UNSC agenda (Ministry of Foreign Affairs 2020):

- (i) Climate change and the concomitant rise in global sea levels threatens to submerge small island states, [and] the fight for natural resources feeds conflicts in regions such as the African Great Lakes region.
- (ii) Natural disasters and extreme weather events can bring on widespread migration, cause impoverishment, and increase pressure on the use of natural resources in a way that would also make the international security situation more precarious.

Addressing the National Statement on Climate and Security Risks on 22 April 2020,³³ the Permanent Representative of Estonia to the UN, Sven Jürgenson, emphasised that climate change impacts are “clear drivers to insecurity” and well-recognised peace and security risks in many regions around the world. Calling climate change developments an “existential threat” to the very survival of countries worldwide, he pointed out a comprehensive need for strategic planning to address security threats posed by climate change through more coordinated action at national, regional, and international levels (including the UN, its agencies, and its missions). Second, Jürgenson (2020) underlined the importance of systematic reporting by the Secretary-General on climate-related security risks and of creating a framework for knowledge-exchange, presenting international analyses and forecasts as tools available to all member-states. Third, his statement (Jürgenson 2020) proposed that the options of modern technology and digital infrastructure should be advanced to strengthen early warning capacity by working towards interoperable international data on climate-related security risks.

On 24 July 2020, a statement at the UNSC meeting on “Maintenance of international peace and security: climate and security” by Rene Kokk, the Minister of the Environment of Estonia, emphasised the growing global importance of the climate change factor. It “increases instability and existing tensions and poses a real threat to

Joint Initiative to Address Climate-Related Security Risks, 22 June 2020; at: <https://new-york-un.diplo.de/un-en/news-corner/200622-climate/2355076> (18 December 2021).

³² Estonia in the UN Security Council; at: <https://vm.ee/en/activities-objectives/estonia-united-nations/estonia-un-security-council> (10 May 2021).

³³ Estonia’s National Statement on Climate and Security Risks; at: <https://un.mfa.ee/national-statement-at-the-arria-on-climate-and-security-risks-the-latest-data/> (13 June 2022).

international peace and security”, and Kokk called for immediate action.³⁴ Although Estonia has not experienced major climate change disasters, Kokk pointed out the negative effects to biodiversity, particularly in the agriculture and forestry sectors. Reminding the audience that “climate change intensifies important drivers of conflict and fragility and challenges the stability of states and societies”, the Minister called for the UNSC to take a *systematic approach* to managing climate-related security risks, and presented some proposals below.

First, it is important to improve the United Nations’ capacity to minimize security risks from climate change. For example, appointing a Special Representative for climate and security would help improve coordination among relevant UN entities. Secondly, we need reliable and accurate information and data to better understand the conflict drivers and the implications for stability. We need to improve the collection, monitoring and analysis of the data. Systematic reporting by the Secretary-General to the Security Council on climate-related security risks should be part of such an approach (Minister of the Environment of Estonia 2020: 14).

After 2020, Estonian President Alar Karis and Prime Minister Kaja Kallas addressed the UNSC. The 9 December 2021 speech³⁵ by President Karis at the UNSC’s open debate on international peace and security in the context of climate change linked the climate change and terrorism challenges, which pose a “significant threat” to international peace and security: both phenomena know no borders. The president explained that climate change causes environmental degradation, which sets the stage for social instability, conflict, terrorism tensions, and the further spread of wider extremism. These act as “threat multipliers”, amplifying both security risks and provoking different human rights violations. Therefore, he also stressed, the activities by the Sahel Alliance in dealing with the consequences of climate change by increasing food security and dealing with youth unemployment were very welcome (Karis 2021).

Describing linkages between rising global inequality, forced migration and the spread of extremism, President Karis (2021) pointed out that rising temperatures and extreme weather put pressure on natural resources and cause enforced displacement. In parallel, he emphasised, we see conflicts for natural resources within and between states, and people who have become desperate at having lost their homes. For example, in 2020 nearly 31 million people were displaced within their own countries because of natural disasters, caused by extreme weather events and climate change. He also referenced the World Bank’s estimate that the number of climate migrants could be 216 million by 2050, opening up even more opportunities for people-smuggling and creating conditions for terrorist organisations to exploit. According to the President Karis, this is what we currently witness at Europe’s borders:

³⁴ Letter dated 28 July 2020 from the President of the Security Council addressed to the Secretary-General and the Permanent Representatives of the members of the Security Council. S/2020/751, Annex 7.

³⁵ Statement by President Alar Karis at UN Security Council open debate on International peace and security in the context of climate change; at: <https://un.mfa.ee/statement-by-president-alar-karis-at-un-security-council-open-debate-on-international-peace-and-security-in-the-context-climate-change/> (13 June 2022).

Social and economic conditions play a significant part in enabling the rise of terrorism and extremism. Therefore, to counter terrorism and extremism we must understand and address the root causes on the national, regional and global level. Causes such as global inequalities, forced migrations and scarcity of vital resources such as clean water and agricultural land, etc. We believe that all mechanisms that help to reduce poverty, inequalities and adaptation problems brought by rapid social, cultural and environmental changes also help to fight terrorism by nipping it in the bud (Karis 2021).

President Karis (2021), however, expressed his belief that the UNSC has the relevant tools and the mandate to respond to climate-related security risks. Hence, he concluded, it is time to “go beyond the holding of thematic debates” and to adopt a Security Council resolution on climate and security to advance discussions and make a difference.

The 23 February 2021 statement by Prime Minister Kaja Kallas at a UNSC video teleconference (VTC) on Climate and Security³⁶ welcomed America’s return to the Paris climate agreement and repeated Estonia’s firm position that the UN Secretary-General needs to receive a mandate to collect data, which needs to be globally comparable, accessible, and interoperable, as well as to coordinate climate change policy. The prime minister also raised the need to protect women and girls, who are especially vulnerable and disproportionately affected by climate change:

We must direct resources to local women’s groups at the frontlines of climate change. We must recognize that women have an equal right to access, use and control land and resources. This is the way to build resilient communities not only for women but for everyone (Kallas 2021).

Prime Minister Kallas also described how Estonia has chosen to cooperate with some small islands on green technology solutions and expertise transfer: for example, support for adaptation and emergency communication systems in the Pacific region, drinking water monitoring systems in the Grenada Island river basin and the development of solar energy solutions for rural areas in Myanmar (Kallas 2021). Estonia proposed the Data for the Environment Alliance (DEAL) as a new cooperation initiative. As explained by Kallas (2021), DEAL consists of actors who will support the UN Environment Program (UNEP) in developing a global environmental data strategy by 2025, which also aims to improve national data management capacities across the globe. The DEAL initiative, which is facilitated and supported by the UNEP Science-Policy-Business Forum (SPBF)³⁷ has probably been the most significant practical outcome of Estonia’s climate change agenda in the UNSC.

Summing up Estonia’s main climate change-related security concerns addressed to the UNSC, it is clear that the comprehensive approach to climate change as a threat-multiplying global challenge prevails. Destabilising climate change processes are also drivers for rising human insecurity, by leading to increasing competition

³⁶ Statement by Prime Minister Ms. Kaja Kallas at UN Security Council VTC meeting on Climate and Security; at: <https://un.mfa.ee/statement-by-prime-minister-ms-kaja-kallas-at-un-security-council-vtc-meeting-on-climate-and-security/> (16 June 2022).

³⁷ The Data for the Environment Alliance (DEAL); at: <https://dataenvironmentalliance.org/> (16 June 2022).

for natural resources, deepening water and food shortages, widening poverty and inequalities, and inciting further social instability, forced migrations and cross-border conflicts. The latter in turn leads to widening grounds for the spread of extremism, human rights violations, terrorism, human trafficking, and other related transnational organised criminal activities, which will challenge national security communities.

Inter-related topics such as uncontrolled climate-related migration and associated rising pressures for border security reflect Estonia's national security concerns most directly. Surprisingly, climate change-related energy deficiency aspects were almost absent from high-level speeches to the UNSC by Estonia's representatives. For Estonia, and the whole EU, the need for more urgent energy transitions only occurred after Russia's unprovoked aggression war against Ukraine on 24 February 2022. The pressure regarding energy insecurity in Europe will only intensify further. In addition, the Estonian prime minister's address to the UNSC also stressed the gender dimension – the need to protect women and girls who are especially affected by climate change. Collectively, these are critical, up-and-coming topics in Estonia's widening security thinking.

5.9 Conclusion

Regardless of public attentiveness to national environmental and ecological security conditions, climate change challenges were not visible in Estonia's strategic thinking and principal security strategies until joining the EU and NATO from 2004 onwards. This development is understandable, since due to its geographical location in Northern Europe, on the Eastern coast of the Baltic Sea, Estonia has not suffered any major climate change-related large-scale catastrophes or resource depletion so far. But significant changes are expected during this century, especially the rise of average temperatures and sea levels. The increased amount of precipitation and number of storms is already recognised. Being a member of international organisations and sharing much wider threat assessments than that of only a regional security community, the wider global security thinking of the EU and other bodies, including the climate change impact on energy security, civil protection, climate-related irregular migration, and the possible rise in terrorism risks, has been steadily adopted into Estonia's security strategies and visible foreign policy activities. These concerns were also strengthened in Estonia's international security agenda before and after becoming a rotating member of the UN Security Council.

In analysing Estonian official documents, climate change is seen as the source of insecurity and a "threat multiplier" by bringing together the undesirable side-effects as outlined in national- and international-level strategies. At the national level, the most important public threat perceptions in Estonia relate to possible large-scale border pressures that could trigger wider regional irregular migration, the rise of extremism, and terrorism risks. Within domestic civil protection and crisis management policies, climate change challenges are connected mostly with experienced

natural threats due to sudden changes in weather conditions, such as an increased number of bigger storms and a rapidly increasing sea level.

Public concerns about the sustainability of the electricity supply, as a vital service and a central part of national security, are rising. Due to the extensive need for the reconstruction of Estonia's energy sector in the coming decade, reforms need serious political attention, especially in the multi-national Ida-Viru industrial region. Thus, the ecological and human security domains are a highly interconnected and hardly-distinguishable area of the overall national security sphere. The challenge to policymakers is to find optimal ways of transforming the energy system balanced with socio-economic transition and respect for the human security dimension. Negative impacts on energy security should thus be avoided and locally-specific circumstances considered, in parallel with climate policy goals, to guarantee a significant amount of reconstruction investment over long-term economic and fiscal policies.

Global climate change has steadily been recognised as a possible threat multiplier in Estonia too. However, it was in fifth place in the 2020 ranking of public threats, after security challenges such as the fast spread of cyber-attacks, terror acts, refugee flows, the spread of disinformation and the worldwide economic crisis. Nevertheless, climate change-related security awareness in Estonia has been growing significantly since 2015. Still, the cases described above demonstrate the different kinds of friction caused by activities that should mitigate climate change. The case of the economic transition of the Ida-Viru industrial region shows a complex interplay between social, political, ethnic, cultural and energy security issues. This is due to the need for a transformation of electricity production and minimising dependence on Russia's energy resources after its military invasion against Ukraine. Concerning green alternatives, the development of wind turbine energy is a cost-effective option for energy production. However, some limits and challenges have arisen when building wind parks near operational areas of defence facilities, such as air-surveillance radars. The environmentally-friendly EU railway investment project *Rail Baltica* has also evoked some protests by environmental activists and private landowners.

The NSC of Estonia emphasises the understanding that interlinked challenges related to the impact of climate change on international security require preventive and comprehensive cross-sectoral policy responses. These include conflict prevention, crisis management and post-conflict reconstruction. The main aspects of climate security-related processes on a national basis are characterised by three interconnected domains. The first, national security, consists mainly of energy security (meaning assurance of supply) and development of defence assets. Second, human security, generally means consumer protection and including access to resources (and ensuring their availability). Third, ecological security, consists of both environmental protection and sustainable development. The development of climate change as a security issue in Estonia is characterised by (i) the adoption of international and EU climate security policies into domestic policies; (ii) tensions over sustainable energy supply and rising energy insecurity during the transition period; (iii) increasing business competition over ownership of domestic green resources; and (iv) associated social stresses regarding the economic restructuring in the energy sector, especially in the industrial and socio-ethnically sensitive Ida-Viru region.

Security policy developments in Estonia's UNSC agenda in 2020–2021 underlined the importance of systematic reporting by the Secretary-General on climate-related security risks. This included creating a framework for global knowledge exchange and presenting international analytical and forecasting information as a tool available to all member-states. Also, the options of modern technology and digital infrastructure should be advanced, following Estonia's position, to strengthen early warning capacity by working towards interoperable international data on climate-related security risks. Estonia has chosen to assist small islands in terms of green technology solutions and expertise transfer. Good examples are support for adaptation and emergency communication systems in the Pacific region, drinking water monitoring systems in the Grenada Island river basin and the development of solar energy solutions for rural areas in Myanmar. Estonia has also proposed the Data for the Environment Alliance (DEAL) as a new cooperation initiative to support the UN Environment Program (UNEP) in developing a global environmental data strategy by 2025. With these initiatives, Estonia has shown that it can also play an active role in international climate policy.

References

- 15min, 2020: "Rail Baltica Has Adapted to Carrying Military Equipment"; at: <https://www.15min.lt/en/article/politics/rail-baltica-has-adapted-to-carrying-military-equipment-526-1413980?all#print>.
- Adamson, Sarah, 2020: "Rail Balticu Vastaste Joud Ei Rauge: Riigikogule Ja Valitsusele Saadetud Avalikul Kirjal on Üle 500 Allkirja" [The Power of Rail Baltica's Opponents Is Not Abating: The Open Letter Sent to the Parliament and the Government Has More Than 500 Signatures]; at: <https://www.delfi.ee/artikkel/88615113/rail-balticu-vastaste-joud-ei-rauge-riigikogule-ja-valitsusele-saadetud-avalikul-kirjal-on-ule-500-allkirja>.
- Baltic News Service, 2020: "Nato Commander: Rail Baltica Will Improve Military Mobility", in: *The Baltic Times*; at: https://www.baltictimes.com/nato_commander__rail_baltica_will_improve_military_mobility/.
- Bulakh, Anna; Tuohy, Emmet; Kearns, Jordan, 2016: "Impacts of Climate Policy on Estonian Energy Security"; at: https://icds.ee/wp-content/uploads/2015/ICDS_climate_report_2016-03.pdf.
- Cavegn, Dario, 2017: "Protests in Tallinn against Current Shape of Rail Baltic Project", in: *Eesti Rahvusringhääling*; at: <https://news.err.ee/591437/protests-in-tallinn-against-current-shape-of-rail-baltic-project>.
- Council of European Union, 2008: "Report on the Implementation of the European Security Strategy—Providing Security in a Changing World" (Brussels: European Union); at: https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/reports/104630.pdf.
- David, Kirjoittanut, 2018: "Tunneli Tallinaan: Helsinki-Tallinna-Rautatietunneli" [Tunnel to Tallinn: Helsinki-Tallinn Railway Tunnel], in: *FinEstlink.fi*; at: <https://www.finestlink.fi/en/2018/02/07/final-report-published/>.
- Eesti Keskkonnauhenduste Koda (EKO), 2019: "Erakondade Keskkonnalubadustes on Esikohal Metsanduse Areng Ning Kliimaküsimused" [The Development of Forestry and Climate Issues Come First in the Political Parties' Environmental Promises] (city: EKO); at: <https://www.eoy.ee/ET/erakondade-keskkonnalubadustes-on-esikohal-metsanduse-areng-ning-kliimakysimused/>.

- Eesti Rahvusringhääling, 2021: “Enefit and Danish Company Planning Offshore Wind Farm in Gulf of Riga”, in: *ERR News*; at: <https://news.err.ee/1608191263/enefit-and-danish-company-planning-offshore-wind-farm-in-gulf-of-riga>.
- Eesti Rahvusringhääling, 2021a: “Memorandum: Rail Baltic a Precondition for Tallinn-Helsinki Tunnel”, in: *ERR News*; at: <https://news.err.ee/1608192223/memorandum-rail-baltic-a-precondition-for-tallinn-helsinki-tunnel>.
- Eestinen, 2018: “Helsinki-Tallinna Tunnel Ja Rail Baltica on Arutusel Eesti-Soome Ministrite Kohtumisel” [The Helsinki-Tallinn Tunnel and Rail Baltica Are under Discussion at the Estonian-Finnish Ministerial Meeting], in: *eestinen*; at: <https://eestinen.fi/2018/11/helsinki-tallinna-tunnel-ja-rail-baltica-on-arutusel-eesti-soome-ministrite-kohtumisel/>.
- Estonian Foreign Intelligence Service, 2020: “International Security and Estonia 2020”; at: <https://www.valisluureamet.ee/doc/raport/2020-en.pdf>.
- Estonian Foreign Intelligence Service, 2021: “International Security and Estonia 2021”; at: <https://www.valisluureamet.ee/doc/raport/2021-en.pdf>.
- Estonian Government, 2015: “‘Siseturvalisuse Arengukava 2015–2020’ Heakskiitmine” [Approval of the National Internal Security Development Plan 2015–2020]; at: <https://www.riigiteataja.ee/akt/303032015005>.
- Estonian Government, 2019: “The Government Approved the Action Plan for the Next Four Years”; at: <https://www.valitsus.ee/en/news/government-approved-action-plan-next-four-years>.
- Estonian Government, 2019a: “The Government Supports the Achievement of European Climate Neutrality by 2050”; at: <https://www.valitsus.ee/en/news/government-supports-achievement-european-climate-neutrality-2050>.
- European Commission, 2008: “Climate Change and International Security”; at: https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/reports/99387.pdf.
- European Commission, 2021: “Special Eurobarometer 513 ‘Climate Change’”, in: *European Commission*; at: https://ec.europa.eu/clima/system/files/2021-06/ee_climate_2021_en.pdf.
- European Union, 2018: “Political Roadmap on the Synchronization of the Baltic States’ Electricity Networks with the Continental European Network Via Poland” (Brussels: European Union); at: https://energy.ec.europa.eu/system/files/2019-10/c_2018_4050_en_annexe_acte_autonome_nlw2_p_v2_0.pdf.
- European Union, 2018a: *Regulation (Eu) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action* (Brussels: European Union).
- Eurydice, 2017: “Estonia: Historical Development”; at: https://eacea.ec.europa.eu/national-policies/eurydice/content/historical-development-24_en.
- Foreign Policy Strategy, 2020: “Estonian Foreign Policy Strategy 2030” (Tallinn: Republic of Estonia, Ministry of Foreign Affairs); at: https://vm.ee/sites/default/files/Estonia_for_UN/Rasmus/estonian_foreign_policy_strategy_2030_final.pdf.
- Gnadenteich, Uwe, 2019: “President: Ida-Virumaa Tänašed Probleemid Hüüdsid Tulles” [President: Today’s Problems of Ida-Virumaa Called out]; at: <https://www.postimees.ee/6706991/president-ida-virumaa-tanased-probleemid-huüdsid-tulles>.
- Hardt, Judith, Nora, 2021: “The United Nations Security Council at the Forefront of (Climate) Change? Confusion, Stalemate, Ignorance”, in: *Politics and Governance*, 9: 5–15.
- Haugevik, Kristin; Kuusik, Piret; Raik, Kristi; Schia, Niels Nagelhus: “Small States, Different Approaches. Estonia and Norway on the UN Security Council” (Tallinn: International Centre for Defence and Security); at: https://icds.ee/wp-content/uploads/2021/11/ICDS_EFPI_Report_Small_States_Different_Approaches_Haugevik_Kuusik_Raik_Schia_November_2021.pdf.
- International Energy Agency, 2019: “Estonia 2019 Review”; at: <https://www.iea.org/countries/estonia>.
- Jermalavičius, Tomas et al., 2022: “Woes and Hopes of Ida-Virumaa” (Tallinn: International Centre for Defence and Security); at: <https://icds.ee/en/download/47064507/>.

- Jürgenson, Sven, 2020: "National Statement at the Vtc Arria on Climate and Security Risks: The Latest Data"; at: <https://un.mfa.ee/national-statement-at-the-arria-on-climate-and-security-risks-the-latest-data/>.
- Juurvee, Ivo; Loik, Ramon, 2021: "Estonia: Building Resilience through Vital Service Provider", in: Andžāns, Māris; Sprūds, Andris; Sverdrup, Ulf: *Critical Infrastructure in the Baltic States and Norway: Strategies and Practices of Protection and Communication* (Riga: Latvian Institute of International Affairs): 14–38.
- Juurvee, Ivo; Loik, Ramon, 2021a: "Estonia: Communication to Gain Practical Results", in: Andžāns, Māris; Sprūds, Andris; Sverdrup, Ulf: *Critical Infrastructure in the Baltic States and Norway: Strategies and Practices of Protection and Communication* (Riga: Latvian Institute of International Affairs): 132–40.
- Kallas, Kaja, 2021: "Statement by Prime Minister Ms. Kaja Kallas at Un Security Council Vtc Meeting on Climate and Security"; at: <https://un.mfa.ee/statement-by-prime-minister-ms-kaja-kallas-at-un-security-council-utc-meeting-on-climate-and-security/>.
- Karis, Alar, 2021: "Statement by President Alar Karis at Un Security Council Open Debate on International Peace and Security in the Context Climate Change"; at: <https://un.mfa.ee/statement-by-president-alar-karis-at-un-security-council-open-debate-on-international-peace-and-security-in-the-context-climate-change/>.
- Kliimamuutused, 2020: "Mõju Näited Eestis" [Impact Examples in Estonia], in: *Estonian Green Movement*; at: <https://www.kliimamuutused.ee/pohjused-ja-tagajarjed/tagajarjed/moju-naiteid-eestis>.
- Kulikov, Dmitri, 2021: "Üleminekufondi 340 Miljonit Eurot Läheb Kõik Ida-Virumaale" [The Transition Fund's 340 Million Euros Will All Go to Ida-Virumaa] at: <https://www.err.ee/1608099757/uleminekufondi-340-miljonit-eurot-laheb-koik-ida-virumaale>.
- Léonard, Sarah; Kaunert, Christian, 2019: *Refugees, Security and the European Union* (London: Routledge).
- Loik, Ramon; Smith, Robert, 2015: "Understanding European Security Integration: Fighting Criminal Interventions in the Baltic States", in: Hancock, Mary N.; Hancock, M. Donald: *The Baltic Security Puzzle: Regional Patterns of Democratization, Integration, and Authoritarianism* (Hampton, USA: Rowman & Littlefield): 92–116.
- Männik, Erik, 2013: "The Evolution of Baltic Security and Defence Strategies", in: Lawrence, Tomas; Jermalavičius, Tony (eds.): *Apprenticeship, Partnership, Membership: Twenty Years of Defence Development in the Baltic States* (Tallinn: International Centre for Defence Studies Tallinn): 13–44.
- Michelson, Aleksandr et al., 2020: "Ida-Virumaa Majanduse Ja Tööturu Kohandamine Põlevkivitööstuse Vähenemisega" [Adapting the Economy and Labor Market of Ida-Virumaa to the Decline of the Oil Shale Industry] (Tallinn: SA Poliitikauringute Keskus Praxis); at: http://www.praxis.ee/wp-content/uploads/2020/12/Lopparuanne_Polevkivitoostuse-kahanemise-mojud.pdf.
- Miljan, Toivo, 2015: *Historical Dictionary of Estonia* (Maryland: Rowman & Littlefield).
- Ministry of Economic Affairs and Communications, 2019: "Estonia's 2030 National Energy and Climate Plan (Necp 2030): Estonia's Communication to the European Commission under Article 3(1) of Regulation (Eu) No 2012/2018"; at: <https://faolex.fao.org/docs/pdf/est200007.pdf>.
- Ministry of Economic Affairs and Communications, 2021: "Memorandum of Understanding between Governments of Finland and Estonia on Common Transport Initiative Co-Operation Including the Helsinki-Tallinn Railway Tunnel Project" (Tallinn: Ministry of Economic Affairs and Communications); at: <https://www.lvm.fi/documents/2018/1/1019592/Memorandum+of+Understanding+between+Governments+of+Finland+and+Estonia+26.4.2021pdf/05cff6a3-76ba-18ca-40a0-63cde422bf1b?t=1619444221790>.
- Ministry of Economic Affairs and Communications, 2021a: "Uuendatav Õhuseiresüsteem Lihtsustab Uute Tuuleparkide Rajamist" [the Advanced Air Surveillance System Simplifies the Construction of New Wind Farms] (Tallinn: Estonian Ministry of Economic Affairs and Communications); at: <https://mkm.ee/uudised/uuendatav-ohuseiresusteem-lihtsustab-uute-tuuleparkide-rajamist>.

- Minister of the Environment of Estonia, 2020: "Letter Dated 28 July 2020 from the President of the Security Council Addressed to the Secretary-General and the Permanent Representatives of the Members of the Security Council" (New York: UNSC); at: https://digitallibrary.un.org/record/3880587/files/S_2020_751-EN.pdf.
- Ministry of Environment, 2017: "Climate Change Adaptation Development Plan until 2030": at: <https://envir.ee/media/912/download>.
- Ministry of Environment, 2017a: "Pariisi Kokkulepe [Paris Agreement]"; at: <https://envir.ee/pariisi-kokkulepe>.
- Ministry of Environment, 2018: "Climate Change Adaptation" (Tallinn: Estonian Ministry of Environment); at: <https://www.envir.ee/en/news-goals-activities/climate/climate-change-adaptation>.
- Ministry of Environment, 2018a: "General Principles of Climate Policy"; at: <https://envir.ee/en/general-principles-climate-policy>.
- Ministry of Environment, 2018b: "'Prioritised Action Framework for Natura 2000 in Estonia' Pursuant to Article 8 of Council Directive 92/43/Eec on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive) for the Multiannual Financial Framework Period 2021–2027" (Tallinn: Ministry of the Environment); at: <https://envir.ee/media/1935/download>.
- Ministry of Environment, 2019: "Estonia's Fourth Biennial Report under the United Nations Framework Convention on Climate Change" (Tallinn: Estonian Environmental Research Centre); at: https://unfccc.int/sites/default/files/resource/BRIV_EE_2019.pdf.
- Ministry of Foreign Affairs, 2019: "Estonia in the United Nations" (Tallinn: Estonian Ministry of Foreign Affairs); at: <https://vm.ee/en/united-nations>.
- Ministry of Foreign Affairs, 2019a: "Estonia in the UN Security Council" (Tallinn: Ministry of the Environment); at: <https://vm.ee/en/activities-objectives/estonia-united-nations/estonia-un-security-council>.
- Ministry of Foreign Affairs, 2020: "The Connection between Climate Change and the International Security Environment" (Tallinn: Estonian Ministry of Foreign Affairs); at: <https://vm.ee/en/activities-objectives/estonia-united-nations/estonia-un-security-council>.
- North Atlantic Treaty Organization (NATO), 2010: "Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization", in: NATO: *Active Engagement, Modern Defence* (Brussels: NATO); at: https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_publications/20120214_strategic-concept-2010-eng.pdf.
- Orru, Kati; Tillmann, Mari; Ebi, Kristie L.; Orru, Hans, 2018: "Making Administrative Systems Adaptive to Emerging Climate Change-Related Health Effects: Case of Estonia", in: *Atmosphere*, 9,6.
- Parliament, 1996: "Eesti Riigi Kaitsepoliitika Põhisuundade Heakskiitmine" [Approval of the Main Directions of the Defense Policy of the Estonian State], in: *Riigi Teataja*; at: <https://www.riigiteataja.ee/akt/13009161>.
- Parliament, 2001: "Eesti Vabariigi Julgeolekupoliitika Aluste Heakskiitmine" [Approval of the Foundations of the Security Policy of the Republic of Estonia], in: *Riigi Teataja*; at: <https://www.riigiteataja.ee/akt/72805>.
- Parliament, 2004: "Eesti Vabariigi Julgeolekupoliitika Alused (2004)" [The Foundations of the Security Policy of the Republic of Estonia, in: *Riigi Teataja*; at: <https://www.riigiteataja.ee/akt/773389>.
- Parliament, 2016: "Pariisi Kokkuleppe Ratifitseerimise Seadus" [Paris Agreement Ratification Act], in: *Riigi Teataja*, at: <https://www.riigiteataja.ee/akt/201112016002>.
- Parliament, 2017: "Eesti Julgeolekupoliitika Alused" Heakskiitmine" [Approval of National Security Concept], in: *Riigi Teataja*; at: <https://www.riigiteataja.ee/akt/306062017002>.
- Parliament, 2017a: "Kliimapolitiitika Põhialused Aastani 2050" [General Principles of Climate Policy until 2050], in: *Riigi Teataja*; at: <https://www.riigiteataja.ee/akt/307042017001>.
- PricewaterhouseCoopers (PwC), 2019: "22nd Annual Global CEO Survey: Ceos' Curbed Confidence Spells Caution"; at: <https://www.pwc.com/mu/pwc-22nd-annual-global-ceo-survey-mu.pdf>.

- PricewaterhouseCoopers (PwC), 2020: "Pwc 23. Iga-Aastane Globaalne Tippjuhtide Uuring Ceo Survey Eesti Raport: Navigeerimine Ebakindluse Tõusulainel" [Pwc's 23rd Annual Global Survey of Top Executives Ceo Survey Estonia Report: Navigating the Rising Tide of Uncertainty]; at: https://www.pwc.com/ee/et/publications/CEOSurveyEE/CEO_Survey_2020_Eesti-raport.pdf.
- Rail Baltica, 2018: "Rail Baltica: Preparation of the Operational Plan of the Railway. Final Study Report"; at: https://www.railbaltica.org/wp-content/uploads/2019/05/RB_Operational_Plan_Final_Study_Report_final.pdf.
- Rail Baltica, 2021: "Rail Baltica—Project of the Century"; at: <https://www.railbaltica.org/about-rail-baltica/>.
- Riigikohus, 2021: "Riigikohus: Tuuleparkide Rajamise Piirangud Pole Põhiseadusega Vastuolus" [Su-preme Court: Restrictions on the Construction of Wind Farms Are Not against the Constitution], at: <https://www.riigikohus.ee/et/uudiste-arhiiv/riigikohus-tuuleparkide-rajamise-piirangud-pole-pohiseadusega-vastuolus>.
- Roonemaa, Holger; Mari, Eesmaa; Inese, Liepiņa; Naglis, Navakas, 2019: "Chinese Investments Come with Golden Handcuffs"; at: <https://news.postimees.ee/6772374/chinese-investments-come-with-golden-handcuffs>.
- Sagris, Valentina; Petrov, Laura; Lavallo, Carlo, 2005: "Towards an Integrated Assessment of Climate Change-Induced Sea-Level Rise in the Baltic Sea: An Example for the City of Pärnu (Estonia)"; at: <https://core.ac.uk/download/pdf/38621984.pdf>.
- Sotsiaalteaduslike rakendusuuringute keskus, 2015: "Kliimamuutuste Mõjude Hindamine Ja Sobi-like Kohanemismeetmete Väljatöötamine Majanduse Ja Ühiskonna Valdkondades" [Assessment of the Effects of Climate Change and Development of Appropriate Adaptation Measures in the Fields of Economy and Society], at: <https://www.digar.ee/arhiiv/en/raamatud/62396>.
- Stockholm Environment Institute Tallinn Centre, 2019: "Analysis of the Opportunities to Increase Climate Ambition in Estonia"; at: <https://envir.ee/kliima/kliima/uuringud>.
- The Organisation for Economic Co-operation and Development (OECD), 2017: "Keskonnatoime Ülevaated, Eesti Highlights 2017" [Reviews of Environmental Impact, Estonian Highlights 2017] (Paris: OECD); at: https://www.oecd.org/environment/country-reviews/OECD_Keskkonnatoime_ulevaated_Eesti2017.pdf.
- Tuuleenergia Assotsiatsioon, 2021: "Wind Energy in Estonia"; at: https://tuuleenergia.ee/?page_id=1373&lang=en.
- United Nations, Security Council (UNSC), 2021: "The UN Security Council and Climate Change. Report to the United Nations Security Council" (New York: UNSC); at: <https://www.securitycouncilreport.org/research-reports/the-un-security-council-and-climate-change.php>.
- Zwolowski, Kamil, 2012: "The EU and a Holistic Security Approach after Lisbon: Competing Norms and the Power of the Dominant Discourse", in: *Journal of European Public Policy*, 19,7: 988–1005.

Chapter 6

Preventing and Managing Climate Risks: France's Approach to Climate Security



Adrien Estève

Abstract Between 2007 and 2020, France has been one of the driving forces behind the debates on climate security within the United Nations Security Council (UNSC). This support increased under the Hollande and Macron presidencies as climate diplomacy became an important component of the country's foreign policy after the adoption of the Paris Agreement in 2015. France's current approach to climate security is the result of the development of different policy narratives in the discourses and practices of policymakers, which tend to adopt a risk-based approach to climate change, both nationally and internationally. Recent debates on climate security in France show a growing concern for the anticipation and the prevention of the potential crises that climate change can trigger, and their implications for different policy areas. In the menacing context of the Anthropocene, and thanks to a discursive analysis of primary sources, I will show that the social and political construction of risks could lead to a more securitised approach to climate policies in France.

Keywords Climate change · Security · United Nations Security Council · France · National security

6.1 Introduction

A permanent member of the United Nations Security Council, France pushed for the organisation of the 2007 debate on the “Impact of Climate Change on Peace and Security”. Jean-Marc de la Sablières, Permanent Representative of France to the United Nations, listed several security threats raised by climate change such as “food crises”, “health dangers”, “extreme natural disasters”, the “depletion of resources”, “the loss of arable land”, “natural disasters”, the “rise of water levels” and “migratory flows” (United Nations [UN] 2007). This initial support can be partly explained by France's dynamic climate diplomacy. Indeed, together with other European countries such as Germany, the French government has become a strong supporter of the multilateral climate negotiations that take place within the UN Framework Convention on Climate

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Change. Under the Hollande Presidency, France hosted the 2015 United Nations Climate Change Conference (COP21), which led to the signing of the Paris Agreement. Under the Macron Presidency, climate change has continued to be an important component of France's foreign policy, with the creation of new international initiatives to counterbalance the United States' withdrawal from the Paris Agreement between 2016 and 2020. Recent examples under the Macron presidency are the One Planet Summits, which are international meetings led by France, the World Bank and the United Nations to finance climate change programmes internationally (Ministry of the Armed Forces 2017) and "Make Our Planet Great Again", a national initiative led by the French Presidency to fund research projects on climate adaptation in the context of the withdrawal of the United States from the Paris Agreement (President of the French Republic 2017).

Between 2018 and 2021, climate change also became an important framework in France's domestic policy with, for example, the constitution of a citizens' panel to advise on climate policies (the Citizens' - Convention for Ecological Transition). Announced in 2019 in the context of the "yellow vests" protests, which highlighted the potential inequalities raised by the ecological transition (and more specifically the fuel taxes), this initiative is an attempt to prevent tensions and build a more "democratic" approach to climate governance (Government of France 2019). This initiative also appears in a context where France witnesses a rise in awareness of climatic perils coming from its citizens. In 2018 and 2019, thousands of French students took part in the climate strikes launched by Swedish activist Greta Thunberg, which partly undermined France's diplomatic effort to present itself as a driving force in the fight against climate change. This was particularly the case in September 2019, when the Global Week for Future happened contemporaneously with the UN Climate Change Summit. During the Summit, President Macron urged world leaders to finance the Green Climate Fund. France's vulnerability to climate change also explains this growing political concern. The French territory consists of metropolitan France in Western Europe and several overseas territories (former colonies) in the Atlantic, Pacific, and Indian oceans, but also on the South American continent (French Guiana) and in the Antarctic region (French Southern and Antarctic Lands). This global presence exposes the country to a large variety of climate hazards, which are increasingly constructed as threats.

As I will show, between 2007 and 2020, the linkage between climate change and security in France is the result of the development of different policy narratives in the discourses and practices of policymakers, which tend to adopt a risk-based approach to climate change. The evolution of the contemporary debates on climate security in France shows a growing concern for the anticipation of potential crises that climate change can trigger and their implications for different policy areas (health, agriculture, defence etc.). If previous studies on climate security in France focus primarily on the defence sector and national security (Boulanger 2010; Alex/Estève 2018), this contribution shows that other governmental bodies also adopt a new perspective on climate risks and contribute to the national and global debate on how they should be prevented and managed.

From a theoretical standpoint, I will show how the increased adoption of a risk-based approach in both climate and security policies (as separate policy domains) allowed for the increased construction of climate change as a security issue in France. I will identify the construction of climate risks (such as floods, wildfires, droughts) by different actors and how their association with national, human, and ecological security concerns (such as terrorism or migrations) creates a threatening context and paves the way for a securitised approach to climate change (Corry 2012; Oels 2013; Judge/Maltby 2017; Estève 2021). Scholars have indeed noticed that a risk-based approach could lead to a multiplication of security narratives from political and military actors, even when the risk is perceived as low (Rasmussen 2006). In the case of climate security discourses, this narrative tends to present a threatening picture of climate change and identify potential crises that need to be addressed. Moreover, as presented in the Introduction of this book, climate security crises are perceived differently by the various actors. Indeed, they tend to adopt a national security framing, a human security framing, or an ecological security framing. If climate change is perceived as a national security issue, the focus is on the protection of the national territory, and it can be legitimate to use military responses to ensure the survival of the territorial state. If climate change is constructed as a human security issue, the referent object of security is the wellbeing of individuals or groups, and it can be argued that development strategies are the best policy responses. Finally, if climate change is perceived as an ecological security issue, the focus is on the preservation and restoration of ecosystems. The best policy responses are then aimed at assuring ecosystem resilience and enforcing the rights and needs of the most vulnerable beings.

In this research, I identify three intertwined policy narratives that I will use to structure the chapter. First, we can isolate a risk-based narrative in which climate change is connected to national security risks. It mainly originates from the Ministry of the Armed Forces and emerged particularly in the aftermath of COP21 in Paris, which had an impact on the framing of climate change in security terms in France. Second, we can identify a discourse in which climate change is linked to human security risks. This narrative originates from the more internationalised governmental bodies, namely the Ministry of the Armed Forces, the Ministry of Europe and Foreign Affairs and the Ministry of the Interior. Finally, we can witness the emergence of discourse in which planetary risks are addressed. It originates from various governmental bodies and aims at addressing ecological security risks.

6.2 National Security Perceptions and Policy Answers

In this section, I will show how climate change is constructed as a national security issue in France and highlight the most salient governmental policy responses.

6.2.1 *Discourses on Climate Change and National Security Risks*

Strategic studies on the security implications of climate change are at the core of the national security perceptions in France, as in other countries like the United States (Briggs 2012). Initially scarcely developed between 2008 and 2014, they begin to thrive in 2015 thanks to the work of the defence sector during the preparations for COP21 (Ministry of the Armed Forces 2015). The French military doctrine does not view climate change as a threat multiplier but rather as a “risk” or “hazard” multiplier, meaning that even if climate-induced security risks are indirect or low, they should be addressed as a matter of precaution (Ministry of the Armed Forces 2017). If, initially, this narrative originates from traditional concerns for climate-induced natural disasters and extreme weather events (Ministry of the Ecological and Inclusive Transition 2018) the Ministry of the Armed Forces and the Ministry of Europe and Foreign Affairs have recently connected this to contemporary security crises and positioned themselves as parts of this new framework (Ministry of the Armed Forces 2017; Ministry of the Ecological and Inclusive Transition 2018).

The first important perceived risk is climate migration. During the 2010s, there was a push for studies on the future of migrations in the context of the European migrant crisis. In 2010, the Ministry of Environment (then called the “Ministry for Ecological and Inclusive Transition”) funded a research programme named EXCLIM (Climatic Exile) to better understand and manage climate migrations. In 2013, the final report concluded that European countries (including France) lacked a clear vision and understanding of the magnitude of the problem (Climate Exile Research Program 2013). In the wake of COP21, migrations began to be connected to climate change within France’s military doctrine (Ministry of the Armed Forces 2017). During the discussions on the Global Compact for Migration, France’s diplomats recommended the adoption of the Paris Agreement in order to tackle climate-induced migrations (Ministry of Europe and Foreign Affairs 2019).

The second important perceived risk is armed violence, especially terrorist actions. In the context of France’s involvement in the Sahel and South-East Asia, there is an interest in the future security implications of climate change in these regions. In the aftermath of France’s largest military operation abroad, Operation Barkhane, launched in 2014 in the Sahel region, the Ministry of the Armed Forces showed an interest in prospective works on how climate change may fuel existing local tensions (Observatory of Climate Change Impacts on Defence and Security [OCCIDS] 2018, 2019). Also, in 2017, Jean-Yves Le Drian, Minister of Europe and Foreign Affairs, insisted on the necessity of building a “preventive security diplomacy” in the region, built around a series of initiatives that we will analyse more precisely in the international focus section (Ministry of Europe and Foreign Affairs 2017).

The third perceived risk is climate catastrophe. Since the early 2010s, France’s overseas territories have been considered by the government as the primary focus for the study of the impact of extreme weather events, due to their exposure to natural disasters (Ministry of the Armed Forces 2017). The impact of the 2017

Irma hurricane in Saint Martin and Saint Barthélemy played an important role in the change of practices of political and military leaders regarding extreme weather events provoked by climate change (President of the French Republic 2017). The destruction of many buildings and houses on the islands shed light on the lack of readiness of France's military regarding the assistance of civilian populations in remote overseas territories (National Assembly 2019; Senate 2019). However, since they are part of French territory, they also led to a realisation that some extreme weather events recently experienced in metropolitan France (for example in the 2018 Aude floods or in the 2019 Var floods) can be triggered by climate change and may require adaptation measures.

Indeed, in 2019, the Ministry of Ecological and Inclusive Transition estimated that 62% of the French population is either “strongly” or “very strongly” exposed to climate risks (Ministry of the Ecological and Inclusive Transition [MEIT] 2019). Moreover, the 2019 Amazonian fires caused by Brazil's deforestation policy triggered outraged reactions from France, who shares the largest border of its territory with Brazil because of the presence of Guiana. This caused diplomatic tensions between France and Brazil, especially when French President Emmanuel Macron stressed the importance of the Amazonian forest in the mitigation of climate change as part of his diplomatic narrative during the UN Climate Change Summit in 2019, where he brought a delegation from Guiana (President of the French Republic 2019a). Other connections between climate change and security can be found in the public statements of the current Minister of the Armed Forces, Florence Parly. In 2018, during her intervention at the Munich Security Conference, she stressed the potential military impact of climate-induced phenomena such as “droughts, floods, [and] sea level rises” (Ministry of the Armed Forces 2018). In 2019, during an informal meeting with the European Defence Ministers in Helsinki, she particularly highlighted the security implications of climate change in the Arctic and its impact on the strategic equilibrium in the region (Ministry of the Armed Forces 2019).

6.2.2 Policy Responses

At the national level, these three growing concerns gave birth to three different initiatives, which contributed to the emergence of a climate security debate at the highest levels of decision-making.

The first initiative is the Observatory of Climate Change Impacts on Defence and Security, created in 2016 and funded by the Ministry of Defence. Before the 2015 COP21 in Paris, the Ministry of Defence (renamed the Ministry of the Armed Forces in 2017) decided to organize a “Defence and Climate” conference to gather military officials and discuss the implications of climate change for the defence sector. The synthesis report of the conference shows the involvement of France's strategic allies in Africa and, more specifically, in the Sahel region (Ministry of the Armed Forces 2015). The speakers clearly established connections between climate-induced crises (floods, droughts) and security issues (migrations, armed conflicts). The decision to

create the Observatory was in order to provide the Ministry with an adequate tool to anticipate these climate-induced security risks in the future. Since its creation in 2016, the Observatory has connected climate change with various security concerns. Some examples include illegal fisheries in the Asia-Pacific region (and more specifically in Vietnam) and terrorism in the Sahel region (two regions where French troops are currently operating). The Observatory keeps working on climate risks within the Directorate General for International Relations and Strategies (DGRIS). In 2021, it was officially announced that it would be renewed for an additional period of four years, which shows its integration within the Ministry of the Armed Forces.

The second initiative is the creation of a “climate security” programme within the *Institute of Advanced Studies in National Defence* (IHEDN). The IHEDN is a public research institution created in 1936 and under the responsibility of the office of the Prime Minister. Its role is to develop strategic thinking and defence studies at the highest level. Each year, it offers a special formation to selected public and private executives as well as high-ranking military personnel on contemporary security and military issues. For the 72nd meeting, which took place during the academic year 2019–2020, the Institute decided to focus on the “consequences of climate change for security and defence”. The participants were separated into six groups. Each group had to work with an expert and write a report on a specific topic: the prevention of the security dimensions of climate change, the link between climate change and migrations, climate security at the United Nations, the prevention of climate-induced armed conflicts, the inclusion of climate change in defence policies, and the role of citizens in the anticipation of the harmful effects of climate change. The reports were presented to the IHEDN in June 2020. The choice of climate change in an institution under the supervision of the Prime Minister, as well as the selection of experts from the Observatory and the DGRIS to teach the issue, provide a good indication of the contemporary circulation of ideas on climate change and national security within the French state and more specifically its elites.

The third initiative is the creation of a parliamentary mission on “climate imbalances and conflicts” at the National Assembly in 2019. Two deputies from the Commission for Foreign Affairs, Mr. Alain David (Socialist Party) and Mr. Frédéric Petit (Democratic Movement), heard from experts from the Observatory of Climate Change Impacts on Defence and Security, and also from the French security community, to produce a report on the linkage between climate change and armed conflicts. On January 21st, 2021, an official report on the matter was published and presented to the National Assembly (National Assembly 2021). After several pages dedicated to various climate risks (droughts, sea level rise, extreme weather events), the document criticises the lack of preparation of the main French security actors and military personnel. To face the potential security consequences of these events, the deputies advocate more specifically for an acceleration of adaptation efforts from the armed forces and present them as currently unable to tackle future climate crises on French territory. According to the mission, the resilience of military infrastructure should be increased, since its protection guarantees the availability of the armed forces if France’s territorial integrity is threatened by a climate crisis.

Finally, the Ministry of the Armed Forces developed its own specific international network on climate change and national security. We can identify two institutional initiatives. The first one is the participation in the South Pacific Defence Ministers Meeting (SPDMM). Though the initiative began in 2013, climate change began to be a substantial part of the discussions in 2017, when France focused its attention on the impacts of climate change in the region by 2030. The results, published in 2019, focused on three elements: the resilience of critical infrastructure, the management of rescue operations in cases of natural disaster, and the surveillance of maritime spaces (Ministry of the Armed Forces 2019). Another national security initiative is the constitution of a transatlantic network, the International Military Council on Climate Security (IMCCS), in 2019. Led by French, Dutch and American think tanks and military leaders, it aims at exploring the “high-order security risks” and “geopolitical impacts” of climate change, as well as its impact on “military and defense”, according to its first annual report published in February 2020, entitled “The World Climate and Security Report 2020” (International Military Council on Climate and Security 2020).

6.3 Human Security Perceptions and Policy Responses

In this section, I will show how climate change is constructed as a human security issue in France and highlight the most salient governmental policy responses.

6.3.1 *Discourses on Climate Change and Human Security Risks*

In France, the Ministry of Foreign Affairs develops a strong human security discourse, as part of France's diplomatic efforts on climate change following the 2015 Paris Agreement. Indeed, after the withdrawal of the United States from the Paris Agreement, President Macron attempted to impose France as a leader on the issue through his involvement in international climate negotiations and also through his participation in new international initiatives.

The first important perceived human security risk is food shortages, with a specific focus on France's partners in the Sahel region and in West-Africa. Before COP21, in 2015, France initiated a “4 per 1000: Soils for Food Security and Climate” Consortium, conducted by the Ministry of Agriculture. Its goal is to improve climate resilience through the development of new agricultural practices in certain areas of the world, such as North Africa. The declaration of intention insists on how new agricultural practices, such as carbon sequestration, may reinforce “agricultural resilience” by durably protecting people from food shortages and land degradation (Ministry of Agriculture and Food [MAAF] 2016).

The second important risks that are addressed through a human security lens are international humanitarian risks. Based on the issues presented in the documentation of the Ministry of Foreign Affairs, I propose this broad category to contain all probable impacts of climate change on the population at the global level. This includes a series of risks such as droughts, desertification, salinisation or floods that need to be addressed collectively through cooperation mechanisms and international agreements. In 2017, France initiated an international initiative meant to improve the international adaptation to climate change in the wake of COP21: the Adapt' Action programme. Under the supervision of the French Development Agency (FDA), and with a budget of 30 million euros, its goal is to help 15 countries fulfil the objectives of the 2015 Paris Agreement. It particularly applies to France's partners in Africa (for example Congo and Senegal) and in the Caribbean or in the Indian Ocean (small island states such as the Dominican Republic and Madagascar) (French Development Agency 2017). Moreover, it relies mostly on improved governance mechanisms, better environmental policymaking and innovative engineering projects. As already identified in the national focus, the Adapt' Action programme is aimed at tackling climate risks—economic and human risks are explicitly mentioned among the concerns (French Development Agency 2017). In this case, human security risks cover a large variety of precarious living conditions that could be threatened by climate-related events (difficult access to water, geological fragilities, etc.). The Ministry of Europe and Foreign Affairs is currently trying to tackle the issue and warns against the reduction of the “nutritional and health attributes” of agricultural goods due to climate hazards (Ministry of the Ecological and Inclusive Transition 2018a). France is also pressing the issue at the European level and is involved in a European climate adaptation framework, the EU Adaptation Strategy, originally formulated in 2009 and revised in 2018. It identifies several transborder risks that need to be addressed by European countries, including economic risks and health risks (European Commission [EC] 2018).

The third category encompasses health risks, which are also tied to France's environmental policies. They were indeed mentioned during the 2007 “Grenelle Environment”, which was a national initiative started by President Sarkozy to revise France's national environmental policies. Although the primary focus of the debate was an ecological transition towards renewable energies, the very first working group of the Grenelle was dedicated to climate change. The 2009 Grenelle I law connects human security risks and climate change through its requirement to finance research programmes on “infectious diseases and sanitary risks linked to climate change”. The 2011 “National Adaptation Plan on Climate Change” also outlines the health risks raised by climate change, especially those associated with the transportation and conservation of food, or the new diseases that can occur, like Chikungunya, which began to be imported into metropolitan France from the overseas territories in the early 2010s. In the context of the COVID-19 pandemic, health risks became increasingly important within the human security discourse because of their association with climate change. This was particularly the case in the context of the discussion of the fourth “Health and Environment Plan” in 2020 and 2021 conducted by the Ministry

of the Environment and the Ministry of Health. Climate change is considered as one of the triggers of the pandemic and is presented as a potential accelerator of future diseases (MEIT 2020).

6.3.2 Policy Responses

To better address human security concerns in vulnerable areas, the French Ministry of Foreign Affairs is involved in international civil-military partnerships and networks. We can focus on two contemporary initiatives in the Sahel region, where France is currently military involved (the Barkhane Operation, since 2014): the G5 Sahel (national security aspects) and the Sahel Alliance (human security dimensions).

The G5 Sahel is an alliance between five Sahelian countries (Burkina Faso, Chad, Mali, Niger and Mauritania) created in 2014. In 2017, France welcomed the adoption of Resolution 2359 of the UNSC for the creation of the G5 Sahel Joint Force, which reinforces the military missions conducted by the French armed forces in the area since 2014. Quite absent from the 2013 UN Integrated Strategy, climate change begins to be part of the UN framework on the Sahel region in the aftermath of COP21. During a UNSC meeting on May 26, 2016, the Deputy Permanent Representative of France to the United Nations, Alexis Lamek, highlighted the security challenges that could be aggravated by climate change: “forced migration, political instability, insecurity and the temptation of extremism” (Permanent mission of France to the United Nations 2016). During the same meeting, the Special Representative of the United Nations Secretary-General for West Africa and the Sahel (SRSG), Mohamed Ibn Chambas, stressed the impact of climate change on potential food shortages and security crises (Permanent Secretariat of the G5 Sahel 2016). Climate change became a substantial part of the G5 Sahel's doctrine in 2018 with a declaration on the matter by the President of the G5 and President of Niger, Mahamadou Issoufou (Permanent Secretariat of the G5 Sahel 2018). France played an important diplomatic role in the international legitimisation of the debate on climate security in the Sahel with other important statements on the matter at the UNSC on July 11, 2018 (Permanent mission of France to the United Nations 2018) and on January 25, 2019 (Permanent mission of France to the United Nations 2019). On January 20, 2020, President Macron announced the creation of a “Sahel Coalition” between the G5 Sahel and France, which could reinforce France's climate security discourse in the governance of the region. During the UNSC session that took place on February 23, 2021, he further justified France's involvement in the region by connecting climate change and human security (President of the French Republic 2021).

Another international civil-military partnership is the Alliance Sahel, initiated by France, Germany, and the European Union in 2017. It gathers together the members of the G5 Sahel, European countries (France, Italy, Germany, Spain, the United Kingdom), the European Union, the World Bank, the African Development Bank and the United Nations Development Programme. Even if the Alliance presents itself as a purely economic initiative, it identifies “rural development and food security” as one

of its main missions (Alliance Sahel [AS] 2017). The connection between climate change and agricultural production is highlighted in the presentation of the Alliance's development policy (AS 2018) as well as in the statements of the Alliance's French coordinator, Jean-Marc Gravellini, who establishes a clear link between poverty, extreme climate events and terrorism (AS 2019). At the end of 2020, the Alliance Sahel increased its financial involvement in the 10-year "Great Green Wall" project, which is presented as a solution to protect Sahelian farmers from droughts and prevent migration. Since 2013, a UN Integrated Strategy for the Sahel, endorsed by the UNSC in June 2013, identifies security and development as the main issues in the region, and this led to the creation of the United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA).

The French government's emphasis on human security at the international level led to the creation of new international initiatives to better finance humanitarian programmes and prevent human security risks under the framework of the UNFCC. In particular, the French-led coalitions, "One Planet Summits", have proven influential. The first Summit took place in Paris exactly two years after the signature of the Paris Agreement, on December 12, 2017. While the first meeting focused exclusively on the financing of the ecological transition, that of 2018 witnessed the emergence of a debate on the "protection of vulnerable populations" and their access to resilient sources of energy (One Planet Summit [OPS] 2018). In the "Africa Pledge" that concluded the 3rd meeting in Nairobi, this narrative on human security proved to be as important as ecological transition: "this Summit focused on two key areas: renewable energy access and protection of African ecosystems in order to foster and support sustainable growth while improving the resilience of vulnerable populations" (OPS 2019). The 2021 Summit in Marseille was partly dedicated to the small island states and focused on the impact of climate change on local populations in these areas. France's overseas territories in the Pacific, such as Tahiti, are presented as particularly vulnerable to climate-induced migrations due to sea level rise.

6.4 Ecological Security Perceptions and Responses

In this section, I will show how climate change is constructed as an ecological security issue in France and highlight the most salient governmental policy responses.

6.4.1 *Discourses on Climate Change and Ecological Security Risks*

Ecological security perceptions were already present within France's climate policy in 2007 and have continued to be important in climate policies in recent years. The idea here is not only to adapt to climate crises, but to build the resilience of

France's infrastructures, cities or landscapes in order to prevent the destabilisation of certain ecosystems. Because of the complexity of the issue, this narrative puts an important emphasis on expert knowledge, and scientists are asked to prioritise certain issues and orientate political actions. There is an analogy here with the role of the Intergovernmental Panel on Climate Change (IPCC) in global climate governance. Therefore, new scientific institutions and initiatives were created to fulfil this new mission. In 2008, a National Observatory on the Effects of Climate Change (ONERC) became part of the Ministry of the Environment in the aftermath of the 2008 Grenelle conference. ONERC publishes annual reports on the effects of climate change in France, but also participates in the production of risk indicators to prevent the harmful effects of droughts or wildfires (Ministry of the Ecological and Inclusive Transition 2015). Between 2011 and 2015, a study named "France's Climate in the XXIst Century" was conducted by France's meteorological agency (Météo-France) under the supervision of the Ministry of the Environment's Directorate General for Energy and Climate (DGEC). Under the patronage of well-known climatologist and IPCC expert Jean Jouzel, the team of scientists focused on the prevention of potential floods and sea level rises (Ministry of the Ecological and Inclusive Transition 2015). Finally, in 2018, the President created the High Council for Climate. This new and independent advisory authority comprises twelve members and publishes an annual critical report on France's climate policies for the Prime Minister's office. The first report highlighted the insufficiency of France's carbon reduction policies, but also issued a general alert about the lack of resilience of France's forests against the risk of wildfires (High Council for Climate 2019).

From an ecological security standpoint, there is a clear emphasis on the prevention of natural risks by certain governmental bodies. Several national policies mention the necessity to enforce forest resilience, infrastructure resilience and territories resilience.

The prevention narrative is particularly present within the "civil security" community at the Ministry of the Interior, in charge of the rescue efforts in French territory. However, since Hurricane Irma in 2017, we can see that the prevention of natural risks has become part of a prospective approach to climate change with the publication of future scenarios and the creation of expert teams at the Ministry of the Interior and the Ministry of the Armed Forces (Ministry of the Armed Forces 2018, OCCIDS 2019; Ministry of the Interior 2018). On February 12, 2020, the Ecological Defence Council (EDC), which gathers the Ministers in charge of ecological matters under the direction of the French President, suggested changes to the current preventive policies, especially regarding the risks of floods in metropolitan France. The Ministry of Ecological Transition estimates that seventeen million French citizens are currently exposed to flood risks (Ecological Defence Council 2020). The ECC plans to guarantee the financing of the 1995 "Barnier Fund" dedicated to the financial recovery of populations after an extreme weather event.

There is a discourse on the prevention of energy risks. France is dependent upon nuclear power and has framed energy resilience as protecting its nuclear energy infrastructure from climatic events. During the Summer of 2019, a massive heat wave in France led to the stoppage of three nuclear reactors because the rivers were

too warm to cool them, a situation already felt during a 2003 heat wave. In 2018, a parliamentary inquiry committee on the safety of nuclear infrastructure highlighted the lack of preventive action by France's nuclear authorities regarding droughts and heat waves and recommended an improvement of the current preventive framework of the Nuclear Safety Authority (National Assembly 2018).

6.4.2 *Policy Responses*

As an answer to these growing ecological security concerns, the French government began two separate initiatives to prevent urgent environmental and planetary risks.

The first initiative is the acceleration of the implementation of the Paris Agreement. Indeed, the current governmental push toward the reduction of greenhouse gas emissions and the mitigation of climate change relies more and more on a reminder of the strict link between carbon emissions and environmental risks. This turn began after the United States' withdrawal from the Paris Agreement under the Trump administration. In the months following the US decision, the French presidency initiated a sustained diplomatic effort to keep climate change on the agenda of global diplomacy. This led to strong statements between 2017 and 2020 from French diplomats and other officials, including the President himself, who regularly accused the American government of denying climate change (President of the French Republic 2017). In line with this rhetoric, the French government began to work on a bill to materialise the decarbonisation of the economy and encourage others to follow its example. As a result, the ecological security rhetoric is at the core of the 2021 "Climate and Resilience" law. The text uses an emergency rhetoric and presents "resilience" as the main purpose of the law, which leads to a synthesis between climate mitigation and climate adaptation discourses. As a result, the text establishes a clear connection between the reduction of carbon emissions and the prevention of the most harmful ecological consequences of climate change (National Assembly 2021a).

The second initiative is an international measure named CREWS (Climate Risks and Early Warning Systems), constructed in the aftermath of COP21. It gathers more than forty countries and three international organisations: the World Bank (through the Global Facility for Disaster Reduction and Recovery), the World Meteorological Organization and the United Nations International Strategy for Disaster Reduction. Its objective is to build a mechanism to improve the resilience of Least Developed Countries (LDC) and Small Island Developing States (SIDS) against climate-related natural events and reduce global disaster mortality (Climate Risks and Early Warning Systems 2018). During the early discussions on the production of the plan, France's diplomats also insisted on the involvement of the Green Climate Fund in the programme. In 2019, at the United Nations, President Macron particularly insisted on the necessity to finance the Fund and announced a doubling of France's contribution as well as an increased participation of several European countries to compensate for the United States' financial withdrawal (President of the French Republic 2019). In 2020, France's new contribution to CREWS is being

discussed and the Ministry of Foreign Affairs is currently campaigning for it, since it is considered a suitable way to manage natural and ecological risks at the global level.

6.5 France's Involvement in UNSC Debates

France has been one of the driving forces behind several discussions on the security implications of climate change at the United Nations Security Council (UNSC). Between 2007 and 2018, the French delegation sided with its European allies (the UK, Germany, and Sweden) to continue the discussions on the security implications of climate change during both the open debates (20 July 2011; 11 July 2018) or at the "Arria Formula" meetings (Maertens 2021). A member of the Group of Friends on Climate and Security since its launch by Germany in 2018, and a supporter of the Climate Security Mechanism, France showed its support for multilateral solutions to climate security through the co-creation of the Alliance of Multilateralism (again with Germany) on April 2, 2019. During the 2019 open debate, which took place on January 25, the French representative Anne Gueguen presented France's risk-based approach to climate security. She formulated three key recommendations: "risks to international security posed by the impacts of climate change must become a central element of the conflict prevention agenda"; "a rigorous and regular analysis of these risks is necessary and in the international public interest" and must be conducted by the UN Secretary-General and the UNSC; and "this risk analysis must be accompanied by preventive measures that will be implemented by national Governments, regional organizations, development partners and United Nations agencies" (Ministry of Europe and Foreign Affairs 2019).

In 2020, the open debate that took place on July 24 again showed France's emphasis on the prevention of climate-induced international security risks and on multilateral solutions to climate security issues. Before the debate, France took part in a meeting on "Climate Security and Risks" in the Arria Formula on April 22 with Germany, the Dominican Republic, Estonia, Belgium, Saint Vincent and the Grenadines, Niger, Tunisia, the United Kingdom and Vietnam. All countries called for a "joint initiative to address climate-related security risks" and especially "conflict prevention" (Ministry of the Ecological and Inclusive Transition 2020). They reiterated their statement on June 22 during a virtual meeting with UN Secretary-General Antonio Guterres. During the open meeting, the Permanent Representative of France to the United Nations, Nicolas de Rivière, stated that "it is important not to forget the threats to international security linked to environmental risk, in particular to climate change and the destruction of natural biotopes, and to strengthen our collective action on this matter" (Ministry of the Ecological and Inclusive Transition 2020). Through its Representative, France also expressed its support for the appointment of a Special Envoy for Climate Security to strengthen the existing multilateral framework on climate security (Ministry of the Ecological and Inclusive Transition 2020).

The 2020 UNSC elections constituted a challenge for the involvement of France and its European partners in the UNSC debates. Indeed, five UNSC non-permanent seats were renewed and allocated to Norway, Ireland, Mexico, India, and Kenya. In addition to the departure of the Belgian delegation, France lost one of its most valuable allies on the climate security front with the end of Germany's tenure. Indeed, even if Ireland could be a valid European partner on the matter and had already indicated that it would act as co-chair with Niger of a new UNSC Informal Expert Group on Climate and Security, the cooperation between Germany and France had proved to be efficient at the UNSC because of their influence within the European Union. However, thanks to the involvement of the United Kingdom, a new open debate on climate security took place on February 23, 2021 and was an occasion for France to maintain and strengthen its claim for a more preventive and risk-oriented approach. President Macron indeed acknowledged the "complex and undeniable" connection between climate change and international security and pledged support once more for the nomination of a UN Climate Security Envoy (President of the French Republic 2021). Thus, France seems to adopt a human security perspective in its foreign policy approach to climate security at the UNSC, by focusing on the prevention of humanitarian crises due to climate change, and leaving aside the more national and ecological perspectives we identified at the domestic level. This aligns with France's call for multilateral solutions to the climate crisis, uttered in the various post-COP21 international climate meetings in the context of the failure of the American leadership on the matter under the Trump administration.

6.6 Conclusion

In line with its declarations at the UNSC, France is developing its own perspective on climate security thanks to the involvement of different governmental bodies in the current national debate on climate change. In addition to the post-COP21 debate on the national security implications of climate change in metropolitan France and its overseas territories, I have witnessed the emergence of new perspectives on human and ecological security. Therefore, I identify three discourses on climate risks in France, which are all connected to the three main approaches to climate security identified in this chapter: climate-induced security risks (national security), humanitarian, food and health risks (human security) and natural or ecological risks (ecological security). While it would be a stretch to say that climate change shapes the dominant understanding of security in France, it does provide additional elements to the already existing conceptions of security within each agency or Ministry.

Moreover, in a context where the current French government supports climate policies, especially within the UNSC, we can observe a growing interest in the security implications of climate change both in internal and foreign affairs. Therefore, the three security narratives are present and often intertwined within new programmes, initiatives and institutions, which focus on the identification of emerging climate risks. We can also see that France's military involvement in vulnerable regions such

as the Sahel and the Pacific has had an impact on the framing of climate change in terms of national security, through its linkage with “hard security” issues (i.e., terrorism, violent conflict). This could lead to a militarisation of the issue and it could marginalise other important approaches (the human and ecological impacts of climate change). We can already see that military actors are getting more and more involved in the current French-led international initiatives and dialogues on climate security (especially in the Sahel region and in South-East Asia). Future research tasks may try to show how these security narratives are received by the public in France, and whether the grammar of security feeds the ongoing debate on the most appropriate responses to global climate change.

References

- Alex, Bastien; Estève, Adrien, 2018: “Les Acteurs De La Défense Face Au Changement Climatique: Itinéraire D’une Nouvelle Contrainte Stratégique En France Et Aux États-Unis”, in: *Revue internationale et stratégique*, 109,1: 93–103.
- Alliance Sahel (AS), 2017: “Sahel Alliance Launched: Eur 6bn and 500 Projects for Development”; at: <https://www.afd.fr/fr/actualites/alliance-sahel-6-milliards-et-500-projets-pour-le-dev-eloopement>.
- AS, 2018: Agriculture, Rural Development and Food Security; at: <https://www.alliance-sahel.org/en/fields/agriculture-rural-development-food-securite/>.
- AS, 2019: “Nous Devons Aider Plus Rapidement Et Mieux Le Sahel”, in: *LeMonde.fr*; at: https://www.lemonde.fr/afrique/article/2019/02/05/nous-devons-aider-plus-rapidement-et-mieux-le-sahel_5419637_3212.html.
- Boulanger, Philippe, 2010: “Du Bon Usage De L’environnement Par Les Armées. Le Début Des Stratégies Nationales Militaires De Développement Durable”, in: *Cahiers de géographie du Québec*, 54,152: 313–36.
- Briggs, Chad Michael, 2012: “Climate Security, Risk Assessment and Military Planning”, in: *International Affairs*, 88,5: 1049–64.
- Climate Exile Research Program, 2013: “Rapport Scientifique - Gérer Les Déplacements Des Populations Dus Aux Phénomènes Climatiques Extrêmes (2010–2013)”; at: http://www.reseau-terra.eu/exclim/IMG/pdf/exclim_rapport_final.pdf.
- Climate Risks and Early Warning Systems, 2018: “Annual Report 2018”; at: <https://www.crews-initiative.org/en/about-us/crews-annual-reports>.
- Corry, Olaf, 2012: “Securitisation and ‘Riskification’: Second-Order Security and the Politics of Climate Change”, in: *Millennium - Journal of International Studies*, 40,2: 235–58.
- Ecological Defence Council, 2020: “Intervention D’elisabeth Borne, 4ème Conseil De Défense Écologique, Paris – 12 Février 2020”; at: <https://www.ecologie.gouv.fr/intervention-delisabeth-borne-4eme-conseil-defense-ecologique-paris-12-fevrier-2020>.
- Estève, Adrien, 2021: “Preparing the French Military to a Warming World: Climatization through Riskification”, in: *International Politics*, 58,4: 600–18.
- European Commission (EC), 2018: “Report from the Commission to the European Parliament and the Council on the Implementation of the Eu Strategy on Adaptation to Climate Change” (Brussels: EC); at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0738&from=EN>
- French Development Agency, 2017: “Adapt’action: Ensemble Face Au Changement Climatique”; at: <https://www.afd.fr/fr/ressources/adaptaction-ensemble-face-au-changement-climatique>.

- Government of France, 2019: “Convention Citoyenne Pour Le Climat – Synthèse Des Contributions De La Première Phase”; at: <https://contribuez.conventioncitoyennepourleclimat.fr/pages/synthese-phase1?format=html&locale=fr>.
- High Council for Climate, 2019: “Premier Rapport Annuel Du Haut Conseil Pour Le Climat - Agir En Cohérence Avec Les Ambitions”; at: <https://www.vie-publique.fr/rapport/38343-premier-rapport-annuel-du-haut-conseil-pour-le-climat>.
- International Military Council on Climate and Security, 2020: “The World Climate and Security Report 2020 – a Product of the Expert Group of the Imccs”; at: https://imccs.org/wp-content/uploads/2020/02/World-Climate-Security-Report-2020_2_13.pdf.
- Judge, Andrew; Maltby, Tomas, 2017: “European Energy Union? Caught between Securitisation and ‘Riskification’”, in: *European Journal of International Security*, 2,2: 179–202.
- Maertens, Lucile, 2021: “Climatizing the UN Security Council”, in: *International Politics*, 58,4: 640–60.
- MEIT, 2020: “Le Plan National Santé Environnement (Pnse)”; at: <https://www.ecologie.gouv.fr/plan-national-sante-environnement-pnse>.
- Ministry of Agriculture and Food (MAAF), 2016: “Declaration of Intention for the Formation of a ‘4 Per 1000: Soils for Food Security and Climate’ Consortium”; at: https://www.4p1000.org/sites/default/files/content/gov_do_en_forum_2-1-report_forum_1_marrakech.pdf.
- Ministry of Europe and Foreign Affairs, 2017: “Jean-Yves Le Drian Défend Une Diplomatie Sécuritaire Préventive Au Sahel”; at: <https://www.lopinion.fr/international/jean-yves-le-drian-defend-une-diplomatie-securitaire-preventive-au-sahel>.
- Ministry of Europe and Foreign Affairs, 2019: “Climate & Security: To Anticipate, Prevent and Limit the Effects”; at: <https://onu.delegfrance.org/Climate-Security-to-anticipate-prevent-and-limit-the-effects>.
- Ministry of the Armed Forces, 2015: “International Conference of Defence Ministers and Senior Officials—the Implications of Climate Change for Defence”; at: https://www.defense.gouv.fr/sites/default/files/tronc_commun/28.04.2022%20Strat%C3%A9gie%20climat%20et%20d%C3%A9fense.pdf.
- Ministry of the Armed Forces, 2017: “Revue Stratégique De Defense Et De Sécurité Nationale”; at: https://www.diplomatie.gouv.fr/IMG/pdf/2017-rs-def1018_cle0b6ef5-1.pdf.
- Ministry of the Armed Forces, 2018: “Defence and Climate: France is Committed”; at: <https://www.archives.defense.gouv.fr/content/download/539178/9257163/file/Plaquette-DefClim-2018.pdf>.
- Ministry of the Armed Forces, 2019: “Implications of Climate Change on Defence and Security in the South Pacific by 2030”; at: https://climateandsecurity.org/wp-content/uploads/2019/07/obs_climat-et-dc3a9fense_201905-re-implications-of-climate-change-in-the-south-pacific-by-2030-spdmm-report.pdf.
- Ministry of the Ecological and Inclusive Transition, 2015: “Observatoire National Sur Les Effets Du Réchauffement Climatique (Onerc), 2014–2015 Annual Report”; at: <https://www.ecologie.gouv.fr/observatoire-national-sur-effets-du-rechauffement-climatique-onerc>.
- Ministry of the Ecological and Inclusive Transition, 2018: “La Sécurité Alimentaire Et Le Changement Climatique”; at: <https://www.diplomatie.gouv.fr/fr/politique-etrangere-de-la-france/developpement/autres-secteurs-d-importance/securite-alimentaire-nutrition-et-agriculture-durable/la-securite-alimentaire-et-le-changement-climatique/>.
- Ministry of the Ecological and Inclusive Transition, 2018a: “Le Plan National D’adaptation Au Changement Climatique (Pnacc 2)”; at: https://www.ecologie.gouv.fr/sites/default/files/2018.12.20_PNACC2.pdf.
- Ministry of the Ecological and Inclusive Transition (MEIT), 2019: “Changement Climatique – Impacts En France”; at: <https://www.ecologie.gouv.fr/impacts-du-changement-climatique-sante-et-societe>.
- Ministry of the Ecological and Inclusive Transition, 2020: “Le Plan National Santé Environnement (Pnse)”, at: <https://www.ecologie.gouv.fr/plan-national-sante-environnement-pnse>.

- Ministry of the Interior, 2018: "La Lettre De La Mission De La Stratégie Et De La Prospective N°1"; at: <https://www.interieur.gouv.fr/Le-ministere/Securite-civile/Documentation-technique/Mission-de-la-strategie-et-de-la-prospective>.
- National Assembly, 2018: "Rapport Fait Au Nom De La Commission D'enquête Sur La Sûreté Et La Sécurité Des Installations Nucléaires"; at: <https://www2.assemblee-nationale.fr/15/autres-commissions/commissions-d-enquete-de-la-xv-eme-legislature/commission-d-enquete-sur-la-surete-et-la-securite-des-installations-nucleaires>.
- National Assembly, 2019: "Proposition De Loi Visant À Mieux Anticiper Les Déplacements Des Populations Victimes Des Changements Climatiques Et Environnementaux, En France Et Dans Le Monde"; at: https://www.assemblee-nationale.fr/dyn/15/textes/115b2533_proposition-loi.
- National Assembly, 2021: "Parliamentary Mission on 'Climate Imbalances and Conflicts'"; at: [http://www2.assemblee-nationale.fr/15/commissions-permanentes/commission-des-affaires-etrangeres/missions-d-information/dereglemens-climatiques-et-confits/\(block\)/56314](http://www2.assemblee-nationale.fr/15/commissions-permanentes/commission-des-affaires-etrangeres/missions-d-information/dereglemens-climatiques-et-confits/(block)/56314).
- National Assembly, 2021a: "Projet De Loi Portant Lutte Contre Le Dérèglement Climatique Et Renforcement De La Résilience Face À Ses Effets"; at: https://www.assemblee-nationale.fr/dyn/15/textes/115b3875_projet-loi.pdf.
- Observatory of Climate Change Impacts on Defence and Security (OCCIDS), 2018: "Rapport D'étude N°6 – Prospective Sahel"; at: https://www.iris-france.org/wp-content/uploads/2018/11/RE6_Prospective-Sahel_V1.pdf.
- OCCIDS, 2019: "Rapport D'étude N°8 – Pacifique Sud"; at: https://www.iris-france.org/wp-content/uploads/2019/10/201902-D%C3%A9fense-Climat-Pacifique_Sud-RE-n8.pdf.
- Oels, Angela, 2013: "Rendering Climate Change Governable by Risk: From Probability to Contingency", in: *Geoforum*, 45, 17–29.
- One Planet Summit (OPS), 2018: "One Planet Summit Program, New York City - September 26, 2018"; at: <https://www.oneplanetsummit.fr/en/events-16/2nd-edition-one-planet-summit-new-york-4>.
- OPS, 2019: "Africa Pledge – Chair Summary"; at: <https://www.oneplanetsummit.fr/les-evenements-16/le-one-planet-summit-se-reunit-nairobi-67>.
- Permanent mission of France to the United Nations, 2016: "Peace and Security in Africa: Challenges in the Sahel Region—Statement by Mr Alexis Lamek, Deputy Permanent Representative of France to the United Nations - Security Council, 26 May 2016"; at: <https://onu.delegfrance.org/Challenges-to-the-security-and-development-of-the-Sahel-are-immense>.
- Permanent mission of France to the United Nations, 2018: "Risks Related to Climate Change for International Peace and Security. Statement of Mr. François Delattre, Permanent Representative of France to the United Nations - Security Council - 11 July 2018"; at: <https://onu.delegfrance.org/In-the-face-of-climate-change-we-must-move-forward>.
- Permanent mission of France to the United Nations, 2019: "Climate & Security: To Anticipate, Prevent and Limit the Effects, Addressing the Impacts of Climate-Related Disasters on International Peace and Security, Statement by Mrs. Anne Gueguen, Deputy Permanent Representative of France to the United Nations, Chargée D'affaires A.I. Security Council, 25 January 2019"; at: <https://onu.delegfrance.org/Climate-Security-to-anticipate-prevent-and-limit-the-effects>.
- Permanent Secretariat of the G5 Sahel, 2016: "Sahel: Le Changement Climatique Joue Un Rôle Dans L'instabilité De La Région, Selon Des Responsables Onusiens" (New York: UNSC); at: <https://news.un.org/fr/story/2016/05/336102>.
- Permanent Secretariat of the G5 Sahel, 2018: "Faire Face Aux Défis Du Changement Climatique Et À Leurs Conséquences"; at: <https://www.g5sahel.org/le-president-en-exercice-du-g5s-demande-de-faire-face-aux-defis-du-changement-climatique-et-a-leurs-consequences/>.
- President of the French Republic, 2017: "Discours De Clôture Du Président De La République Au One Planet Summit"; at: <https://www.elysee.fr/emmanuel-macron/2017/12/12/discours-de-cloture-du-president-de-la-republique-au-one-planet-summit>.
- President of the French Republic, 2019: "Contribuez Au Fonds Vert Pour Le Climat"; at: <https://www.facebook.com/watch/?v=1144278345763363>

- President of the French Republic, 2019a: “Forêt Amazonienne: Une Délégation De Guyane Avec Macron À L’onu”; at: <https://www.geo.fr/environnement/foret-amazonienne-une-delegation-de-guyane-avec-macron-a-lonu-197567>.
- President of the French Republic, 2021: “Intervention Du Président Emmanuel Macron À L’occasion D’un Débat Organisé Par Le Conseil De Sécurité Des Nations Unies”; at: <https://www.elysee.fr/emmanuel-macron/2021/02/23/intervention-du-president-emmanuel-macron-a-loccasion-dun-debat-organise-par-le-conseil-de-securite-des-nations-unies>.
- Rasmussen, Mikkel Vedby, 2006: *The Risk Society at War: Terror, Technology and Strategy in the Twenty-First Century* (Cambridge: Cambridge University Press).
- Senate, 2019: “Rapport D’information Fait Au Nom De La Delegation Sénatoriale Aux Outre-Mer—Risques Naturels Majeurs: Bâtir La Resilience Des Outre-Mer”; at: <https://www.senat.fr/rap/r19-122-1/r19-122-11.pdf>.
- United Nations (UN), 2007: “Le Conseil De Sécurité Examine Pour La Première Fois L’impact Des Changements Climatiques Sur La Sécurité Dans Le Monde”; at: <https://www.un.org/press/fr/2007/CS9000.doc.htm>.

Chapter 7

Climate Security Discourses in Germany: The Transformation of Climate Change Towards a Development and Foreign Policy Priority



Franziskus von Lucke

Abstract This chapter looks at the climate security debate in Germany between 2007 and 2020 and analyses whether and how it has had an impact on key government policies, practices and institutions. Analysing parliamentary debates, governmental reports and NGO publications and resting on a discursive securitisation framework, the chapter finds that political climate security debates in Germany have increasingly moved from a focus on *ecological security* towards articulating climate change as a threat to *human* and *international security*. This specific discursive constellation has predominately affected German foreign and development policy. Thus, concepts such as *comprehensive climate risk management* or *climate diplomacy* have become central political priorities. In this context, Germany made climate security a core theme of its 2019–2020 term as a member of the UNSC and initiated several institutional reforms and policy innovations. By contrast, the German defence sector has been reluctant to play a larger role in climate security debates. It has become slightly more active from the mid-2010s onwards, yet still sees climate security primarily as a foreign policy and development issue.

Keywords Climate change · Climate Security · Germany · Risk · Foreign policy · Climate diplomacy

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7.1 Introduction

The additional greenhouse effect represents a danger of almost unimaginable proportions for all of humanity. In contrast to the previous environmental hazards, it is a worldwide threat, the local and regional effects of which can hardly be estimated at present.

(Deutscher Bundestag 1990: 88)

As the above quote from a 1990 report of the Enquete Commission on the Protection of the Atmosphere exemplifies, constructing climate change and other environmental issues as an “existential threat”, “catastrophe” or “security issue” has a long tradition in Germany (see Fig. 7.1 for a chronological overview). The beginnings of the German environmental and climate security debate date back to the 1980s and early 1990s, when scientists and scientific advisory bodies raised the alarm about the threats posed by the “climate catastrophe” (DPG 1986) and other environmental changes (Weber 2008: 59, 95). Together with increased media coverage about its potentially catastrophic consequences (Der Spiegel 1986), the perception of climate change as an existential threat soon found its way into the German Parliament (*Bundestag*) (Deutscher Bundestag 1989: 1; 1993: 2646). In the mid-2000s, the climate security debate became even more central, when Germany participated in the first United Nations Security Council (UNSC) debate on climate security in 2007 (UNSC 2007), and the German Advisory Council on Global Change (WBGU) published a politically highly-influential report entitled “World in Transition: Climate Change as a Security Risk” (WBGU 2007). Since that time, climate security has become a major framing of the climate crisis in Germany. It has had tangible political consequences in terms of policies, practices and institutional changes, which makes Germany a particularly interesting case for studying the implications of constructing climate change as a security issue.

As the chapter will show, while the resonance in the traditional security (i.e., defence sector) was limited, the effects of linking climate change and security were more pronounced in the development and foreign policy sector. On the one hand, this was due to the popularisation of specific climate security framings (human and international security) that made new climate policies in these sectors both conceivable and necessary. On the other hand, actors in the development, and especially in the foreign policy, sector also eagerly took up the new framing themselves. Eventually, this transformed the political understanding of climate change in Germany from an environmental issue towards a key development and foreign policy objective (von Lucke 2020; von Lucke/Hardt 2022). The most visible manifestation of this transformation has been Germany’s increasingly active role in the UNSC debates on climate security. Thus, Germany not only initiated the second UNSC debate in 2011 (UNSC 2011, a), but also made climate security the heart of its thematic campaign when it again became a non-permanent member of the UNSC in 2019/2020 (Auswärtiges Amt 2018a, 2019b, g).

In the following, I make sense of these developments by analysing the German climate security debate, building on a discursive and broad securitisation framework (Diez et al. 2016: 19). In contrast to narrow approaches to securitisation that focus exclusively on how threat constructions legitimise “extraordinary measures” (Buzan

et al. 1998), I take any political consequences that, without referring to the security dimension, would not have seemed legitimate as evidence of a successful securitisation (Trombetta 2008). Moreover, I subsume any articulation of climate change as an existential threat or risk under the term “climate security debate”. Thus, the word “security” does not necessarily have to appear explicitly (Buzan et al. 1998: 27); i.e., articulations that depict climate change as a threat, danger or risk¹ to certain referent objects can also be part of this debate. My analytical approach distinguishes between different climate-security discourses (see also von Lucke 2020; Diez et al. 2016), namely “human security” (individuals and groups as referent object), “national security” and “international security” (the state or international order as referent object) as well as “ecological security” (ecosystems, nature as such as referent object). In the overall theoretical framework of this book (see Chap. 1), we do not explicitly discuss “international security” as a separate security conception. However, due to the emphasis in the German debate on the global character of the threat and on international responses to climate security challenges, and the noticeable lack of narrow, militarised national security concepts, I do add this conception in the German case study.

I assess the prevalence of different discourses based on the secondary literature, as well as on the frequency and prominence of associated arguments in parliamentary debates, reports, policies and speeches of key politicians.² I also assume that the dominance of specific climate security discourses encourages quite different political consequences. These can range from preparing the military for possible “climate wars”, stepping up development aid or climate risk management measures, to improving domestic or international climate mitigation policies or strengthening climate diplomacy efforts (Trombetta 2008, 2011; Floyd 2012; von Lucke 2020: 28–30).

The overarching research objective is to better understand how exactly political actors (including policy makers, NGOs and think tanks) have articulated climate change as a security issue in Germany; i.e., which climate security discourses prevailed, and how this has impacted policies, practices and institutions in key political sectors. Empirically, the chapter draws on an analysis of primary and secondary sources (see especially von Lucke 2020; Diez et al. 2016) and focuses on the period between 2007 – when the climate security debate gathered particular momentum – and 2020 (and partly 2021) – when Germany’s non-permanent term in the UNSC ended. The chapter is structured as follows: Sect. 7.2 focuses on how climate change has been constructed as a security issue in Germany and distinguishes between the abovementioned discourses, e.g., human security, international/national security and ecological security. Sect. 7.3 then takes a closer look at the political and institutional

¹ Future-oriented climate-risk constructions, *riskification* and resilience approaches play an increasingly important role in political debates about climate change (Diez et al. 2016: 13–19; see also Corry 2012; Oels 2011), which is why I include references to *climate risk* in the analysis of this chapter.

² The analysis of this chapter draws on the research and findings of earlier books (von Lucke 2020; Diez et al. 2016) and on systematic internet searches of the websites of key German ministries and institutions (see also von Lucke et al. 2021).

consequences of this specific discursive constellation and discusses Germany's role as a non-permanent member of the UNSC in 2019/2020. The chapter concludes with a summary of the main findings and a brief reflection on the normative implications of the climate security debate in Germany.

7.2 Analysing Climate Security Discourses in Germany

In the following section, I explore which of the above-mentioned climate security discourses, i.e., threat constructions related to climate change, have prevailed in Germany and how the relationship between them has changed over time. This is mainly based on a discourse analysis of parliamentary debates and key reports and policies by governmental and non-governmental actors.

7.2.1 *From Ecological to Human and International Security*

After the beginnings of the climate security debate in the late 1980s, the German Parliament and several non-state actors, including scientists, repeatedly discussed the security implications of climate change during the 1990s (Deutscher Bundestag 1975: 18328; 1992: 15; 1993: 2646; Carius/Lietzmann 1998) and 2000s (Rotte 2001; Brauch 2002; Deutscher Bundestag 2004: 8374). In the beginning, *ecological security* considerations still played an important role and constructed climate change as threatening nature as such, destabilising the global ecosystem and eventually endangering all of humankind (Deutscher Bundestag 1993: 12646). For instance, a 1989 parliamentary debate argued that “The threat to the Earth’s atmosphere endangers life on Earth if the present trend is not fully and comprehensively halted” (Deutscher Bundestag 1989: 1). Likewise, a 1993 debate highlighted the fact that many species were at the brink of extinction (Deutscher Bundestag 1993: 12658), and a 1995 debate made it clear that “expected climate change would affect nature in drastic ways” (Deutscher Bundestag 1995: 812).

Besides articulations in Parliament, several NGOs and church organisations such as Diakonie Katastrophenhilfe or Brot für die Welt repeatedly emphasised the threats of climate change for certain ecosystems, often highlighting humankind’s responsibility for creation, and linking ecological security articulations to climate justice narratives (Brand et al. 2009: 13; Diakonisches Werk der EKD e.V. et al. 2008: 77ff). For instance, a 2008 Diakonie report warned that “the expected global increase in temperature will have an impact on many ecosystems”, and that “there is very high confidence that recent warming is already strongly affecting all terrestrial biological systems” (Diakonisches Werk der EKD e.V., Germanwatch, and Brot für die Welt 2008: 77). Nonetheless, throughout the late 2000s and 2010s, ecological security and concerns for nature as such gradually became less influential as a standalone discourse, especially at the high-politics level, i.e., in mainstream political debates,

and the focus shifted towards more direct threats to humans or political bodies. Thus, even though ecological security arguments have remained part of governmental reports (Federal Development Ministry 2017a: 19, 23; BMU/Schulze 2019: 2; UBA 2019: 138ff; Bundesregierung Deutschland 2019), they are mainly supporting other climate security discourses and have ceased to be at the forefront of climate security debates.

Thus, when the political discussion on the security implications of climate change gathered more momentum in the late 2000s and early 2010s, the focus in Germany increasingly shifted towards constructing climate change as a threat to *human* and *international security* (see Harrington, this volume, who observes a similar development in the UK). A first trigger for this transformation of the debate was the 2003 “Pentagon Study” on abrupt climate change scenarios (Schwartz/Randall 2003). It particularly discussed the consequences of climate change for national and international security, was frequently cited in German parliamentary debates (see for example Deutscher Bundestag 2004: 8374), and eventually foreshadowed the increased attention on climate change as a threat to international peace and security at the UN level since 2007 (UNSC 2007a). At the same time, a range of academic (Barnett/Adger 2007; Seiler 2011; Scheffran et al. 2012; Brauch et al. 2009) and non-governmental reports (Germanwatch 2011; Seiler 2011; Jakobeit/Methmann 2007) increasingly focused on the human security implications of climate change. While all this helped to amplify attention for climate change and security in Germany, arguably the most important trigger was the WBGU report of 2007 (WBGU 2007). This constructed climate change as a risk to human security (WBGU 2007: 20), yet also drew connections between localised dangers for individuals and international security (WBGU 2007: 1–2). It also included detailed recommendations for policy-makers (WBGU 2007: 250ff) and was widely cited in parliamentary debates and other governmental reports in Germany (Deutscher Bundestag 2010: 6855; 2007b: 13389).

Thus, from 2007 onwards, key political actors such as the then Foreign Minister Frank-Walter Steinmeier, Development Minister Heidemarie Wieczorek-Zeul or the Minister of State at the Foreign Office Cornelia Pieper (Steinmeier/Miliband 2008; Steinmeier 2007b, 2014; Pieper 2011; UNSC 2007: 19), as well as influential reports by ministries and non-governmental organizations (adelphi 2009, 2012; Federal Development Ministry 2007; Auswärtiges Amt 2007, 2011, 2013; Carius et al. 2008) have repeatedly urged that the security implications of climate change be taken seriously. In the following section, I take a closer look at how the human and the international security discourses in particular have become central to the debate and thus helped to transform the dominant understanding of climate change in Germany.

7.2.2 *Climate Change as a Risk to the Human Security of Southern Populations*

Overlapping with the wider merging of development and security and the popularisation of human security approaches (see Pospisil 2009; Tschirgi et al. 2010; Merkel 2010), but also reinforced by research institutions and NGOs (Germanwatch 2009; Jakobeit/Methmann 2007; Seiler 2011; World Bank 2012), the *human security* implications of climate change have become a core framing in Germany (Deutscher Bundestag 2007: 13389), as this quote from the WBGU report exemplifies:

Rising global temperatures will jeopardize the bases of many people's livelihoods, especially in the developing regions, increase vulnerability to poverty and social deprivation, and thus put human security at risk (WBGU 2008: 8).

The focus on this broad, non-traditional security conception is not surprising, given Germany's hugely problematic past concerning nationalism and military involvement (e.g., starting two world wars) and the resulting reserved security culture that focuses on shared understandings of sovereignty, international cooperation, multilateralism and (preferably civilian) preventive conflict management strategies (Böckenförde/Gareis 2014).

While debates also acknowledged human security challenges for the German population (Deutscher Bundestag 2008: 21069), the attention was mainly on how the direct physical effects of climate change would threaten "poor" populations in the Global South (Federal Development Ministry 2007; Deutscher Bundestag 2007a: 10951):

If we see the consequences of such disasters in an industrialised country with existing infrastructure and a certain level of prosperity, then, of course, is it all the more apparent what that means for Africa, parts of Asia or Latin America [...]. There, climate protection is a matter of life and death (Deutscher Bundestag 2013: 31291).

Underlining this specific focus on human security in the Global South, the German Ministry for Development (BMZ) and its head at that time, Heidmarie Wieczorek-Zeul (1998–2009, Social Democratic Party, SPD), played key roles in the course of the climate security debate (Bohnet 2015). Wieczorek-Zeul represented Germany (as well as the EU) in the first UNSC debate on climate change in 2007 – which had been convened by the UK, which since 2007 had also become increasingly engaged with climate security (see Harrington, this volume) – where she firmly welcomed the UNSC discussing the security implications of climate change (UNSC 2007: 19). She emphasised the vulnerability of poor populations in developing countries (UNSC 2007: 20) and demanded that the "security implications of climate change should receive more attention" particularly in the context of conflict prevention (UNSC 2007: 19). Foreshadowing a growing focus on climate risk constructions in Germany, Wieczorek-Zeul also made clear that the world needed a "global framework of risk management" and a focus on "preventive diplomacy" (UNSC 2007: 20).

Mirroring these articulations in the UNSC, the emphasis of the climate-security debate in Germany in the late 2000s and early 2010s was on urging the government and the world to adopt ambitious climate measures, but also on mainstreaming the human security implications of climate change into German and international development cooperation efforts (Carius et al. 2008: 16; Federal Development Ministry 2013a). A specific focus was on preventing human security crises by supporting local actors in their adaptation to climate change (Bundesregierung Deutschland 2008: 7), increasing their adaptive capacity and resilience (Federal Development Ministry 2013), and by improving the (risk) management of disasters, including the establishment of climate insurance schemes (Carius et al. 2008: 53–54; GTZ 2008; Hannen 2012: 12; GIZ 2011; Federal Development Ministry 2015: 9, 18).

In the mid-2010s, the climate security debate lost some momentum, not least due to the change in the governing coalition to a more economic friendly CDU (centre-right)-FDP (liberal-right) government in 2009, including a newly appointed Minister for Development – Dirk Niebel (FDP) (2009–2013) – who focused less on climate change in general and the human security implications in the Global South in particular (von Lucke 2020: 150). However, the reinvigoration of the general climate debate by climate activists such as Greta Thunberg and Fridays for Future, as well as dire scientific warnings such as the 2018 Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5 °C (IPCC 2018), have contributed to a revival of the climate security debate in Germany, particularly since 2018. Within the human security-focused discourse, the attention has remained on the direct physical threats of climatic changes for vulnerable populations in the Global South. Thus, a number of governmental reports highlighted the dangers of extreme weather events, droughts, heatwaves and sea level rises (Federal Development Ministry/Müller 2019; Federal Development Ministry 2019d: 5; Auswärtiges Amt 2019g) that could lead to losses of livelihoods and arable land, resource scarcity, food insecurity, famines and a growth in global poverty (Federal Development Ministry 2017a: 20, 99; 2019b: 4; Auswärtiges Amt 2017: 24; 2019: 3).

The consequences of climate change become visible first and foremost in developing countries. And within these countries it is the poorest who suffer most – through lost harvests, dwindling groundwater supplies, or when storms destroy their houses (Federal Development Ministry 2019b: 4).

In terms of threatened groups and individuals, most reports particularly singled out people in Africa (Federal Development Ministry/Müller 2019; Sachverständigenrat 2019: 22–23), women, minorities, indigenous people (Auswärtiges Amt 2019: 10; Federal Development Ministry 2019a: 15; d: 1; Deutscher Bundestag 2019: 1), and inhabitants of small island states (Auswärtiges Amt 2017; 2019a: 1; d: 1; Federal Development Ministry 2019d: 5). Beyond this emphasis on the Global South, concerns for the human security of people in Germany slightly increased towards the end of the 2010s (BMU 2018: 14; UBA 2019: 32–33; Bundeswehr Journal 2018: 1–2), yet still were less prevalent than the focus on the Global South.

Eventually, human security-focused arguments have become a key framing of climate change in Germany and have largely incorporated the ecological security discourse. Consequently, climate change has increasingly ceased to be acknowledged as an environmental issue, but instead has become a central priority of Germany's development programmes (see also Sect. 7.3.1).

7.2.3 *Climate Change as Threatening International Peace and Security*

Climate change as a threat to *international security* has also played an increasingly important role in Germany since 2007, not least due to the WBGU recommendations (WBGU 2007: 205) and the growing climate security debate within the UN organisations where key political actors (particularly in the foreign policy sector), increasingly connected human security issues on the local scale, such as extreme weather or resource scarcity, with global peace and security as well as (in)stability (von Lucke 2020: 231, 239). A common concern was that extreme weather events, resource scarcity and deteriorating living conditions (i.e., threats to human security) could sooner or later destabilise already fragile states and societies, leading to migration, conflicts or geopolitical tensions, which could eventually threaten neighbouring states, and regional and international security (Deutscher Bundestag 2009: 604; 2011: 17991). The Foreign Office in particular, and then Foreign Minister Frank-Walter Steinmeier, frequently articulated climate change as an issue of international security and, for instance, in 2008 in a much-noticed statement together with UK Foreign Secretary David Miliband, called it a “stress multiplier” with “important consequences for peace and security” (Steinmeier 2007, 2007a, b; Steinmeier/Miliband 2008). Additionally, in 2007 the Minister of State at the Foreign Office, Gernot Erler, made it clear that “environmental and climate policy are an elementary part of security policy” (Federal Environment Ministry 2007). In this context, Germany also sought to establish the theme at the UN level and in the EU (in 2007 Germany held the EU Council Presidency) (Steinmeier 2008), and in 2008 contributed to an influential EU strategy paper on “Climate Change and International Security” (Solana/European Commission 2008).

Since 2011, the focus on climate change as a threat to international security became even more influential and was firmly integrated into German foreign policy (Interview 2015; Auswärtiges Amt 2011). In this context, the Foreign Office collaborated closely with the environmental think tank “adelphi”. Specialising in climate, environmental and development issues, adelphi was amongst the first and most influential non-governmental organisations to explore the climate-security angle in Germany (adelphi 2012, 2013; Auswärtiges Amt/adelphi 2017). A key outcome of this collaboration were the concepts of “climate foreign policy” and “climate diplomacy” (adelphi 2012, 2013; Auswärtiges Amt/adelphi 2017; Pieper 2011), which aimed at building momentum for a comprehensive climate agreement by 2015, but also

sought to establish the security implications of climate change in international fora and especially in the UNSC (adelphi 2012: 8).

Besides linking climate security to foreign policy and diplomacy, the debates on the implications of climate change for international peace and security also gradually included more traditional security concerns. Mirroring the rise in importance of climate security matters in the leadership of armed forces around the world in the late 2010s (Givetash 2019; Brock et al. 2020), such articulations increasingly also appeared in policies of the Ministry of Defence (BMVg). Reports feared that climate change would cause or exacerbate violent conflicts (Deutscher Bundestag 2019a: 1, 2; BMVg 2019b), increase instability (BMVg 2019: 2; b: 1; Deutscher Bundestag 2019: 1), or drive migration (Auswärtiges Amt 2019: 3, 9; Bundesregierung Deutschland 2019: 2; BMVg 2020a). Eventually, climate change could lead to geopolitical and resource-based tensions (Auswärtiges Amt 2019: 4, 10; b: 1), and become a “catalyst for conflicts”³ (Auswärtiges Amt 2019: 4; f: 2), particularly in Africa, e.g. in South Sudan (Planungsamt der Bundeswehr 2018: 15), or in the Arctic (BMVg 2019; c: 1–2).

However, despite this slightly intensified focus on traditional aspects of international security, in accordance with the broad understanding of security in Germany, most reports did not conceptualise climate change as a direct cause of insecurity or conflict but mainly as a “risk multiplier” which, in conjunction with other stressors, could increase the likelihood and intensity of conflicts, instability and migration (Bundeswehr 2019: 15; Auswärtiges Amt 2019g: 1; Deutscher Bundestag 2019: 2). Consequently, most debates on climate change as a threat to international security have remained in the foreign policy sector and are aimed at mainstreaming this threat perception into international institutions.

In 2011, during its term as a non-permanent member (2011–2012), Germany organised the second debate on climate change and the “maintenance of international peace and security” in the UNSC (2011a, b). In a letter addressed to the Secretary General (UNSC 2011), the Permanent Representative of Germany to the UN, Peter Wittig, stressed that “the impacts of climate change on peace and security are already tangible” and that climate change was a “risk multiplier” concerning armed conflict, especially in already fragile countries in the Global South (UNSC 2011: 2). In his capacity as national spokesperson, he further emphasised Germany’s concern for developing countries, especially the small island states, and made clear that “For them the security dimension of climate change is crystal clear” (UNSC 2011a: 21). He also underlined the importance of preventive action and the fear that localised conflicts could eventually get out of control and destabilize “whole regions”, which is why he urged the UNSC to act in order to “prevent crises before they become acute” (UNSC 2011a: 21). Complementing these efforts in the UN system, Germany raised climate security issues during its Presidency of the G7 and included the topic

³ The phrase “catalyst for conflicts” was originally coined in a report of the US think tank CNA in 2014 and has since become a common catchphrase in climate security debates (CNA Military Advisory Board 2014).

in the final communiqué of the Foreign Ministers' Meeting in 2015 (Auswärtiges Amt 2015).

Articulations of climate change as a threat to international security have remained central until 2021. The Foreign Office has repeatedly warned about the danger of climate change for international peace and security (Auswärtiges Amt 2017: 19; 2018; 2019g), and Foreign Minister Heiko Maas in particular (SPD, since 2018), has made tackling the threats of climate change for international security a cornerstone of his tenure (Auswärtiges Amt 2019e, f, 2020b, d). Thus, together with the human security framing, this discourse has become increasingly influential in Germany, which has had a profound impact on how political actors understand climate change and design political countermeasures.

7.3 Political and Institutional Impact: Strengthening Climate Foreign Policy and Risk-Based Climate Development Approaches

In this section, I take a closer look at how the discursive transformation of climate change in Germany from a mainly environmental issue and a danger to ecological security towards a threat to human and international security has affected concrete policies and practices. Key examples are an increasing focus on risk management schemes and insurance solutions in the development sector, as well crisis prevention and climate diplomacy programmes at the Foreign Office, including Germany's attempts to establish climate security practices at the UN level. While the changes cannot be narrowed down exclusively to these sectors, I focus specifically on the development, climate and energy policy, defence, and foreign policy sectors because the effects have been most pronounced here (see von Lucke 2020: 42, 142).

7.3.1 Climate Security in the Development Sector: Towards a Riskification of Climate Change in the Global South

The widespread securitisation of climate change as a risk to the human security of "poor and vulnerable" Southern populations has established climate change as a key part of German development policy and has had a profound impact on the work of central ministries and agencies such as the BMZ and the German Development Agency (GIZ). Thus, in order to manage (and possibly prevent) some of the perceived dangers of climate change for human security, a specific emphasis in BMZ policies has been on "comprehensive climate and disaster risk management" (Federal Development Ministry 2019d: 7–9), which is also at the core of a

programme of the GIZ on “Climate Risk Management – Concepts, Instruments, Effects” (Federal Development Ministry 2019b: 2; GIZ 2020). In more detail, the BMZ’s strategy includes preventive measures and early warning approaches (Federal Development Ministry 2019: 1; a: 1; d: 15) and aims at furthering the resilience of vulnerable groups, corporations and states (Federal Development Ministry 2019a: 1; 2021; Federal Development Ministry/Müller 2019). In this context, the BMZ has cooperated closely with the renowned Potsdam Institute for Climate Impact Research (PIK) and has initiated a series of events, starting with the “Berlin Insights Series on Climate Change and Development” in January 2021 (Potsdam Institute for Climate Impact Research 2021), which particularly aimed at assessing the risks of climate change in the Global South.

A core philosophy of the BMZ’s efforts on climate change is a “networked or comprehensive approach” to human security (Federal Development Ministry 2017a: 2, 4, 24). To implement its climate security goals, the BMZ has pledged to increase Germany’s international climate financing to four billion per year until 2020 (Federal Development Ministry 2017a: 107; 2019b: 8) and supports several concrete programmes. Examples are the “Global Adaptation Commission” (Federal Development Ministry 2019c: 2), the “Global NDC Partnership” (Federal Development Ministry 2017: 6), the “Sendai Framework” (Federal Development Ministry 2019d: 6), the “Global Initiative [for] Disaster Risk Management” (GIKRM) (Federal Development Ministry 2019d: 7), or the “G7-Initiative Climate Risk & Early Warning Systems” (CREWS) (Federal Development Ministry 2019d: 15). In addition, the BMZ has increasingly begun to accept migration as a preventive strategy that could alleviate some of the human security problems caused by climate change (Federal Development Ministry 2019d: 17). In this context, Germany was a member of the “Nansen Initiative” from 2012 to 2015 that strove to establish an agenda for the protection of people displaced by disasters or climate change (Federal Development Ministry 2017a: 106; Nansen Initiative 2015), and chaired the “Platform on Disaster Displacement”⁴ from 2016 to 2017 (Federal Development Ministry 2017a: 106). The move away from handling migration as a threat and towards seeing it as part of the solution constitutes an important change in perspective, which migration scholars have been recommending for some time, because it can help to bring about a less confrontational stance on human mobility (Black et al. 2011).

Finally, a particular emphasis of Germany’s climate development policy has been on “risk transfer” and climate insurance schemes. Thus, in 2017, Germany, together with the G20 and V20 (Group of the Poorest and most Vulnerable Countries), founded the “InsuResilience Global Partnership”⁵ (Federal Development Ministry 2017a: 98, 99; 2019a, c: 2). The initiative wants to establish climate finance and insurance as an important part of comprehensive climate risk management strategies. The goal is to strengthen the resilience of states and people in the face of disasters and to go

⁴ At: <https://disasterdisplacement.org/> (15 October 2022).

⁵ At: www.insuresilience.org (15 October 2022).

from “ex-post” to “ex-ante” disaster support (Federal Development Ministry 2019: 1; 2019a: 1). The BMZ has so far financed InsuResilience with €450 million (Federal Development Ministry 2019a: 2) and according to its “Vision 2025”, the initiative sets itself the goal of insuring 500 million poor people, covering 150 million directly through microinsurance, and covering ten per cent of annual climate and disaster damages in the V20 (Federal Development Ministry 2019a: 2). In this context the BMZ also supports the “Insurance Development Forum” (IDF) of the United Nations Development Programme (UNDP) (Federal Development Ministry 2019a: 2).

Given the still-strong role of the climate-related human security discourse in German political debates, it seems very likely that climate (in)security and climate risk management strategies will continue to play an important role in Germany’s development sector.

7.3.2 Climate Security in the Climate and Energy Sector: The Importance of Ecological Modernisation and Climate Justice

Climate security discourses played a role when it came to putting climate change on the political agenda in the first place, and especially in the late 1990s and 2000s contributed to legitimising important climate policies. Important examples are an Ecological Tax Reform (Deutscher Bundestag 1998: 1) and a Renewable Energy Law (Böcher/Töller 2012: 59; Deutscher Bundestag 2000: 1, 18), both adopted by the then governing coalition of the centre-left SPD and the Green Party in 1999/2000. Later, policy-makers and institutions particularly relied on climate security framings to rally support for renewable energies (BMU et al. 2007). And although the final trigger was the nuclear catastrophe in Fukushima (Dröge 2016: 17), climate (and energy) security arguments helped to legitimise the phase-out of nuclear energy and the German Energy Transition from 2011 onwards (WBGU 2007: 1–9; Bundestagsfraktion 2008: 3; BMU et al. 2007: 1).

However, although securitising climate change contributed to these developments, and over 71 per cent of German citizens saw climate change as a major threat in 2019 (Pew Research Center 2019), it is difficult to single out climate security discourses as the main force when it comes to legitimising climate and energy policy. Thus, especially in the second half of the 2010s, climate policy in Germany was mainly framed in terms of global justice, regulatory and energy policy, or as economic imperative or opportunity (Federal Environment Ministry 2016: 7; BMU 2018: 6, 10; Deutscher Bundestag 2019). In line with the influential “ecological modernisation” narrative (Jänicke 2008), a key motive is to modernise the economy through climate measures (Federal Environment Ministry 2016: 7) and to avoid negative consequences, such as economic and social damage, by taking early action (BMU

2018: 17) and strengthening resilience as well as adaptation efforts in Germany (UBA 2019: 6, 245, 251; Bundesamt für Bevölkerungsschutz und Katastrophenhilfe 2019a; Federal Environment Ministry 2018).

Not least because of the rise of social movements, climate justice narratives have become even more influential since 2018. Often combining⁶ the call for more just climate policies with securitising portrayals of climate change as “breakdown”, “emergency”, “catastrophe”, or “apocalypse” (Fridays for Future 2020; Extinction Rebellion 2019), these movements successfully reinvigorated the climate debate in Germany. They contributed to the adoption of the 2019 Climate Package and encouraged more than 40 German communities to declare a “climate emergency” by February 2020 (UBA 2020). Reacting to a lawsuit by environmental organisations and members of Fridays for Future (Ring 2021), in April 2021 a high-profile verdict of the German Constitutional Court further underlined the importance of the climate justice framing (and possibly the utility of combining it with securitising articulations in order to increase attention). Referring to Article 20a of the German Constitution and the precautionary principle, the court ruled that parts of the German climate law were unconstitutional because they passed undue mitigation burdens onto future generations (Bundesverfassungsgericht 2021), which in turn forced the German government to amend its climate law (Tagesschau.de 2021).

It remains to be seen whether securitising articulations will again become more relevant for legitimising domestic climate policy in Germany under the coalition government of SPD, Greens and FDP newly elected in the fall of 2021. The growing focus on the severe climate change implications for Germany in recent debates and reports (BMU 2018: 14; UBA 2019: 32–33; Bundeswehr Journal 2018: 1–2) – including the 2021 flood disaster (bpb 2021) – could indicate that this might be the case, especially when it comes to adaptation, disaster response and civil protection policies (UBA 2019: 6; Bundesamt für Bevölkerungsschutz und Katastrophenhilfe 2019, b). The newly intensified debate – following Russia’s February 2022 attack on Ukraine – about the importance of renewable energies as “freedom energies” (Lindner 2022), which could reduce Germany’s dependence on Russian fossil fuels and ensure its energy security, could also again strengthen the climate and energy security debate.

⁶ For a more thorough discussion of combining climate justice arguments with securitisation see von Lucke et al. (2021: 55ff) or the chapter on St Vincent and the Grenadines in this book.

7.3.3 *Climate Security in the Defense Sector: Greening the Military and “Networked Approaches to Security”*

In stark contrast to countries such as the United States (see Briggs, this volume), narrow and militarised national security conceptions of climate change have never gained a strong foothold in Germany. Nevertheless, the prevailing discussion of the dangers of climate change for international peace and security has had some impact on the German defence sector, especially in the second half of the 2010s.

Before the late 2010s, the BMVg and the German Armed Forces (*Bundeswehr*) only occasionally participated in the climate security debate (Interview 2014, 2015a). While some reports explored the security implications of climate change (Planungsamt der Bundeswehr 2012; Bundeswehr 2012, 2014), the tenor in the defence sector was that this was not a matter for the military, but had to be solved by civilian actors and approaches (Bundeswehr 2012: 7; 2014). This changed somewhat from 2016 onwards. While they still primarily see climate change as an issue to be tackled by civilian actors and international climate policy (BMVg 2019b: 1), the BMVg and the German Armed Forces have begun to accept a limited role for the defence sector and the military within the “networked approaches to security”, preventive climate foreign policy and the increasing links between development and security (BMVg 2016: 42; 2017: 2). After the brief mention of climate security in a 2016 “White Book on Security Policy and the Future of the Armed Forces” (BMVg 2016: 2; 2019), there are growing attempts to gather expertise on climate security within the BMVg (2019b: 2). This includes calls for the Bundeswehr to “recognize the problem of climate change as a concrete security threat” (BMVg 2019: 2) and to prepare for changed mission scenarios (BMVg 2019b). In this context, the BMVg also discussed the possibility of increased military deployments within NATO to manage migration flows or to deliver humanitarian aid if global warming exceeds two degrees (BMVg 2019: 2). Moreover, a few reports discussed the likelihood of increased demand for domestic support by the Bundeswehr in the case of climate-induced disasters in Germany (Bundeswehr Journal 2018). At the end of 2020, following the dominant focus on prevention in Germany, the BMVg, together with the Foreign Office and the University of the Armed Forces in Munich, started a project on using artificial intelligence for the early detection of crisis, which also intends to look at the security implications of climate change (BMVg 2020).

Institutionally, climate security debates also led the BMVg to issue a “sustainability report” in 2018, hence partly engaging in the narrative of “greening the military”, which has become more influential in other countries as well (see the chapters on the UK and US in this book) (BMVg 2018: 19ff; US Navy 2016). The 2020 version of the sustainability report includes a whole chapter on climate change, which reaffirms Germany’s general dedication to abate climate change and underlines the commitment to reduce the emissions of the German military (BMVg 2020b: 13–15). In this context, the BMVg and the Armed Forces have continued to discuss how higher temperatures during missions in Africa will affect the military readiness of the German Armed Forces in the future (Bundeswehrverband 2021). Beyond that, on

26 June 2018 the BMVg organised a “Strategic Forecast: The Arctic Dialogue”, which discussed the impacts of climate change in this region, but also questions related to security policy (BMVg 2018a: 1). Further, on 18 June 2019, it held a networking meeting on future scenarios in the context of climate change (BMVg 2019: 1) and in August 2019 Germany participated in a meeting of EU defence ministers on connections between climate change and defence issues and its relevance for NATO cooperation (BMVg 2019a).

Nevertheless, despite this growing relevance of climate security in the defence sector, and not least due to the longstanding reservations about narrow national security conceptions and the use of military force in Germany, the defence-related climate debate is still much less intense than in other countries (see e.g. Estève, and Briggs, this volume). However, in response to Russia’s attack on Ukraine in 2022, Chancellor Olaf Scholz (SPD) announced a sea change (*Zeitenwende*) in Germany’s defence policy, including a €100 billion special fund for the armed forces and a substantial increase in the annual spending on defence (Scholz 2022). This could facilitate a greater openness towards national security conceptions and the use of military force and thus gradually also strengthen the importance of the defence sector in climate security debates in Germany.

7.3.4 Climate Security in the Foreign Policy Sector: The Rise of Climate Diplomacy and Germany’s Efforts as a Non-Permanent Member of the UNSC (2019–2020)

In line with the increasingly important framing of climate change as a threat to international peace and security, the Foreign Office’s role in climate debates and the importance of climate foreign policy in general has grown constantly. In the late 2010s, the Foreign Office and Foreign Minister Heiko Maas (Auswärtiges Amt 2019f, 2020b; Maas 2021) became key actors in emphasising and acting in response to the security implications of climate change. Foreign Office documents state that climate change has become a “catalyst” for German foreign policy (Auswärtiges Amt 2019e: 3) and make it clear that addressing the security risks of climate change needs to become a “central foreign policy priority” (Auswärtiges Amt et al. 2019). As a result, fulfilling the international climate goals has become a “new imperative of German foreign policy” (Auswärtiges Amt 2019f: 3).

As part of the concepts of “climate foreign policy” and “climate diplomacy”, on the one hand, the Foreign Office strives to tackle the root causes of climate insecurity by supporting the international climate negotiations and ambitious climate policies in order to mitigate and prevent the security risks of climate change (Auswärtiges Amt 2019d: 1; g: 2; Auswärtiges Amt et al. 2019). This includes the establishment of a “Federal Foreign Office Climate Fund” aimed at raising awareness of the implications of climate change (adelphi 2012: 54), or the organisation of “Global Climate Security Dialogues” around the world (adelphi 2012: 30).

On the other hand, Germany's climate foreign policy also focuses on the (security-related) symptoms of climate change and thus entails concrete measures to deal directly with second-order threats such as conflicts, instability or migration. In general, the emphasis of the Foreign Office's strategy is on "holistic" (Auswärtiges Amt 2017: 100; 2019: 8–9), "networked" (Auswärtiges Amt 2019c: 1–3, 5), and "preventive" approaches (Auswärtiges Amt 2018: 1; 2020: 2). Moreover, aligning with the BMZ's focus, particular attention is placed on "climate-risk-management" (Auswärtiges Amt 2017: 100). The 2017 published report "Preventing Crises, Resolving Conflicts, Building Peace" summarises this approach (Auswärtiges Amt 2017: 13, 19, 23ff, 33). Thus, Germany strives to combine some of the goals of the Agenda 2030 – especially SDG 13 (Climate) and SDG 16 (Peace) (Auswärtiges Amt 2019c: 2, 3) – and as a consequence focuses on preventing or controlling the first-order physical and second-order socio-economic risks of climate change. Examples are a pilot project on climate security in the Horn of Africa, which includes a "crisis early detection tool" (Auswärtiges Amt 2019: 8; f: 3), as well as the "Platform of Disaster Replacement" (Auswärtiges Amt 2019: 10; Deutscher Bundestag 2019: 6), and the "ECC Platform" that facilitates an exchange on environment, conflict, and cooperation (Auswärtiges Amt/adelphi 2017; Deutscher Bundestag 2019: 13).

The Foreign Office has also sought to increase the international visibility of its efforts on climate security and in line with its emphasis on "climate diplomacy" mainstreams climate security into its embassies and diplomatic missions around the world (Auswärtiges Amt 2019: 4–5; b: 1). Moreover, in June 2019, in continuation of the 2011 "Climate Diplomacy in Perspective: From Early Warning to Early Action" event (Deutscher Bundestag 2019: 14), the Foreign Office, together with adelphi, initiated the "Berlin Conference on Climate Security" (BCSC) and issued a "Berlin Call for Action" (Auswärtiges Amt 2019f: 3). Key themes were "risk informed planning", "enhanced capacity for action", and "improving operational responses to climate security risks at the international level" (Auswärtiges Amt et al. 2019). In 2020 the BCSC took place for the second time and saw several high-level statements from foreign ministers, heads of state, and UN chiefs. In his speech, German Foreign Minister Heiko Maas argued that "[c]limate change has become one of the key risks to global peace and stability" and urged that "[f]oreign and security policy must reflect this and finally embrace a new concept of security" (Auswärtiges Amt 2020b). He went on, emphasising that Germany has put climate change at the heart of its membership of the UNSC, has organised several high-level debates on the topic, and initiated a "Climate and Security Risk and Foresight Assessment" (together with adelphi and the PIK) (Auswärtiges Amt et al. 2020; Auswärtiges Amt 2020b). The project's main objective is:

[...] to ensure that local, national and international diplomacy, development and defense strategies, policies and decision-making have access to, and thus can be better informed by, evidence-based analysis on climate change related security risks (Auswärtiges Amt et al. 2020).

Finally, in April 2021, the German government underlined that climate change has become a cross-cutting topic for German foreign policy and that Germany continues to strive to mainstream the issue into all its bilateral and multilateral relations and across several departments and issue areas (Deutscher Bundestag 2021). A vital part of these mainstreaming efforts is Germany's commitment to establish climate security matters in international institutions (see also Auswärtiges Amt 2019: 4; Deutscher Bundestag 2019: 4).

While Germany had already welcomed the climate security debate in the UNSC in 2007, and even initiated the second debate in 2011, its engagement at the UNSC has moved to yet another level since 2018, when it made climate security the core theme of its 2019–2020 term as non-permanent member (Auswärtiges Amt 2019: 3). According to the Foreign Office, key reasons for its increased efforts to enshrine climate security in the UN system are the growing threat of climate change, and the need to support other countries in their climate abatement efforts, but also the opportunity for Germany to strengthen its bi- and multilateral ties through increased climate foreign policy efforts (Auswärtiges Amt 2019: 3). While rarely stated openly, another reason for pushing climate security at the UNSC could be Germany's quest to reform the UNSC and its ambition to become a permanent member of the Council (Auswärtiges Amt 2020a). Since questions of climate security will most likely grow in importance in the foreseeable future, and Germany already has a track record as a forerunner in this area, the topic is ideal to showcase Germany's ability to act and take on responsibility at the global level (Braun/Höfner 2019: 3).

In preparation for and during its tenure in the UNSC, Germany aimed at enabling the Council to act in situations in which climate change exacerbates conflicts. In addition, it sought to strengthen the information management and early warning systems in the UNSC (Auswärtiges Amt 2019d: 1; Auswärtiges Amt et al. 2019). To accomplish these goals, Germany (together with the small island state of Nauru) had already founded the "Group of Friends of Climate Security" in August 2018 (Auswärtiges Amt 2018: 1–2; 2019: 4, 7). The Group is connected to an "International Expert Network" (Deutscher Bundestag 2019: 2) and to the "Climate Security Mechanism" (Deutscher Bundestag 2019: 2), which is tasked with developing a toolbox for "integrated climate-related security risk assessments" and to assess the UN's work on climate change and security (UNDP 2018). Beyond these efforts, Germany helped to initiate an open debate at the UNSC on climate security on 25 January 2019 (Climate Diplomacy 2019; Auswärtiges Amt 2019d: 1) and supported several UNSC resolutions that referred to the security implications of climate change, e.g. Resolutions 2408, 2423, 2429, and 2431 (all in the year 2018), as well as 2457 and 2461 (both 2019) (Deutscher Bundestag 2019: 5, 8).

During its UNSC Presidency in July 2020, Germany again intensified its efforts to promote climate security. Together with nine other UNSC members, it organised yet another high-level debate on climate security on July 24th 2020. In his speech, Foreign Minister Maas highlighted that soon “climate change will be a catalyst in almost every conflict that we are dealing with”. In line with Germany’s focus on risk management and preventive approaches, Maas furthermore demanded better “information on climate-related security risks” as well as early warning instruments for the UNSC, and emphasised the need for special advisors on climate security in UN missions.⁷ Lastly, he urged the Secretary-General to appoint a “Special Representative on Climate and Security” and suggested convening an “Informal Expert Group of the Security Council on climate and security”⁸ (Auswärtiges Amt 2020c; UNSC 2020).

In one of the most recent open debates of the UNSC on climate change, in February 2021, on behalf of the 54 members of the Group of Friends on Climate and Security, Maas underlined Germany’s outspoken stance on climate security. He called climate change “the existential threat of our times”, reiterated Germany’s concern, especially for the poorest people, and demanded “a concerted effort by the entire UN system to make climate action its top priority”. This should include “regular reporting by the Secretary-General on the security implications of climate change”, appointing a special representative for climate security, and “training for all relevant UN personnel on the implications of climate change on peace and security and humanitarian crises” (Maas 2021).

Given the considerable efforts of the Foreign Office to enshrine climate security in the UNSC and its additional attempts to explore connections during high-level conferences and in several research projects, it seems very likely that Germany will continue to pursue this avenue in the foreseeable future. Moreover, under the new Foreign Minister Annalena Baerbock (Greens, since 2021) – who has depicted climate change as “jeopardising our prosperity and security” (Baerbock 2022) – the Foreign Office will assume even more responsibility for climate change, and Baerbock herself will become Germany’s chief international negotiator (Krüger 2021).

The following Fig. 7.1 summarises key developments in the German climate security debate between 1980 and 2021: Non-state actors are in yellow, environmental and development policy in green, foreign policy in blue, defence policy in orange, and developments at the international level in dark grey.

⁷ Germany already funds an expert on climate security at the UN mission in Somalia (UNSC 2020: 13/98).

⁸ The Expert Group held its inaugural meeting in November 2020 (adelphi 2020).

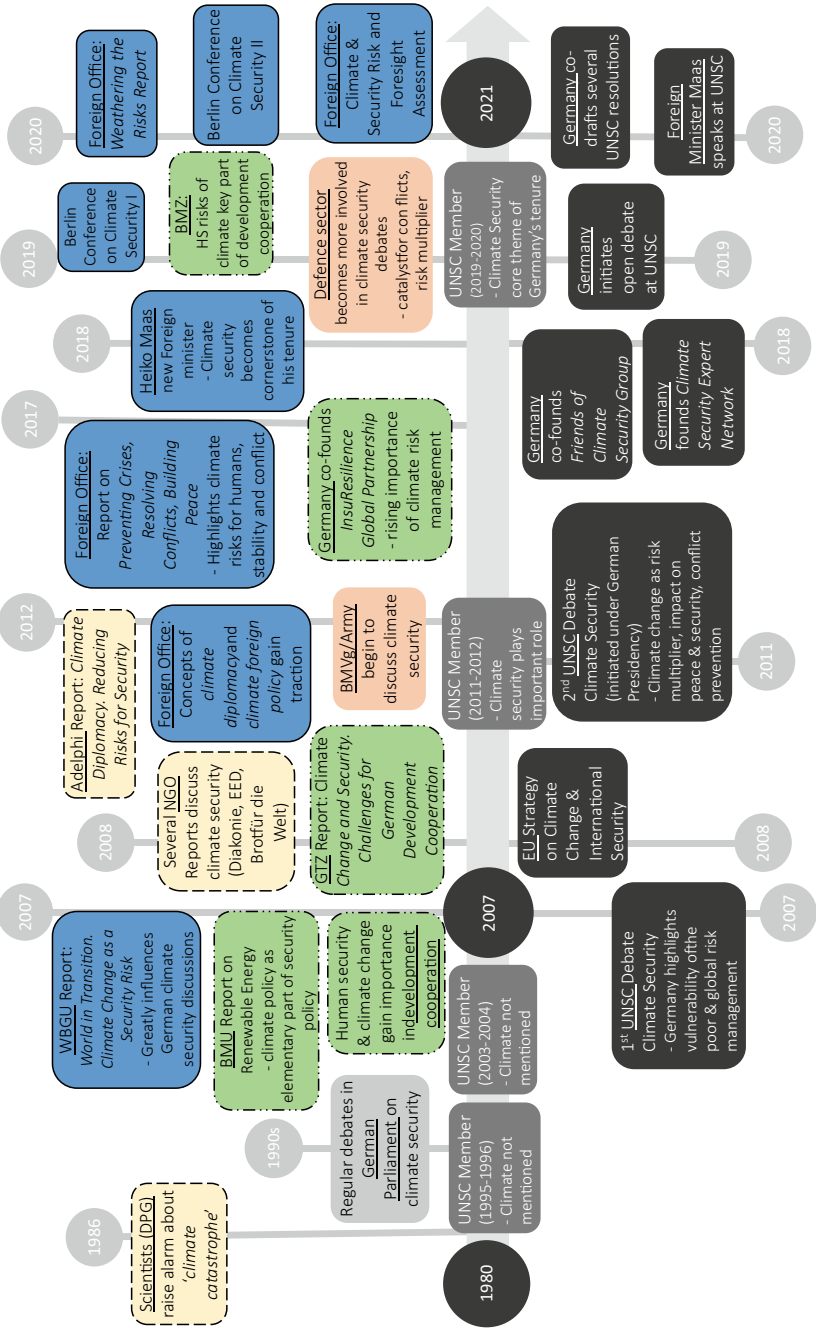


Fig. 7.1 Key milestones of the German climate security debate (1980–2021). Source Elaborated by the author

7.4 Conclusions

Going beyond the existing literature on the securitisation of climate change, which mainly looks at the international and European level (Dupont 2019; McDonald 2021; Scott/Ku 2018) or only includes cursory analyses of the climate security debate in Germany (Angenendt et al. 2011; Richert 2009; Rothe 2012), this chapter has explored the German case in detail. It has shown that the manifold security implications of climate change have been an important part of political debates in the country since the 1990s and – similar to the development in other countries, for instance the US or the UK – have become even more relevant since 2007. While ecological security played an important role, especially in the 1990s and 2000s, and is still part of climate security debates today, other climate security discourses have become more influential, particularly since 2007. In accordance with Germany's longstanding restraint when it comes to security and defence policy, and the widespread conceptual merging of security and development, climate change has been mainly discussed as a threat to the human security of poor people in the Global South or as an issue of international security. By contrast, political actors in Germany have largely avoided connecting climate change to “national security” conceptions. And, while the narrative of climate change as causing or exacerbating conflicts and threatening international peace and security has also been widespread, it has always been linked to human security conceptions, and primarily aimed at strengthening multilateral solutions.

Institutionally, these specific climate security discourses have predominately affected and are articulated in German foreign and development policy. Thus, concepts such as “comprehensive climate risk management”, “climate foreign policy” and “climate diplomacy” have become cornerstones of the BMZ's and Foreign Office's work. In this context, Germany made climate security a core theme of its 2019–2020 term as non-permanent member of the UNSC and initiated several proposals for institutional changes and new policies. While this has not yet led to a sea change in the UNSC's approach to climate change, it has kept the topic on the agenda and has helped to create several permanent climate security focal points, such as the Friends of Climate Security, the Climate Security Mechanism and the Climate Security Expert Network. Concerning Germany's development sector, the BMZ has thoroughly integrated climate security into its policies, mainly with an emphasis on comprehensive climate risk management and efforts to strengthen the resilience of people in the Global South. The defence sector and the Ministry of Defence as well as the Armed Forces had been reluctant to play a larger role in climate security debates, but since the mid-2010s, they have become slightly more active and now see a limited role for themselves in holistic and networked approaches to (climate) security, though still subordinating their engagement to the Foreign Office and BMZ.

Theoretically, this chapter shows the importance of distinguishing between different climate security discourses as they legitimise very different political countermeasures (see McDonald 2013; Diez et al. 2016). Even though the securitisation of climate change has not (yet) led to the “extraordinary” or “emergency” measures

that define “successful” securitisation in the original securitisation approach of the “Copenhagen School” (Buzan et al. 1998), it nevertheless has thoroughly transformed how climate change is handled politically and has contributed to legitimising a range of concrete policies and practices in Germany (see also von Lucke 2020: 142ff, 240ff). From a normative perspective, this specific climate security debate increases the attention placed on climate change, largely avoids militarising tendencies, and by integrating climate change into development and foreign policy may help to mitigate climate change or at least support the most vulnerable populations. However, even this less exceptional or militaristic securitisation has its downsides. It shifted the focus towards the (security) “symptoms” of climate change (for instance, violent conflicts or threats to human security such as resource scarcity, extreme weather or human displacement), which in the long run could deflect attention from the root causes of, and appropriate measures to mitigate, climate change in the Global North. By mainly pointing towards the vulnerability of poor populations in the Global South, the securitisation of climate change in Germany also to some extent externalises the responsibility for (the security implications of) climate change to countries and people that are least responsible for creating the problem in the first place (Dalby 2014; Caney 2010). In addition, it may legitimise a paternalistic discourse that tells Southern people how to behave correctly (i.e. be “climate-friendly”) and reinforces the stigma of the “unruly South” (Pugh 2004; Duffield/Waddell 2006), hence amplifying existing dependencies, injustices and power inequalities (von Lucke 2020: 258).

Therefore, it is crucial to re-emphasise the role of ecological security (von Lucke/Hardt 2022) and thus to focus on the common responsibility of mankind in the Anthropocene (Hardt 2017; Fagan 2017) for environmental protection or mitigation policies and to once more locate the responsibility to act primarily within industrialised countries. The debate following Russia’s attack on Ukraine in 2022 about Germany’s dependence on Russian fossil fuels and the importance of renewable energies as “freedom energies” (Lindner 2022) to achieve energy security might help in this endeavour. Beyond that, an ecological security perspective would also strengthen increasingly more important (global) climate justice narratives, which might help to legitimise more progressive, inclusive, and sustainable climate policies (McDonald 2021). Nevertheless, even in combination with global justice or ecological narratives, emphasising the security implications of climate change runs the risk of silencing important voices, locating agency and responsibility in the wrong levels, or focusing too much on short-term symptom-control measures (von Lucke et al. 2021: 55ff). Thus, securitising climate change remains a double-edged sword which should be wielded carefully.

References

- adelphi, 2009: "Klimawandel und Internationale Sicherheit: Entwicklung und Umsetzung der Europäischen Roadmap"; at: <https://www.adelphi.de/de/projekt/klimawandel-und-internationale-sicherheit-entwicklung-und-umsetzung-der-europ%C3%A4ischen-roadmap>.
- adelphi, 2012: "Climate Diplomacy: Reducing Risks for Security" (Berlin: Auswärtiges Amt).
- adelphi, 2013: "Climate Diplomacy: New Approaches for Foreign Policy" (Berlin: Auswärtiges Amt); at: https://www.adelphi.de/en/system/files/mediathek/bilder/climate_diplomacy_2013_online.pdf.
- Angenendt, Steffen; Dröge, Susanne; Kaim, Markus; Richert, Jörn, 2011: "Einleitung: Klimawandel - Eine Neue Sicherheitspolitische Herausforderung?", in: Angenendt, Steffen; Dröge, Susanne; Richert, Jörn (Eds.): Klimawandel und Sicherheit (Baden-Baden: Nomos): 7–17.
- Auswärtiges Amt, 2007: "Sicherheitsrisiko Klimawandel: 17. Forum Globale Fragen" (Berlin: Auswärtiges Amt).
- Auswärtiges Amt, 2011: "Klima und Sicherheit" (Berlin: Auswärtiges Amt).
- Auswärtiges Amt, 2013: "Leitlinien Deutscher Arktispolitik: Verantwortung Übernehmen, Chancen Nutzen" (Berlin: Auswärtiges Amt); at: <https://docplayer.org/67691316-Leitlinien-deutscher-arktispolitik-verantwortung-uebernehmen-chancen-nutzen.html>.
- Auswärtiges Amt, 2015: "G7 Foreign Ministers' Meeting Communiqué" (Berlin: Auswärtiges Amt); at: <https://www.auswaertiges-amt.de/de/newsroom/-/244398>.
- Auswärtiges Amt, 2017: "Krisen verhindern, Konflikte bewältigen, Frieden fördern: Leitlinien der Bundesregierung" (Berlin: Auswärtiges Amt); at: <https://www.auswaertiges-amt.de/blob/1213498/d98437ca3ba49c0ec6a461570f56211f/krisen-verhindern-data.pdf>.
- Auswärtiges Amt, 2018: "Klimawandel Bedroht Internationale Sicherheit"; at: <https://www.auswaertiges-amt.de/de/aussenpolitik/themen/klima/klima-sicherheit-freundesgruppe-deutschland/2141356>.
- Auswärtiges Amt, 2018a: "Vereinte Nationen: Deutschland gründet Freundesgruppe 'Klima und Sicherheit'" (Berlin: Auswärtiges Amt); at: <https://www.auswaertiges-amt.de/de/aussenpolitik/themen/klima/freundesgruppe-klima-und-sicherheit/2125194>.
- Auswärtiges Amt, 2019: "Bericht des Auswärtigen Amtes zur Klima-Außenpolitik" (Berlin: Auswärtiges Amt); at: <https://www.auswaertiges-amt.de/blob/2295884/ce7a2b35b139dcfec5e74facb68916e6/200124-klimabericht-dl-data.pdf>.
- Auswärtiges Amt, 2019a: "Deutschland, Mitglied Im Sicherheitsrat Der Vereinten Nationen 2019/20" (Berlin: Auswärtiges Amt); at: https://www.auswaertiges-amt.de/de/aussenpolitik/internationale-organisationen/uno/07_Sicherheitsrat.
- Auswärtiges Amt, 2019b: "Dialog Für Mehr Klimaschutz" (Berlin: Auswärtiges Amt).
- Auswärtiges Amt, 2019c: "Diplomatie für Nachhaltigkeit: Bericht des Auswärtigen Amtes zur Umsetzung der Deutschen Nachhaltigkeitsstrategie und der SDGs" (Berlin: Auswärtiges Amt); at: <https://www.auswaertiges-amt.de/blob/2427244/a7dccbf04a952559dea8c2668a9b2f1a/nachhaltigkeitsbericht2020-data.pdf>.
- Auswärtiges Amt, 2019d: "Klima und Sicherheit" (Berlin: Auswärtiges Amt); at: <https://www.auswaertiges-amt.de/de/aussenpolitik/internationale-organisationen/uno/klima-sicherheit/2179664>.
- Auswärtiges Amt, 2019e: "Rede von Außenminister Heiko Maas bei der 55. Münchner Sicherheitskonferenz" (Berlin: Auswärtiges Amt); at: <https://www.auswaertiges-amt.de/de/newsroom/aussenminister-maas-muenchner-sicherheitskonferenz/2190246>.
- Auswärtiges Amt, 2019f: "Rede von Außenminister Heiko Maas zur Eröffnung der Berliner Konferenz zu Klima und Sicherheit" (Berlin: Auswärtiges Amt); at: <https://www.auswaertiges-amt.de/de/newsroom/maas-klima-sicherheit-konferenz/2223650>.
- Auswärtiges Amt, 2019g: "Sicherheitsrisiko Klimawandel – 'Berlin Climate and Security Conference'" (Berlin: Auswärtiges Amt); at: <https://www.auswaertiges-amt.de/de/aussenpolitik/klimaaussenpolitik/klima-konferenz/2222958>.
- Auswärtiges Amt, 2020: "Halbzeit für Deutschland im Un-Sicherheitsrat: Zwischenbilanz und Ausblick" (Berlin: Auswärtiges Amt).

- Auswärtiges Amt, 2020a: "Reform des Sicherheitsrats der Vereinten Nationen" (Berlin: Auswärtiges Amt); at: <https://www.auswaertiges-amt.de/de/aussenpolitik/internationale-organisationen/uno/05-reform-sicherheitsrat/205630>.
- Auswärtiges Amt, 2020b: "Speech by Federal Foreign Minister Heiko Maas at the Opening of the Berlin Climate and Security Conference II" (Berlin: Auswärtiges Amt); at: <https://www.auswaertiges-amt.de/en/newsroom/news/maas-conference-climate-security/2356920>.
- Auswärtiges Amt, 2020c: "Speech by Federal Foreign Minister Heiko Maas on Climate Change and Security at the UN Security Council (Video Conference)" (Berlin: Auswärtiges Amt); at: <https://www.auswaertiges-amt.de/en/newsroom/news/maas-unscc-climate-security/2370754>.
- Auswärtiges Amt, and adelphi, 2017: "Climate Diplomacy: Foreign Policy Responses to Climate Change" (Berlin: Auswärtiges Amt); at: <https://www.adelphi.de/en/publication/climate-diplomacy-foreign-policy-responses-climate-change>.
- Auswärtiges Amt; adelphi; PIK, 2019: "Improving the Climate for Peace: Berlin Call for Action" (Berlin: Auswärtiges Amt).
- Auswärtiges Amt; adelphi; PIK, 2020: "Weathering Risk: A Climate and Security Risk and Foresight Assessment" (Berlin: Auswärtiges Amt); at: https://www.adelphi.de/de/system/files/mediathek/bilder/Weathering%20Risk%20Project%20Overview_0.pdf.
- Baerbock, Annalena, 2022: "Annalena Baerbock.de"; at: <https://annalena-baerbock.de>.
- Barnett, Jon; Adger, W. Neil, 2007: "Climate Change, Human Security and Violent Conflict", in: *Political Geography*, 26,6: 639–55.
- Black, Richard; Bennett, Stephen R. G.; Thomas Sandy M.; Beddington, John R., 2011: "Climate Change: Migration as Adaptation", in: *Nature*, 478,7370: 447–49.
- BMU, 2018: "Climate Action in Figure: Facts, Trends and Incentives for German Climate Policy" (Berlin: BMU); at: https://www.bmu.de/fileadmin/Daten_BMU/Pool/Broschueren/climate_action_figures_2019_brochure_en_bf.pdf.
- BMU, adelphi; Wuppertal Institut, 2007: "Die Sicherheitspolitische Bedeutung von Erneuerbaren Energien" (Berlin: BMU); at: https://www.adelphi.de/de/system/files/mediathek/bilder/studie_ee_sicherheit.pdf.
- BMU; Svenja Schulze, 2019: "Die neue DNA: Digitalisierung, Nachhaltigkeit und Aktion: Rede von Svenja Schulze bei der Re:Publica 2019" (Berlin: BMU); at: <https://19.re-publica.com/de/session/neue-dna-digitalisierung-nachhaltigkeit-action>.
- BMVg, 2016: Weissbuch: Zur Sicherheitspolitik und zur Zukunft der Bundeswehr (Berlin: BMVg); at: <https://www.bundesregierung.de/resource/blob/975292/736102/64781348c12e4a80948ab1bdf25cf057/weissbuch-zur-sicherheitspolitik-2016-download-data.pdf>.
- BMVg, 2017: "Um Klimawandel kümmern" (Berlin: BMVg); at: <https://www.bmvg.de/de/aktuelles/um-klimawandel-kuemmern-20120>.
- BMVg, 2018: "Nachhaltigkeitsbericht 2018 des Bundesministeriums der Verteidigung und der Bundeswehr: Berichtszeitraum 2016–2017" (Berlin: BMVg); at: <https://www.bmvg.de/resource/blob/33208/55714c1f567542a17feda42b892e05f8/g-01-nachhaltigkeitsbericht-2018-data.pdf>.
- BMVg, 2018a: "Strategische Vorausschau: Der Arktisdialog" (Berlin: BMVg); at: <https://www.bmvg.de/de/aktuelles/strategische-vorausschau-der-arktisdialo-25808>.
- BMVg, 2019: "Der Klimawandel: Herausforderungen für die Bundeswehr" (Berlin: BMVg); at: <https://www.bmvg.de/de/aktuelles/klimawandel-bundeswehr-59138>.
- BMVg, 2019a: "Ministertreffen in Helsinki" (Berlin: BMVg).
- BMVg, 2019b: "Neunte Sitzung des Netzwerks 'Strategie und Vorausschau'" (Berlin: BMVg); at: <https://www.bmvg.de/de/aktuelles/neunte-sitzung-des-netzwerks-strategie-und-vorausschau-64884#:~:text=Strategische%20Vorausschau%3A%20Der%20Arktisdialog&text=Schellnhuber%20forderte%20einen%20raschen%20Einstieg,Beispiel%20einer%20Karbonsteuer%20zu%20beginnen>.
- BMVg, 2020: "Auswärtiges Amt und BMVg stärken Gemeinsame Krisenfrüherkennung" (Berlin: BMVg); at: <https://www.bmvg.de/de/aktuelles/bmvg-auswaertiges-amt-staerken-gemeinsame-krisenfrueherkennung-4960694>.

- BMVg, 2020a: "Migration" (Berlin: BMVg); at: <https://www.bmvg.de/de/themen/dossiers/engagement-in-afrika/herausforderungen/migration>.
- BMVg, 2020b: "Nachhaltigkeitsbericht 2020 des Bundesministeriums der Verteidigung und der Bundeswehr: Berichtszeitraum 2018–2019" (Berlin: BMVg); at: <https://www.bmvg.de/resource/blob/3744490/fb034ba5fc1c8148bb103bb04ae928e5/20201022-dl-nachhaltigkeitsbericht-2020-data.pdf>.
- Böcher, Michael; Töller, Annette Elisabeth, 2012: Umweltpolitik in Deutschland: Eine Politikfeldanalytische Einführung (Wiesbaden: Springer Fachmedien).
- Böckenförde, Stephan; Gareis, Sven Bernhard, 2014: Deutsche Sicherheitspolitik: Herausforderungen, Akteure und Strategien in einer Welt im Wandel (Opladen: Barbara Budrich).
- Bohnet, Michael, 2015: "Richtungswechsel in der Entwicklungspolitik", in: E+Z Entwicklung und Zusammenarbeit; at: <https://www.dandc.eu/de/article/das-bmz-muss-sich-globalen-herausforderungen-stellen>.
- bpb, 2021: "Jahrhunderthochwasser 2021 in Deutschland"; at: <https://www.bpb.de/kurz-knapp/hintergrund-aktuell/337277/jahrhunderthochwasser-2021-in-deutschland/>.
- Brand, Richard; Breyer, Katja; Brot für die Welt, 2009: "Klimawandel – Eine Arbeitshilfe für die Gemeindearbeit zur Studie „Zukunftsfähiges Deutschland in einer Globalisierten Welt" (Bonn - Stuttgart); at: http://www.brot-fuer-die-welt.de/fileadmin/mediapool/2_Downloads/Sonstiges/EED_BfdW_04_ZD-Mappe_Klimawandel_09.pdf.
- Brauch, Hans Günter, 2002: "Klimawandel, Umweltstress und Konflikt" (Mosbach: AG Friedensforschung und Europäische Sicherheitspolitik - Peace Research and European Security Studies [AFES-PRESS]); http://hexagon-series.org/pdf/Brauch_Klimawandel_BMU.pdf.
- Brauch, Hans Günter et al. (Eds.), 2009: Facing Global Environmental Change: Environmental, Human, Energy, Food, Health and Water Security Concepts (Berlin - Heidelberg: Springer).
- Braun, Daniela; Höfner, Steven, 2019: "Deutschlands Sitz im Un-Sicherheitsrat: Haltung zeigen." in: KAS Analysen & Argumente, 335 (Januar).
- Brock, Steve et al., 2020: "The World Climate and Security Report 2020", in: International Military Council on Climate and Security (Munich: IMCCS); at: https://imccs.org/wp-content/uploads/2021/01/World-Climate-Security-Report-2020_2_13.pdf.
- Bundesamt für Bevölkerungsschutz und Katastrophenhilfe, 2019: Klimawandel – Herausforderung für den Bevölkerungsschutz, Band 5: Praxis im Bevölkerungsschutz (Bonn: Bundesamt für Bevölkerungsschutz und Katastrophenhilfe).
- Bundesamt für Bevölkerungsschutz und Katastrophenhilfe, 2019a: Klimawandel und Bevölkerungsschutz (Bonn: Bundesamt für Bevölkerungsschutz und Katastrophenhilfe); at: https://www.bbk.bund.de/DE/Themen/Klimawandel/klimawandel_node.html.
- Bundesregierung Deutschland, 2019: "Klimaschutzprogramm 2030" (Berlin: Bundesregierung); at: <https://www.bundesregierung.de/resource/blob/974430/1679914/48c179c7e1912bb2143f1fd9277fdfe0/2019-10-09-klima-massnahmen-data.pdf?download=1>.
- Bundestagsfraktion, Bündnis 90/Die Grünen, 2008: "Zukunftsfähige Energieaußenpolitik Dokumentation der Konferenz vom 25./26. April 2008 in Berlin" (Berlin).
- Bundesverfassungsgericht, 2021: "Leitsätze zum Beschluss des Ersten Senats vom 24. März 2021" (Karlsruhe: Bundesverfassungsgericht); at: https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/DE/2021/03/rs20210324_1bvr265618.html.
- Bundeswehr, 2012: "Klimafolgen im Kontext: Implikationen für Sicherheit und Stabilität im Nahen Osten und Nordafrika: Streitkräfte, Fähigkeiten und Technologien im 21. Jahrhundert: Teilstudie 2" (Berlin: Dezernat Zukunftsanalyse Planungsamt der Bundeswehr); at: http://www.scilogs.de/wblogs/gallery/66/Future_Study_2011_Klimafolgen_im_Kontext.pdf.
- Bundeswehr, 2014: "Future Topic: Klimawandel und Sicherheit in der Arktis nach 2014: Hat die friedliche und kooperative internationale Arktis-Politik eine langfristige Zukunft?" (Berlin: Planungsamt der Bundeswehr, Dezernat Zukunftsanalyse); at: <https://www.bundeswehr.de/resource/blob/140496/ee8dedd2c7039991f0c6adb60c10ab51/arktis-data.pdf>.
- Bundeswehr, 2019: "Geopolitische Information 1/2019: Der Südsudan Auf Einer Gratwanderung: Klimawandelfolgen • Ressourcenfluch • Umstrittene Grenzen." (Berlin:

- Bundeswehr); at: <https://www.bundeswehr.de/resource/blob/169852/5bbf5c1c42cd8df4e803a208572161b8/download-geopolitische-information-data.pdf>.
- Bundeswehr Journal, 2018: "Hitze, Dürre und Flächenbrand – Die Boten einer Klimakrise", in: Bundeswehr Journal (August).
- Bundeswehrverband, Deutscher, 2021: "Darum ist Klimawandel ein wichtiges Thema der Sicherheitspolitik und der Bundeswehr"; at: <https://www.dbwv.de/aktuelle-themen/blickpunkt/beitrag/darum-ist-klimawandel-ein-wichtiges-thema-der-sicherheitspolitik-und-der-bundeswehr>.
- Buzan, Barry; Wæver, Ole; de Wilde, Jaap, 1998: *Security: A New Framework for Analysis* (Boulder: CO: Lynne Rienner).
- Caney, Simon, 2010: "Climate Change and the Duties of the Advantaged", in: *Critical Review of International Social and Political Philosophy*, 13,1: 203–28.
- Carius, Alexander; Lietzmann, Kurt M., 1998: *Umwelt und Sicherheit: Herausforderungen für die Internationale Politik* (Berlin: Springer Berlin, Heidelberg).
- Carius, Alexander; Tänzler, Dennis; Maas, Achim, 2008: "Climate Change and Security: Challenges for German Development Cooperation" (Eschborn: Deutsche Gesellschaft für Technische Zusammenarbeit [GTZ] GmbH).
- Climate Diplomacy, 2019: "Security Council Debates How Climate Disasters Threaten International Peace and Security"; at: <https://www.climate-diplomacy.org/news/security-council-climate-disasters-threaten-international-peace-and-stability>.
- Dalby, Simon, 2014: "Rethinking Geopolitics: Climate Security in the Anthropocene", in: *Global Policy*, 5,1: 1–9.
- Der Spiegel, 1986: "Das Weltklima gerät aus den Fugen" <https://www.spiegel.de/politik/das-weltklima-geraet-aus-den-fugen-a-fa7f2e33-0002-0001-0000-000013519133>.
- Deutscher Bundestag, 1975: "Stenographischer Bericht: 203. Sitzung" (Bonn: Deutscher Bundestag); at: <https://dserver.bundestag.de/btp/07/07203.pdf>.
- Deutscher Bundestag, 1989: "Erste Beschlussempfehlung und Bericht des Ausschusses für Umwelt, Naturschutz und Reaktorsicherheit (21. Ausschuss) zu dem Ersten Zwischenbericht der Enquete-Kommission 'Vorsorge Zum Schutz Der Erdatmosphäre': Gemäß Beschluss des Deutschen Bundestages vom 16 Oktober und 27 November 1987, Drs. 11/533, 11/787, 11/971, 11/1351, 11/3246."
- Deutscher Bundestag, 1990: *Dritter Bericht Der Enquete-Kommission Vorsorge zum Schutz der Erdatmosphäre zum Thema Schutz der Erde* (Bonn: Deutscher Bundestag); at: <https://dserver.bundestag.de/btd/11/080/1108030.pdf>.
- Deutscher Bundestag, 1992: "Erster Bericht der Enquete-Kommission 'Schutz Der Erdatmosphäre' Zum Thema 'Klimaänderung gefährdet globale Entwicklung – Zukunft sichern – jetzt handeln': gemäß Beschluss des Deutschen Bundestages vom 25. April 1991, Drs. 12/419" (Bonn: Deutscher Bundestag); at: <https://dserver.bundestag.de/btd/12/024/1202400.pdf>.
- Deutscher Bundestag, 1993: "Stenographischer Bericht: 147. Sitzung" (Bonn: Deutscher Bundestag); at: <http://dip21.bundestag.de/dip21/btp/12/12147.pdf>.
- Deutscher Bundestag, 1995: "Speech of MdB Brigitte Adler (SPD) in Parliamentary Debate on 20.01.1995: Drs. 13/13" (Berlin: Deutscher Bundestag).
- Deutscher Bundestag, 1998: "Gesetzentwurf der Fraktionen SPD und Bündnis 90/Die Grünen" (Bonn: Deutscher Bundestag); at: <https://dserver.bundestag.de/btd/15/030/1503064.pdf>.
- Deutscher Bundestag, 2000: "Beschlussempfehlung und Bericht des Ausschusses für Wirtschaft und Technologie (9. Ausschuss) zu dem Gesetzentwurf der Fraktionen SPD und Bündnis 90/Die Grünen – Drucksache 14/2341 – Entwurf eines Gesetzes zur Förderung der Stromerzeugung aus Erneuerbaren Energien (Erneuerbare-Energien-Gesetz – EEG) sowie zur Änderung des Mineralölsteuergesetzes" (Berlin: Deutscher Bundestag).
- Deutscher Bundestag, 2004: "Nationalen Allokationsplan als Parlamentsgesetz gestalten (Drucksachen 15/1791, 15/2533): Drs. 15/94" (Berlin: Deutscher Bundestag); at: <https://dserver.bundestag.de/btp/15/15094.pdf>.
- Deutscher Bundestag, 2007: "Rede von Gabriele Groneberg im Deutschen Bundestag: Drs. 16/127" (Berlin: Deutscher Bundestag).

- Deutscher Bundestag, 2007a: “Stenografischer Bericht: 106. Sitzung” (Berlin: Deutscher Bundestag).
- Deutscher Bundestag, 2007b: “Stenografischer Bericht: 127. Sitzung” (Berlin: Deutscher Bundestag).
- Deutscher Bundestag 2008: “Rede von Sigmar Gabriel im Deutschen Bundestag: Drs. 16/195” (Berlin: Deutscher Bundestag).
- Deutscher Bundestag, 2009: “Stenografischer Bericht: 9. Sitzung” (Berlin: Deutscher Bundestag).
- Deutscher Bundestag, 2010: “Stenografischer Bericht: 65. Sitzung” (Berlin: Deutscher Bundestag).
- Deutscher Bundestag, 2011: “Stenografischer Bericht: 150. Sitzung” (Berlin: Deutscher Bundestag).
- Deutscher Bundestag, 2013: “Stenografischer Bericht: 246. Sitzung” (Berlin: Deutscher Bundestag).
- Deutscher Bundestag, 2019: “Antwort der Bundesregierung auf die Kleine Anfrage der Abgeordneten Lisa Badum, Jürgen Trittin, Claudia Roth (Augsburg), weiterer Abgeordneter und der Fraktion Bündnis 90/Die Grünen – Drucksache 19/9475: Sicherung und Erhalt der Lebensgrundlagen durch eine verantwortungsbewusste und klimagerechte Sicherheits- und Außenpolitik – Die Rolle Deutschlands als Mitglied im Un-Sicherheitsrat” (Berlin: Deutscher Bundestag).
- Deutscher Bundestag, 2019a: “Wechselwirkungen von Klima, Ressourcen und Konflikten: Sitzung des Unterausschusses ‘Zivile Krisenprävention, Konfliktbearbeitung Und Vernetztes Handeln”” (Berlin: Deutscher Bundestag); at: <https://www.bundestag.de/dokumente/textarchiv/2019/kw46-pa-zivile-krisenpraevention-665044>.
- Deutscher Bundestag, 2021: Antwort der Bundesregierung auf die Kleine Anfrage der Abgeordneten Lisa Badum, Jürgen Trittin, Magarete Bause, weiterer Abgeordneter und der Fraktion Bündnis 90/Die Grünen: Drucksache 19/27537 (Berlin: Deutscher Bundestag); at: <https://dip21.bundestag.de/dip21/btd/19/286/1928639.pdf>.
- Diakonisches Werk der EKD e.V.; Germanwatch; Brot für die Welt, 2008: “Climate Change, Food Security and the Right to Adequate Food” (Bonn: Germanwatch); at: <https://www.germanwatch.org/sites/default/files/publication/2798.pdf>.
- Diez, Thomas; von Lucke, Franziskus; Wellmann, Zehra, 2016: *The Securitisation of Climate Change: Actors, Processes and Consequences* (London: Routledge).
- DPG, 1986: “Warnung vor einer drohenden Klimakatastrophe: Pressekonferenz in Bonn”; at: https://www.klimamanifest-von-heiligenroth.de/wp-content/uploads/2017/02/DPG_AKE_1985_Heinloth_Warnung_vor_der_drohenden_Klimakatastrophe_19860122_.pdf.
- Dröge, Susanne, 2016: “The Paris Agreement 2015: Turning Point for the International Climate Regime” (Berlin: Stiftung Wissenschaft und Politik [SWP]); at: <http://hdl.handle.net/10419/253166>.
- Duffield, Mark; Waddell, Nicholas, 2006: “Securing Humans in a Dangerous World”, in: *International Politics*, 43,1: 1–23.
- Dupont, Claire, 2019: “The EU’s Collective Securitisation of Climate Change”, in: *West European Politics*, 42,2: 369–90.
- Extinction Rebellion, 2019: “The Truth”; at: <https://rebellion.earth/the-truth/>.
- Fagan, Madeleine, 2017: “Security in the Anthropocene: Environment, Ecology, Escape”, in: *European Journal of International Relations*, 23,2: 292–314.
- Federal Development Ministry, 2007: “Klimakonzept Konkret: Aktionsprogramm ‘Klima und Entwicklung”” (Berlin: Federal Development Ministry); at: https://www.bivica.org/files/gtz_programma-clima.pdf.
- Federal Development Ministry, 2013: “Entwicklung für Frieden und Sicherheit Entwicklungspolitisches Engagement im Kontext von Konflikt, Fragilität und Gewalt” (Bonn: Federal Development Ministry).
- Federal Development Ministry, 2013a: “Entwicklungspolitischer Bericht der Bundesregierung: Weißbuch zur Entwicklungspolitik – Kurzfassung” (Berlin: Federal Development Ministry); at: <https://www.globaleslernen.de/sites/default/files/files/link-elements/weissbuch.pdf>.

- Federal Development Ministry, 2015: "Katastrophenrisikomanagement: Ansatz und Beiträge der Deutschen Entwicklungszusammenarbeit" (Berlin: Federal Development Ministry).
- Federal Development Ministry, 2017: "Dem Klimawandel begegnen: Das klimapolitische Engagement des BMZ" (Berlin: Federal Development Ministry); at: <https://www.bmz.de/resource/blob/112366/dem-klimawandel-begegnen.pdf>.
- Federal Development Ministry, 2017a: "Entwicklungspolitik als Zukunfts- und Friedenspolitik: 15. Entwicklungspolitische Bericht der Bundesregierung" (Berlin: Federal Development Ministry); at: <https://www.bmz.de/resource/blob/23398/044e414070cd9b80f5eb597443a90447/materialie319-entwicklungspolitische-bericht-data.pdf>.
- Federal Development Ministry, 2019: "Frühzeitig Handeln: Frühwarnsysteme mit Risikofinanzierung und Klimarisikoversicherungen verknüpfen" (Berlin: Federal Development Ministry).
- Federal Development Ministry, 2019a: "Insuresilience Global Partnership: Die Globale Partnerschaft für Finanzierungs- und Versicherungslösungen für Klima- und Katastrophenrisiken" (Berlin: Federal Development Ministry); at: <https://www.insuresilience.org>.
- Federal Development Ministry, 2019b: "Klimaschutz - Die Überlebensfrage der Menschheit: BMZ Papier 06/2019" (Berlin: Federal Development Ministry).
- Federal Development Ministry, 2019c: "Klimawandel und Entwicklung: Das klimapolitische Engagement des BMZ" (Berlin: Federal Development Ministry).
- Federal Development Ministry, 2019d: "Umfassendes Risikomanagement: Der Ansatz der Deutschen Entwicklungszusammenarbeit im Umgang mit Katastrophen- und Klimarisiken" (Berlin: Federal Development Ministry); at: <https://www.bmz.de/resource/blob/23422/ef02bca64a9ba42a0d5642110ddf9321/smateriale400-risikomanagement-data.pdf>.
- Federal Development Ministry, 2021: "Analyse und Management von Klimarisiken" (Berlin: Federal Development Ministry); at: <https://www.bmz.de/de/entwicklungspolitik/klimawandel-und-entwicklung/klimarisikomanagement>.
- Federal Development Ministry, and Gerd Müller, 2019: "Weltklimarat-Sonderbericht: Minister Müller fordert zusätzliche Investitionen in Internationalen Klimaschutz" (Berlin: Federal Development Ministry).
- Federal Environment Ministry, 2007: "Report: Climate Protection also Contributes to International Security: Joint Press Release BMU, BMBF, AA, BMZ" (Berlin: Federal Development Ministry); at: <https://www.bmu.de/en/pressrelease/report-climate-protection-also-contributes-to-international-security/>.
- Federal Environment Ministry, 2016: "Climate Action Plan 2050: Principles and Goals of the German Government's Climate Policy" (Berlin: Federal Development Ministry); at: https://www.bmu.de/fileadmin/Daten_BMU/Pool/Broschueren/klimaschutzplan_2050_en_bf.pdf.
- Federal Environment Ministry, 2018: "Hochwasserschutzfibel: Objektschutz Und Bauliche Vorsorge" (Berlin: Federal Development Ministry); at: https://www.fib-bund.de/Inhalt/Themen/Hochwasser/2022-02_Hochwasserschutzfibel_9.Auflage.pdf.
- Floyd, Rita, 2012: "Climate Change, Environmental Security Studies and the Morality of Climate Security." in: E-International Relations.
- Fridays for Future, 2020: "Unsere Forderungen an die Politik"; at: <https://fridaysforfuture.de/forderungen/>.
- Germanwatch, 2009: "Global Climate Risk Index 2010: Who is Most Vulnerable? Weather-Related Loss Events since 1990 and How Copenhagen Needs to Respond"; at: <http://www.germanwatch.org/cr/>.
- Germanwatch, 2011: "Klimawandel Gefährdet Internationale Sicherheit" (Bonn: Germanwatch); at: <http://germanwatch.org/de/2071>.
- Givetash, Linda, 2019: "Militarys Go Green, Rethink Operations in Face of Climate Change", in: NBC News; at: <https://www.nbcnews.com/news/military/militarys-go-green-rethink-operations-face-climate-change-n991651>.
- GIZ-Deutsche Gesellschaft für Internationale Zusammenarbeit, 2011: "Anpassung an den Klimawandel und Wiederherstellung der Lebensgrundlagen in Südwest-Bangladesch: Projekturzbeschreibung"; at: <https://www.giz.de/projektdaten/projects.action?pn=201198324>.

- GIZ, 2020: "Climate Risk Management – Concepts, Instruments, Effects"; at: <https://www.giz.de/en/worldwide/32322.html>.
- GTZ, 2008: "Spice Securing Peace in Crisis Environments Krisenprävention und Konfliktbearbeitung – Kleinwaffenkontrolle – Sicherheitssektorreform – Bildung und Konfliktbearbeitung."
- Hannen, Petra, 2012: "Klimawandel", in: Akzente I: Das Magazin der GIZ, 04.
- Hardt, Judith Nora, 2017: *Environmental Security in the Anthropocene* (London: Routledge).
- Interview, 2014: "Interview with an NGO Representative and General of the Federal Armed Forces", (Berlin: BMVg und DGVN, 6 July).
- Interview, 2015: "Interview with a Representative of the Federal Foreign Office on Climate Change and Security, 09.01.2015" (Berlin: Federal Foreign Office).
- Interview, 2015a: "Interview with an Expert for Peace and Conflict Studies, 29.04.2015" (Hamburg: ISFH).
- IPCC, 2018: *Global Warming of 1.5°C. An IPCC Special Report on the Impacts of Global Warming of 1.5°C above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty* (Geneva: IPCC); at: <https://www.ipcc.ch/sr15/download/>.
- Jakobeit, Cord; Methmann, Chris, 2007: *Klimaflüchtlinge: Die verleugnete Katastrophe* (Hamburg: Greenpeace).
- Krüger, Paul-Anton, 2021: "Wie Baerbock das Auswärtige Amt umbaut"; at: <https://www.sueddeutsche.de/politik/auswaertiges-amt-annalena-baerbock-klimapolitik-1.5482715>.
- Lindner, Christian, 2022: "Rede von Christian Lindner während der Sondersitzung des Bundestags zum Krieg in der Ukraine"; at: <https://www.bundesfinanzministerium.de/Content/DE/Reden/2022/2022-02-27-bundestagsrede-lindner-ukraine.html>.
- Maas, Heiko, 2021: "Statement by Foreign Minister Heiko Maas in the Security Council Open Debate on Climate and Security, 23 February 23"; at: <https://new-york-un.diplo.de/un-en/news-corner/-/2443804>.
- McDonald, Matt, 2013: "Discourses of Climate Security", in: *Political Geography*, 33, March 2013: 42–51.
- McDonald, Matt, 2021: *Ecological Security: Climate Change and the Construction of Security* (Cambridge: Cambridge University Press).
- Merkel, Angela, 2010: "Rede von Bundeskanzlerin Angela Merkel vor der Generalversammlung der Vereinten Nationen".
- Nansen Initiative, 2015: "The Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change" (Geneva); at: <https://www.preventionweb.net/publication/agenda-protection-cross-border-displaced-persons-context-disasters-and-climate-change>.
- Pew Research Center, 2019: "Climate Change Still Seen as the Top Global Threat, but Cyberattacks a Rising Concern"; at: <https://www.pewresearch.org/global/2019/02/10/climate-change-still-seen-as-the-top-global-threat-but-cyberattacks-a-rising-concern/>.
- Pieper, Cornelia, 2011: "Eröffnungsrede von Staatsministerin Cornelia Pieper zur Konferenz 'Climate Diplomacy in Perspective - from Early Warning to Early Action'"; at: http://www.auswaertiges-amt.de/DE/Infoservice/Presse/Reden/2011/111010-StM_P_Klimakonferenz.html.
- Planungsamt der Bundeswehr, 2012: "Future Topic: Geoengineering - Eine Sicherheitspolitische Perspektive" (Berlin: Bundeswehr, Planungsamt).
- Planungsamt der Bundeswehr, 2018: "Future Case Study: 'Methodenunterstützung im Rahmen der Trendanalyse – Am Beispiel des Trendreports von 2018'" (Berlin: Bundeswehr, Planungsamt); at: <https://www.bundeswehr.de/resource/blob/140558/439994e6085f2e996266804ff3726577/fcs-data.pdf>.
- Pospisil, Jan, 2009: *Die Entwicklung von Sicherheit: Entwicklungspolitische Programme der USA und Deutschlands im Grenzbereich zur Sicherheitspolitik* (Bielefeld: transcript-Verlag).

- Potsdam Institute for Climate Impact Research, 2021: "Berlin Insights Series on Climate Change and Development" (Potsdam: PIK); at: <https://www.pik-potsdam.de/de/aktuelles/nachrichten/vertiefte-zusammenarbeit-zwischen-pik-und-bmz>.
- Pugh, Michael, 2004: "Peacekeeping and Critical Theory", in: *International Peacekeeping*, 11,1: 39–58.
- Richert, Jörn, 2009: "Sicherheit und Stabilität im Kontext des Klimawandels", in: *SWP Diskussionspapier*, 8,3.
- Ring, Franziska, 2021: "Mit Berechnung zum 'Riesen-Erfolg'"; in: *Legal Tribute Online*; at: <https://www.lto.de/recht/hintergruende/h/bverfg-klimaklage-grundrechte-klimaschutz-das-sind-die-beschwerdefuehrenden/>.
- Rothe, Delf, 2012: "Security as a Weapon: How Cataclysm Discourses Frame International Climate Negotiations", in: Scheffran, Jürgen; Brzoska, Michael; Brauch, Hans Günter; Link, Michael P.; Schilling, Janpeter (Eds.): *Climate Change, Human Security and Violent Conflict. Challenges for Societal Stability* (Berlin: Springer: 243–58).
- Rotte, Ralph, 2001: *Global Warming, Nationale Sicherheit und Internationale Politische Ökonomie: Überlegungen zu den Konsequenzen der weltweiten Klimaveränderung für Deutschland und Europa* (München: Hanns-Seidel-Stiftung).
- Sachverständigenrat, 2019: "Aufbruch zu einer neuen Klimapolitik: Sondergutachten" (Wiesbaden: Aachverstaendigenrat Wirtschaft); at: https://www.sachverstaendigenrat-wirtschaft.de/filadmin/dateiablage/gutachten/sg2019/sg_2019.pdf.
- Scheffran, Jürgen et al. (Eds.), 2012: *Climate Change, Human Security and Violent Conflict* (Berlin - Heidelberg: Springer).
- Scholz, Olaf, 2022: "Regierungserklärung von Bundeskanzler Olaf Scholz am 27. Februar 2022"; at: <https://www.bundesregierung.de/breg-de/suche/regierungserklaerung-von-bundeskanzler-olaf-scholz-am-27-februar-2022-2008356>.
- Schwartz, Peter; Randall, Doug, 2003: *An Abrupt Climate Change Scenario and its Implications for United States National Security* (Washington, D.C.: Global Business Network); at: http://stephenschneider.stanford.edu/Publications/PDF_Papers/SchwartzRandall2004.pdf.
- Scott, Shirley V.; Ku, Charlotte, 2018: *Climate Change and the UN Security Council* (Cheltenham: Edward Elgar).
- Seiler, Wolfgang, 2011: "Der Globale Klimawandel - Entwicklungen und Auswirkungen: Hitzeschock Versus Eiseskälte - Was bringt die Zukunft?", in: *Politische Studien. Zweimonatszeitschrift für Politik und Zeitgeschehen*, 62,436: 16–29.
- Solana, Javier; European Commission, 2008: "Climate Change and International Security. Paper from the High Representative and the European Commission to the European Council (S113/08)" (Brussels: European Commission); at: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/reports/99387.pdf.
- Steinmeier, Frank-Walter, 2007: "Die Transatlantischen Beziehungen im 21. Jahrhundert: Rede von Bundesaußenminister Steinmeier anlässlich der 43. Münchner Konferenz für Sicherheitspolitik" (München); at: http://www.nato.diplo.de/Vertretung/nato/de/03/BMSteinmeierinM_C3_BCnchen.html.
- Steinmeier, Frank-Walter, 2007a: "Rede von Außenminister Steinmeier zur Eröffnung der G8-Konferenz 'Impulse der Außenpolitik für eine sichere und nachhaltige Energieversorgung', 3. Dezember 2007"; at: <https://politische-reden.eu/AA/t/198.html>.
- Steinmeier, Frank-Walter, 2007b: "'Sicherheitsrisiko Klimawandel' - Rede Des Bundesaußenministers anlässlich des 17. Forum Globale Fragen"; at: <http://www.auswaertiges-amt.de/DE/Infoservice/Presse/Reden/2007/070614-BMKlimawandel.html>.
- Steinmeier, Frank-Walter, 2008: "Climate Change – a Global Challenge, Speech by Frank-Walter Steinmeier, at the Conference "Climate Change as a Security Threat: Strategies for Policy-Makers"; at: <https://www.auswaertiges-amt.de/en/newsroom/news/081106-bm-klimawandel/232826>.

- Steinmeier, Frank-Walter, 2014: "Klimawandel und Sicherheitspolitik: Panel der Stiftung Mercator auf der 50. Münchner Sicherheitskonferenz" (München); at: http://www.auswaertiges-amt.de/DE/Infoservice/Presse/Reden/2014/140131-BM_Mercator.html.
- Steinmeier, Frank-Walter; Miliband, David, 2008: "Europa muss sich den sicherheitspolitischen Folgen des Klimawandels stellen", in: *Climate Diplomacy* <https://www.auswaertiges-amt.de/de/newsroom/080313-steinmeiermiliband/225664>.
- Tagesschau.de, 2021: "Deutschland bis 2045 Klimaneutral?"; at: <https://www.tagesschau.de/inland/klimaschutz-scholz-schulze-101.html>.
- Trombetta, Maria Julia, 2008: "Environmental Security and Climate Change: Analysing the Discourse", in: *Cambridge Review of International Affairs*, 21,4: 585–602.
- Trombetta, Maria Julia, 2011: "Rethinking the Securitization of the Environment: Old Beliefs, New Insights", in: Balzacq, Thierry (Ed.): *Securitization Theory* (London: Routledge): 135–49.
- Tschirgi, Necla; Lund, Michael S.; Mancini, Francesco, 2010: *Security & Development: Searching for Critical Connections* (Boulder, Col: Lynne Rienner).
- UBA, 2019: "Monitoringbericht 2019: Zur deutschen Anpassungsstrategie an den Klimawandel: Bericht der Interministeriellen Arbeitsgruppe Anpassungsstrategie der Bundesregierung" (Dessau: UBA); at: <https://www.umweltbundesamt.de/publikationen/monitoringbericht-2019>.
- UBA, 2020: "Deutsche Kommunen rufen den Klimanotstand aus"; at: <https://www.umweltbundesamt.de/themen/klima-energie/klimafolgen-anpassung/anpassung-an-den-klimawandel/anpassung-auf-kommunaler-ebene/deutsche-kommunen-rufen-den-klimanotstand-aus?parent=68610#undefined>.
- UNDP, 2018: "Supporting Climate Security".
- UNSC, 2007: "5663rd Meeting, Tuesday, 17 April 2007, 10 A.M. New York" (New York: United Nations Security Council); at: <https://www.securitycouncilreport.org/atf/cf/%7B65BF9CF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/CC%20SPV%205663.pdf>
- UNSC, 2007a: "5663rd Meeting, Tuesday, 17 April 2007, 3 P.M., S/Pv5663 (Resumption 1)" (New York: United Nations Security Council); at: https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_pv_5663_rev_1.pdf.
- UNSC, 2011: "Letter Dated 1 July 2011 from the Permanent Representative of Germany to the United Nations Addressed to the Secretary-General" (New York: United Nations Security Council); at: https://digitallibrary.un.org/record/706835/files/S_2011_408-EN.pdf?ln=en.
- UNSC, 2011a: "6587th Meeting, Wednesday, 20 July 2011, 10 A.M (Provisional)" (New York: United Nations Security Council); at: https://www.securitycouncilreport.org/atf/cf/%7B65BF9CF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_pv_6587.pdf.
- UNSC, 2011b: "6587th Meeting, Wednesday, 20 July 2011, 3 P.M., S/Pv.6587 (Resumption 1)" (New York, NY: United Nations Security Council); at: <https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/CC%20SPV%206587%20RES1.pdf>.
- UNSC, 2020: "Open Debate (Video Conference) on the Impacts of Climate Change on International Peace and Security" (New York: UNSC); at: <https://undocs.org/S/2020/751>.
- US Navy, 2016: "The Great Green Fleet (Ggf)"; at: <https://www.cpf.navy.mil/Newsroom/News/Article/2745254/navy-agriculture-secretaries-launch-great-green-fleet/>.
- von Lucke, Franziskus, 2020: *The Securitisation of Climate Change and the Governmentalisation of Security* (Houndmills Basingstoke: Palgrave Macmillan Cham).
- von Lucke, Franziskus; Diez, Thomas; Aamodt, Solveig; Ahrens, Bettina, 2021: *The EU and Global Climate Justice: Normative Power Caught in Normative Battles* (London: Routledge).
- von Lucke, Franziskus; Hardt, Judith Nora, 2022: "La Politique Climatique Allemande La Politique Climatique Allemande Sous L'angle De La Politique Extérieure Et De Sécurité: Une Solution D'avenir?", in: *Allemagne d'aujourd'hui*, 239,1: 111–23.
- WBGU, 2007: *Sicherheitsrisiko Klimawandel* (Berlin: Springer-Verlag).
- WBGU, 2008: "World in Transition: Climate Change as a Security Risk" (London -Sterling, VA: Earthscan); at: http://ccsl.iccip.net/wbgu_jg2007_engl.pdf.

- Weber, Melanie, 2008: Alltagsbilder des Klimawandels (Wiesbaden: VS Verlag für Sozialwissenschaften).
- World Bank, 2012: "Turn Down the Heat: why a 4°C Warmer World Must Be Avoided" (Washington, D.C.: World Bank); at: <https://openknowledge.worldbank.org/handle/10986/11860>.

Chapter 8

The Climate-Security Nexus in Indonesia: A Multitude of Threats and Approaches



I Gede Wahyu Wicaksana and Yohanes William Santoso

Abstract This chapter presents a case study of the climate-security nexus in Indonesia during the administration of President Joko Widodo from 2014 to the present. We drew upon three models of climate-security connections: state security, human security, and ecological security, which underpin the conceptual thinking of this book. Although conceptually distinguishable, in practice all of them are interrelated. We explore the threat perceptions and policy measures of the state's leading climate sectors and look at how non-state actors respond to the government's approaches. Two methodological steps were applied in this study. First, we collected primary and secondary information relevant to climate threat and policy in Indonesia under Widodo. One of the controversial issues discussed is the new capital city construction project. We referred to the climate security concepts mentioned above to unpack the dominant climate security discourses. Second, we examined how the domestic climate change priorities extended to the view articulated by Indonesia in the United Nations Security Council (UNSC). The conclusion is that the Widodo government makes human security the domestic climate priority, but still accommodates ecological protection in some areas of governance. At the international level, however, we can see that climate change's human and environmental security aspects are relatively balanced and equal, suggesting parallel features of Indonesia's global activism for climate agendas.

Keywords Climate change · Human security · Indonesia · Capital city move project · United Nations Security Council

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8.1 Introduction

The links between climate change and security can be understood by means of three analytical concepts: national or state security, human security, and ecological security. We perceive that climate change threatens state security by endangering important values, such as economic development, political stability, national sovereignty, and territorial integrity. In addition, it triggers interstate tensions and conflicts over resources, ecological services, and irregular transnational migrations. These climate-shaped geopolitical challenges affect how foreign policy is made and conducted (Campbell 2009; Harris 2007). In contrast, the human security concept highlights climate change impacts on safety, freedom, human rights, and livelihoods of individuals and groups. Extreme weather, food scarcity, water shortages, and infectious diseases are direct physical effects of climate change, increasing the vulnerability of people living in poverty and enhancing the potential for civil unrest (Intergovernmental Panel on Climate Change 2022). The impacts of climate change are particularly acute across less-developed regions and in developing countries due to their high vulnerability and lower response capabilities (Barnett/Adger 2007; Elliott 2015). Therefore, effective community resilience programs are needed to cope with climatic social and economic issues (Elliott/Caballero-Anthony 2013). Finally, ecological security refers to the dysfunction of specific ecosystems due to climate change. Climate-based environmental destruction shifts biophysical and geophysical processes, harming biodiversity. Consequently, comprehensive policy measures should be designed and applied at national, regional, and international levels to protect the environment and realize sustainable development (Hardt 2017; McDonald 2018).

We argue that these three climate-security nexus models are conceptually distinguishable, but they are interrelated in the practice and policy realms. The threat to state security can expand into human and environmental security concerns and vice versa. One or two of the three security concepts can be more dominant and popular than the other. The perceptions of domestic political actors about the main characteristics of security threats determine how climate-security connections are constructed and how policies are formulated and implemented. In developing countries of the Asia-Pacific region, including Indonesia, human security is the prominent discourse of the climate-security relationship. We develop this argument and ask the question: how do the state and non-state climate actors in Indonesia respond to the dangers of climate change impacts and their implications for policymaking and implementation?

This inquiry is empirically significant. The Indonesian archipelago is vulnerable to climate change effects, mainly the increasing sea-level rise, warmer ocean temperature, and significant wave heights (Zikra et al. 2015: 63). In addition, extreme natural phenomena like La Niña and El Niño make the country prone to weather anomalies and thermospheric processes, affecting sea levels. This sea-level rise and land subsidence will cause flooding in low-lying cities, such as Jakarta, Semarang, and Surabaya. Indonesia has two main seasons: the dry season from May to September

and the wet season from October to April. Both seasons are highly affected by extreme natural phenomena. Consequently, droughts and floods are inevitable (Case et al. 2007; Triana/Wahyudi 2020: 120). According to a global risk analysis published by the (World Bank 2021), Indonesia is in the top third of countries in terms of climate risk from multiple natural hazards.

The existing scholarly publications have covered a wide range of essential aspects of climate change in Indonesia. The latest literature informs about the major trends in science, technology, legislation, and climate change governance in forestry, agriculture, and water management (see, for example, Butt et al. 2015; Djalante et al. 2021, Kaneko/Kawanishi 2016). Nevertheless, little attention has been given to studying the elements of climate securitisation involving interaction between the government's institutions and non-governmental organisations (NGOs). Our study aims to fill this gap by looking more closely at diverse stakeholders' views and actions on climate change. In addition, it can help us understand Indonesia's position in the global climate discourses, specifically within the United Nations Security Council (UNSC) sessions on climate change between 2019 and 2020, when Indonesia became a non-permanent member of the Council. We acknowledge that this inquiry will not explain all the complexities behind Indonesian climate change politics. Still, it is likely to serve as a preliminary assessment to advance climate security studies in Indonesia.

We employed two methodological approaches to analyse the threat perceptions and measures of the state's leading climate policy sectors, and the position of the non-state actors towards the government's policy. First, we collected online government documents, official statements, research reports, and news of climate-related issues and policies under President Joko Widodo (2014–present). We focused on state ministries and agencies responsible for governing the climate change-affected fields, such as development planning, disaster management, marine affairs, agriculture, defence, and foreign relations. Regarding the non-state actors' attitudes, we selected the three most popular and most active NGOs advocating for climate change policy improvement. They are Wahana Lingkungan Hidup Indonesia (WALHI), Aliansi Masyarakat Adat Nusantara (AMAN), and Greenpeace Indonesia (GI). We categorized the relevant information gathered from the primary sources, referring to the concepts of climate-security connections. An analysis of secondary sources complemented this method, particularly when we needed to look back to Indonesia's climate policy evolution before Widodo. Second, we investigated how the domestic ideas, campaigns, and institutionalisation of climate security extended to the Indonesian-articulated view in the United Nations Security Council.

This chapter is organised into four sections. Following this introduction is our analysis of Indonesia's approach to climate security, using this book's three-fold typology. First, we identify diverse climate-security views and practices of the government's structures, although human security has become the dominant policy discourse. However, we notice that the NGOs oppose the government's human security and development approaches. Based on these contending positions, the second section discusses Widodo's project to move the state capital city from Jakarta to East

Kalimantan, which has been controversial because of its possible destructive consequences to the environment. The third part reflects the previously-explored domestic climate-security voices and actions to grasp Indonesia's multilateral climate change initiatives in the UNSC. The last section concludes that the Widodo government prioritises human security at the domestic level, yet still accommodates environmental protection in some governance areas. At the international level, however, we can see a relatively balanced manner in promoting climate change's human and ecological security agendas.

8.2 The Dominance of Human Security in Indonesian Domestic Climate Change Discourse

It is worthwhile to trace the evolution of Indonesian climate security perception to give a stronger context, within which the current approaches are seen as more significant. As early as the 1990s, the security policy elites in Jakarta were already aware that it was important to overcome the impacts of global warming on Indonesian security. Climate change was situated in a North-South contestation in making a post-Cold War world order. The global warming environmental degradation discourse was perceived as a power game by the industrialised countries of the North to force the developing nations of the South to adopt the former's promoted liberal international economic system (Department of Foreign Affairs 1996). This high political framing of climate change altered following democratisation in 1998. Democracy has opened up a broader space for human security agendas to move from the margins on to the centre stage of security policymaking (Sukma 2003). Environmental NGOs played significant roles in pushing the government to meet the demand for strengthening human and ecological security governance in the national political arena (Nomura 2007).

The democratic post-Suharto governments began to acknowledge the reality of climate change's human and environmental security implications. President Susilo Bambang Yudhoyono, who led the country from 2004 to 2014, explicitly stated that creating a better environment for all Indonesians was one of his presidency goals (Yudhoyono 2004: 3–4). He launched a long-term development policy plan, called *Masterplan Percepatan dan Perluasan Pembangunan Ekonomi Indonesia* (*Masterplan of Acceleration and Expansion of Indonesian Economic Development*/MP3EI). MP3EI underscored the risks of climate catastrophes (mainly sea-level rise, flooding, hotter temperatures, and extreme weather events) to the Indonesian economy and livelihoods of local communities living in the coastal regions. Therefore, the development projects which the government planned to execute between 2011 and 2025 under MP3EI should be adaptive to the challenging climate circumstances (Government of the Republic of Indonesia 2011: 8–9). Yudhoyono founded the National

Council on Climate Change (NCCC) in 2008, which was assigned to design and coordinate medium-and long-term programmes focusing on clean energy and reforestation. The NCCC was responsible for managing both the human and ecological security aspects of climate change, guided by the National Action Plan Addressing Climate Change, which was created to follow up on the 2007 Bali Road Map.¹

8.2.1 The Widodo Government's Approach to Climate-Security Relations

The Widodo government adopts human security as a priority in its domestic climate agendas. This is apparent in the emphasis on social and economic aspects of climate security, which directly affect the everyday lives of individual citizens and local communities. Widodo continues some essential parts of Yudhoyono's environmental policies. The Paris Agreement was signed and ratified in Law Number 16/2016, which affirmed Indonesia's strengthened commitment to supporting the global climate policy. Widodo pledged to increase the Indonesian target for reducing Green House Gas (GHG) emissions by 29% below business as usual by 2030 – or 41% with international cooperation (Cabinet Secretariat of the Republic of Indonesia 2015). The president sets the goal of fostering low carbon and climate-resilient development as his environmental focus. This is stated in a strategic vision paper known as *Nawa Cita* (Kumolo 2017). Widodo's *Nawa Cita* provides the basis for the climate security-responsible state ministries and agencies to create plans and implement programmes for supporting the president's environmental mission.

In line with *Nawa Cita*, the Indonesian government formed Indonesia's first Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC). In the NDC document, Indonesia communicated an unconditional emission reduction target of 29% by 2030. With the international community's support, the Widodo administration will reduce emissions to 41% by 2030 (Ministry of Foreign Affairs 2019). In addition, the importance of human security in terms of poverty reduction is highlighted, and "the national commitment towards a low carbon and climate change-resilient development path, in which climate change adaptation and mitigation constitute an integrated and cross-cutting priority" is assured (Government of the Republic of Indonesia 2016: 1). Climate change presents significant risks for Indonesia's natural resources that will, in turn, impact the production and distribution of food, water, and energy. Climate

¹ The Bali Road Map was adopted at the 13th Conference of the Parties and the 3rd Meeting of the Parties held in Bali, Indonesia, in December 2007. The most important element of the agreement was the Bali Action Plan, which outlined a forward-looking set of activities to support the implementation of the first commitment period of the Kyoto Protocol, which expired in 2012 (see the complete report in UNFCCC 2007). For the host country, Indonesia, it was an important diplomatic achievement because it could advance the local climate initiative by responding to the need for more significant financial and technological assistance from developed countries to developing ones in mitigating and adapting to the impacts of climate change.

mitigation and adaptation efforts are described “as an integrated concept that is essential for building resilience in safeguarding food, water, and energy resources” (Government of the Republic of Indonesia 2016: 3). The goals are, among others, to improve certainty in an ecological security sense that is “in spatial planning and land use; Land tenure security; Food security; Water security; Renewable energy” (Government of the Republic of Indonesia 2016: 12).

To achieve the NDC targets, Widodo, like his predecessor, relies on the coordination of four state government institutions, namely the Ministry of National Development Planning (MoNDP), the National Disaster Management Desk (NDMD), the Ministry of Ecology and Forestry (MoEF), and the Ministry of Agriculture (MoA), to work hand-in-hand as the leading sectors in realising climate-adaptable programs. However, Widodo dissolved the NCCC, and its authorities were delegated to the four executive offices mentioned above.

Arguably, this institutional reconfiguration invigorates human security from the current Indonesian climate-security perspective. The former Minister of National Development Planning, Bambang Brodjonegoro, is the key architect of Widodo’s human security-led climate change development policy. According to Brodjonegoro (cited from Ministry of National Development Planning 2019), climate change will dramatically affect Indonesia. In 2100 the national temperature will increase by 1.5 °C, likely leading to more intense extreme weather events. These climate conditions will cause hydro-meteorology hazards, such as floods, droughts, landslides, a reduction in agricultural products, and narrowing areas for fishery activities. Furthermore, Brodjonegoro emphasises that they will affect Indonesia’s economic growth if left unresolved. Regarding Widodo’s maritime development orientation, global warming will affect maritime sectors, particularly with the projection of a temperature rise of 0.25 °C between 2006 and 2040, accompanied by extreme sea waves. These conditions will influence biodiversity, whiten coral reefs, and affect people living in coastal areas (cited from the Ministry of National Development Planning 2019). This statement also suggests a significant recognition of the ecological consequences of climate change.

Furthermore, Brodjonegoro (cited from Ministry of National Development Planning 2019) understands that climate change poses unique challenges to Indonesia, particularly the inherent uncertainties of future climate projections, and the intricate relationships among climate change, physical and biological systems and food security. Scholarly works on the impact of climate change on food security in Indonesia, such as that of Rizal and Anna (2019), confirm that coastal or marine local governments and societies cannot meet the potential challenges coming from climate and extreme weather hazards, primarily associated with sea-level rise, warmer water temperatures, storms, and hurricanes. The Ministry of National Development Planning’s report on climate change control programmes in 2018 explains that 18,000 miles of Indonesia’s coastline have been impacted by climate change. In practical ways, Brodjonegoro (cited from the Ministry of National Development Planning 2019) underlines the importance of low carbon development as the instrument to achieve emission reduction and Indonesian economic growth targets.

This idea is supported by the National Disaster Management Desk (NDMD), a state agency directly commanded by the president. Its role is essential for the climate security agenda, to design and apply national standard procedures for disaster prevention, mitigation, reconstruction, and rehabilitation. The NDMD is also responsible for giving the public information about disaster occurrences and organising necessary activities associated with disaster relief. An official report of the NDMD, published in 2018 (Monardo 2018: 95), notes that Indonesian coastal areas are increasingly vulnerable to various extreme weather hazards. In the long run, they can elevate the risk of natural and social destruction, because of the weak disaster resilience of most of the local communities in the country (Monardo 2018: 128–129). The Director of Disaster Risk Reduction, Raditya Jati, underscored the challenges of poverty, environmental degradation, global warming, and natural disasters in his institution's work plan for 2020 to 2025. The disaster resilience framework must be brought down to the local apparatus, especially village-level administration (National Disaster Management Desk 2019).

The relationship between climate change and the economic component of human security is the top priority in the strategic planning of the Ministry of Ecology and Forestry. The ministry focuses on GHG emission reduction by implementing programmes to control deforestation and forest destruction. According to the Minister of Ecology and Forestry, Siti Nurbaya, (cited from Ministry of Ecology and Forestry 2018), the derivative impacts of climate change, such as a shift in biodiversity, an explosion of plant and animal disease, and peatland forest fires, would adversely affect economic productivity of local communities. Therefore, the Ministry has, since 2015, worked on programmes known as *kehutanan sosial* (social forestry), which is an instrument to help people living in and surrounding the forest to prosper. In line with this programme, Law Number 23/2014 on Local Governance asks the central government to undertake strategic ecological studies throughout the country to help local governments map, assess, and design policies toward improving the quality of the environment and realising sustainable development goals. The Ministry of Agriculture complements social forestry with food security. It builds projects related to climate vulnerability control efforts, consisting of two elements: climate forecasts and delivery systems.

Besides 'the views and approaches to the climate-security nexus of such leading sectors, other state institutions also embrace climate change in their policy discourse. For instance, the Ministry of Defence clearly expresses its position on climate change in the 2015 Defence White Paper. The paper holds that "global climate change impacts human life and environment." Environmental changes, like rising temperatures and sea levels, as well as extreme weather events have a direct and indirect impact on the basic needs of human beings, especially food, water, health, and energy. Therefore, climate change will affect security issues indirectly. Nonfulfillment of human life's basic needs will disrupt resilience and environment adaptability leading to insecurity. It also affects the dynamics of politics, economy, water, and food crisis, the emergence of pandemic disease, the migration, and conflict (Ministry of Defense 2015: 16).

Other direct causes of threat include border issues, internal conflict or civil war, weapons of mass destruction, terrorism, and transnational crime. The major security focus lies on the power dynamics in the Asia Pacific region or the South China Sea disputes. The highest priority of the Indonesian defence establishment is the modernisation of the Armed Forces (Ministry of Defense 2015). Lately, under Defense Minister Prabowo Subianto, the defence policymakers have acknowledged the need to integrate climate resilience into future military modernisation programmes. The Ministry of Defence recognises the significance of other non-climate security threats. However, it does not address how climate change and the different kinds of traditional and non-traditional security issues affect each other, and how the relevant stakeholders should apply the feasible strategies to answer the multiple threats.

Overall, we notice that different policymaking institutions apply synergised approaches to managing Indonesia's climate security. However, overlaps are unavoidable, which indicates the magnitude of the challenges and the limits of policy responses that the government can take. The leading sectors draw primarily on human security, in which the social and economic aspects of national development receive much attention. This climate policy is followed by the environmental protection agenda in some areas of governance, while the state-centric security elements responses to the climate threat are substantially missing.

8.2.2 Criticisms of the NGOs: What Went Wrong with Widodo's Human Security and Development Approaches

As mentioned earlier in the introductory section, we also explored the responses of NGOs to the government's climate security policies and actions. This is important, because the non-state actors highlight critical issues neglected by the government; in other words, there are significant problems that have not been touched through Widodo's pro-human security campaign. Furthermore, by understanding the gap between the state-based and non-state-oriented approaches, we can assess the limits of Widodo's climate role projection.

Indeed, in the eyes of the Environmental NGOs, the Widodo government has not done enough to protect the environment and affected populations from the harms of climate change, particularly in terms of the norm and legal enforcement. Wahana Lingkungan Hidup Indonesia/WALHI is the oldest and largest Environmental NGO in the country, founded in 1980. WALHI's central office is located in Jakarta, where it organises nation-wide advocacy to save the local environment and communities from business exploitation and government repression. It is critical of Widodo's development policy orientation, which is considered as neglecting and destroying the environment. WALHI regards Widodo as sustaining the destructive developmental paradigm based on corporate interests, which is responsible for causing high

GHG emissions, leading to global warming and climate change.² WALHI notes that Indonesia is one of the largest sources of GHG emissions, derived mainly from forest and peat fires, energy generation, and industrial activities (Farid 2019). According to WALHI, Indonesia must be consistently engaged in global emission reduction efforts as a signatory of the Paris Agreement. In fact, over the first tenure of Widodo (2014–2019), WALHI did not see any progressive moves toward the Paris target of emissions reduction being made by the government (Farid 2019). The most obvious thing to WALHI (Sidqi 2019) is that the government has no comprehensive climate-law enforcement mechanisms to ensure that development, environment, and politics can work hand-in-hand. Hence, WALHI suggests that Widodo refers to the IPCC's reports on managing climate change issues in the country.

Aliansi Masyarakat Adat Nusantara (AMAN) expresses almost the same view as that of WALHI, focusing on the empowerment of the roles of the *Masyarakat adat* (customary community) as an important stakeholder in climate policymaking and forest conservation. This position reflects AMAN's general mission, which is to represent and protect the interests of local communities throughout the country.³ Abdon Nababan, AMAN's former secretary-general, argues that the government's long-held development thinking and strategy, dominated by corporate actors, has marginalised the existence and activity of local communities. In fact, the local communities are the owners of about 57 million hectares of natural forest throughout the country, 40% of which is still in good condition. To support the government's programmes on climate change mitigation, Nababan suggests that Widodo has to acknowledge and protect the rights of local communities to manage their forests. Therefore, an urgent task for the government is to complete the mapping of the local communities' forests in the One Map Policy and finalise the regulations on the locals' rights (Saturi 2015). Furthermore, AMAN demands that Widodo regulate *adat* affairs in state law. Through the Ministry of Ecology and Forestry (2020), the government responded positively to AMAN's proposal and promised to proceed with law-making on the community forest. However, up to the time of writing this chapter, the *adat* law has not yet come about, confirming the lack of political will of the president and the parliament in supporting the local communities' interests and rights.

² WALHI explicitly expresses these views on its webpage (<https://www.walhi.or.id/>) in response to the development of various climate and environment-related issues involving the current government and business actors. The latest text about climate change is a criticism of Widodo's speech at the 26th Conference of the Parties, held in Glasgow in November 2021, which did not mention the importance of the roles of local communities in handling the impacts of climate change. Therefore, according to WALHI, Widodo's climate approach is elitist and not inclusive (available at: <https://www.walhi.or.id/masyarakat-sipil-tanggapi-pidato-jokowi-di-cop-26>).

³ AMAN was established in 1999 following the First National Congress of Local Communities, conducted in Jakarta. On its webpage, AMAN claims to represent over 2700 local communities in Indonesia, covering about 17 million indigenous people (available at: <https://www.aman.or.id/profile-kami>).

On Widodo's environmental policy, Greenpeace Indonesia (2019)⁴ highlights two crucial sectors that must be improved – energy and forestry – so that Indonesia can take part in the global climate change mitigation agenda. Greenpeace Indonesia (GI) notes that the environment and climate change were not governed well over the first administrative period of Widodo. The concentration on infrastructure and industrialisation reduced attention to the impacts of climate change, such as increased sea levels, extreme droughts, heavy floods, declining agricultural products, tropical storms, and air pollution, which are now becoming critical problems to Indonesians. GI also reminds Widodo of his international commitment to reduce Indonesia's GHG emissions by 41% by 2030. This target will be unachievable if the currently high figures of fossil fuel use, especially from coal (58% of total national energy use) and deforestation (three million hectares per year since 2004), are not suppressed. Like WALHI and AMAN, GI is firmly in favour of a change in the government's development paradigm, to which the operation of corporations should be confined.

These critical views of the government's climate change approaches imply that although Widodo has tried to invigorate values and campaigns for human security, these have not yet met the ideal concept and expectation of the affected segments of the society. All three NGOs selected in this study believe that human security requires a more comprehensive and bottom-up policymaking process. The government has to accommodate the non-state stakeholder voices substantively. The struggle for upholding human security governance needs to be accompanied by a pro-people development orientation. Major Indonesian environmental NGOs are agreed in their disapproval of how Widodo manages climate change, indicating the existing poles of unbridged interests between the state and non-state climate actors. The government has its version of human security-led climate policy, and the NGOs oppose it. These contending positions extend to the recent debate on Widodo's new capital city construction project.

8.3 The Capital City Move Project and the Climate-Security Debate

After being re-elected in the 2019 presidential election, Widodo announced a plan to move the state's capital city from Jakarta to East Kalimantan. The precise location where the new capital will be constructed is between the Penajam Paser Utara and Kutai Kartanegara Regencies. Widodo and his cabinet members explained that the impacts of climate change, among other things, were the reasons why Indonesia must have a new capital city. The climate-security nexus matters here because human and

⁴ Greenpeace Indonesia is the local branch of the worldwide Greenpeace environmental movement, formally present in Jakarta since 2005. As part of the global network of "greening the globe" advocacy, Greenpeace Indonesia focuses on conserving marine biodiversity and traditional forest areas damaged by industrial pollution and global warming (<https://www.greenpeace.org/indonesia/sejarah-greenpeace/>).

ecological security issues have plagued Jakarta's current capital city for many years. The costs needed to sort out the urban problems would be much higher than the expected benefits. Thus, moving the capital to a new place is the better option. The government's leading climate policy sectors have contributed to constructing the logic of the urgency for relocating the capital city outside crowded Jakarta and the Java Island.

According to Widodo, "Jakarta is already overloaded as the centre of administration, business, trade, finance, and service" (cited from Ihsannudin 2019). Additionally, the president mentions that "Java Island, where about 150 million people or 54% of the Indonesian population live, is also overpopulated". Thus, the demographic burden the island must bear is too heavy. Moreover, Widodo said that Java is getting more troubled by traffic congestion and air and water pollution, which must be urgently overcome (cited from Ihsannudin 2019). The Minister of National Development Planning (cited from Debora 2019) added that climate change harms Jakarta, where a gradual sea level rise of about 4–6 cm will sink the city. This is exacerbated by the cycles of uncontrollable floods coming to Jakarta every ten years. The Minister of National Development Planning notes that a well-ordered city faces floods only every 50 years, so Jakarta faces worse environmental situations.

These climate change and demography-related explanations align with academic studies that demonstrate the vulnerabilities to Jakarta brought by climate change. Firman et al. (2011: 372) discovered that the most visible effect of climate-related disasters on Jakarta is more frequent heavy rainfalls which inundate both the metropolitan's upper and lower areas. The flooding paralyses economic activity, brings about significant infrastructure damage, and results in human victims. This happened in 2002, 2007, 2013 and 2014 (Budiyono et al. 2016: 757) and the flood in early January 2020 submerged about 300 populous areas, including the trade and administrative centres of the city (CNN Indonesia 2020). The provincial government of Jakarta has planned and implemented flood reduction and adaptation measures, consisting of physical engineering, public resettlement, and social rehabilitation programmes, all aimed at improving resilience toward flood risks. However, the planning and implementation of the approaches are less transformational to the current social, economic, and environmental conditions. The planned projects would only control the flood hydrology, but could not strengthen the city's physical capacity to cope with future cycles of disastrous events (Garschagen et al. 2018).

The central government further argued that the relocation of the capital city to East Kalimantan has a lot to do with efforts to address the longstanding problem of economic inequality between Java and regions outside Java. Widodo notes that Java's width area is only a quarter of that of Kalimantan but is home to 60% of the country's economic activities. At the same time, Kalimantan has only a tenth of the gross national production (The Guardian 2019). New capital construction will cost approximately USD 33 billion or IDR 466 trillion. A consortium, consisting of the government and private investors, will share this budget, which means that there will be opportunities for big businesses to participate in the various construction projects in East Kalimantan. The long-term objective is to stimulate and boost investment in the Eastern regions of the country. The green economy and environmentally safe

technology will be two crucial elements of development, underlined by Widodo's economic ministers in selecting the prospective partners to build the megaproject, making the investment contracts, and implementing the construction plans (Rahman 2019).

Despite its pronounced benefits for the nation's future, Widodo's new capital plan is questioned by environmentalists concerned about the possible dangers to the rainforests and wildlife of Kalimantan caused by various kinds of infrastructure construction and pollution (Poon 2019). WALHI and other environmental NGOs, such as AMAN, Forest Watch Indonesia, and Greenpeace Indonesia, are critical of the perceived illegitimate planning of the new capital. They assert that the government, particularly the Ministry of National Development Planning, does not engage local communities as the owners of the lands where Widodo's planned capital city will be realised. The decision was made by a few politicians and business elites who already held extractive rights over the forests in East Kalimantan. Therefore, should the construction projects begin, the oligarchs would be the first to enjoy huge profits from many deals. On the other hand, the interests of the indigenous populations would be sacrificed, including their natural ecosystems and cultural heritages (Greenpeace Indonesia 2019; Hutagaol 2019; WALHI 2019). In addition, WALHI reports that there is no comprehensible position on the important aspects of the environment that will be affected. The new capital city will be below sea level, where deforestation is relatively high, forest fires have frequently occurred, and extreme weather events have increased since the 1980s. The environmental situations in East Kalimantan are no better than those in Jakarta. Thus, it is almost certain that the old capital city problems will be moved to East Kalimantan, which has been troubled by the ecological loads of the forestry and mining industries. Instead, the critics urge Widodo to prioritise the ongoing programmes to resolve the problems of Jakarta and Java Island (Utama 2019; Sucahyo 2020).

Widodo promises to keep on paying attention to improving Jakarta's environmental conditions while the new capital city planning is being completed (Saputri 2022). The Minister of Public Construction and Housing, Basuki Hadimuljono, (cited from Situmorang 2020) announced that the planning of the new capital would be harmonised with the environmental protection policy, with the concept of a "green city". Other government officials promise a "forest city" concept. However, the government's explanations do not satisfy the opposing parties. The disagreement even expands into the more complex network of issues encompassing energy, transportation, and the technological divide. The outbreak of COVID-19 disrupted the capital city move debate. Widodo had to divert the state budget allocated for the new capital to manage the pandemic crisis. The construction project, planned to begin in June 2020, was postponed, considering the prolonged effects of the coronavirus. However, in January 2022, Widodo and the parliament agreed to start the project. One month later, Widodo signed a law as the legal basis for his ambitious infrastructure construction. Environmental experts and NGOs warn about the severe consequences of climate change to the spread of a future pandemic, and warn the government to concentrate on the multidimensional problems of the current virus.

8.4 Indonesia's Climate Position in the UNSC: Balancing Human and Ecological Security

In domestic climate politics, the Widodo government prioritises human security. On the international front, however, the human and ecological security aspects are relatively balanced. The document of the Strategic Plan for 2015–2019 of the Ministry of Foreign Affairs (2015: 1, 3, 6, 8) states that climate change, environmental degradation, and natural disasters are challenges with both global and local impacts. The climate security concerns and approaches of the leading domestic climate policy sectors are adapted to direct the foreign policy within the global climate diplomacy fora. One which is clearly stated is the danger of extreme weather events, sea-level rise, and warmer temperatures which will disrupt the economic productivity of a broad segment of local communities in the country (Ministry of Foreign Affairs 2015: 12). Climate change is categorised as a severe non-traditional security threat to Indonesia and world society (Ministry of Foreign Affairs 2017: 17). Therefore, Indonesia should actively participate and take on its leadership role in climate multilateralism, with a special focus on protecting the interests of developing countries (Ministry of Foreign Affairs 2015: 16). This pro-environment agenda is maintained in the state's international outlook for 2020–2024 (Ministry of Foreign Affairs 2020a: 8), reflecting the Widodo government's consistency with its earlier defined climate policy objectives.

Indonesia's non-permanent membership of the UNSC between 2019 and 2020 provided good diplomatic opportunities to pursue its commitment to advancing global climate change mitigation and adaptation initiatives. This was not the first, but the fourth time Indonesia had been elected a non-permanent member of the Council. Previously, Indonesia was appointed in 1974–1975, 1995–1996, and 2007–2008. Generally, the Indonesian government used its position in the UNSC to speak about peace and security problems related to the Third World nations. In its latest presidencies of the UNSC in 2019 and 2020, Indonesia promoted the settlements of international security issues, such as terrorism and transnational crimes, violence in conflict zones, and protection of civilians in war-torn societies (Ministry of Foreign Affairs 2019a, 2020). In addition, climate change was also discussed as an important means for sustaining peace.

When attending the UNSC climate debate sessions in January 2019, Foreign Minister Retno Marsudi affirmed that Indonesia would sustain its engagement with other UN member countries to manage the harmful effects of global warming and climate change (Hadyan 2019). Marsudi underscored the UNSC's important role in improving the UN member states' capacity to adapt to climate change impacts, especially in the low-lying island countries, where the rise in sea level is becoming an increasingly alarming challenge (AntaraNews 2019). Furthermore, Marsudi suggested that the UNSC must develop a security approach to climate change consisting of three interrelated elements. Firstly, the climate peace mission, in which the UNSC has to consolidate international operations related to post-disaster reconstruction and rehabilitation programmes. The UN peacekeeping missions should be

equipped with climate change adaptation measures besides the traditional military ones. According to Marsudi, Indonesia would be happy to share its experiences with this operation. Secondly, peacekeeping and peacebuilding should be conducted to realise the link between development and peace: the two concepts are inseparable in managing the effects of global warming. Thirdly, climate change mitigation and adaptation should be carried out by states, but the role of regional organisations should be improved to foster cooperation. As a result, the Council needed to better understand the security dimension of climate change. All UN agencies needed to be included in their respective mandate, and “while the Security Council could deal with the security dimensions of climate change, the UNFCCC should remain the leading forum to address climate change. Finally, Marsudi urged that “upholding the Paris Agreement on climate change is vital” (United Nations Security Council 2019).

During the UNSC Arria-Formula meeting in 2020, Indonesia again underlined the importance of avoiding duplication of efforts and the coordination between all UN entities. According to the Indonesian Representative to the UN (Djani 2020), a better understanding of the interconnected factors influencing vulnerability was crucial to finding solutions, as well as the support of knowledge production within the UN system. Still, the implementation of the Paris Agreement is central for Indonesia; therefore, the Indonesian representative emphasised that as “[p]revention is far more effective than the cure, collectively we need to enhance climate mitigation and adaptation capacities of national and local authorities in [a] balance[d] and equal manner”- (Syihab 2020). This expression reflects Indonesia’s more complex understanding of climate change and its security consequences. The Ministry of Foreign Affairs (2019) relates Indonesia’s vulnerability as an archipelagic country to climate change. This is on account of five challenging circumstances leading to the severe impacts of climate calamity: (1) a high number of inhabitants in coastal areas; (2) the extensive coastlines and coastal areas; (3) Indonesia consists of small islands; (4) it has extensive areas of marine and forest ecosystems; and (5) it is prone to the occurrence of a climate change-related disaster.

Since climate change has been perceived as an important non-traditional security threat, Indonesia sought to synergise the international efforts to create peace with sustainable development programmes as an interrelated element of the global climate policy. Indonesia recommended the establishment of a worldwide partnership to discuss the security implications of the economy, public health, and the environment, in which climate change would be incorporated. This tendency is reflexive of Widodo’s foreign policy doctrine and objective, in which climate change receives increasing significance. Climate change is regarded as the reason why external relations must be improved and strengthened. At the same time, economic development continues to occupy an important place in the discourse and conduct of the country’s international relations. The Widodo government’s maritime vision integrated climate change and global warming as the most urgent security problems to be coped with, besides others associated with challenges such as maritime territorial disputes, a weak defence system, resource exploitation, and disturbance to the line of communications (Coordinating Ministry of Maritime and Resource Affairs 2017). Although it is difficult to think of how such complex international activism will be undertaken,

the incorporation of human and ecological security discourses on climate change into Indonesia's statements in the UNSC could indicate Jakarta's enthusiasm to become part of the club of responsible environmental actors.

8.5 Conclusion

After observing threat perceptions and approaches of the leading climate policy sectors of the Widodo administration, we conclude that it places human security at the top of domestic climate priorities. However, the crucial elements of ecological security are also embraced in some governance areas. At the international level, however, we can see that the human and environmental security aspects of climate change are relatively balanced and equal, suggesting parallel features of Indonesia's initiatives on global climate agendas. Hence, what we have argued earlier in the introduction section as the practical interrelationship between the various security concepts of climate change is confirmed. Historically, there was an occasion when the Suharto government framed global warming as a threat to state security in North-South relations. Later, since Indonesia democratised, the human and ecological security components have received greater attention from the government, demonstrated by various initiatives to mitigate and adapt to the impacts of climate change. Recently, Widodo's plan to move the capital city from Jakarta to East Kalimantan has also been underpinned by either human or ecological security arguments.

The environmental NGOs are critical of the Widodo government's climate policy, which is seen as destructive rather than protective. Furthermore, the construction of the new capital city is rejected due to its potential harm to the indigenous peoples' forest ecosystems and the livelihoods of those living in the megaproject location. These contending positions reflect the disconnection between the state and non-state stakeholders in Indonesian climate policymaking, although both sides display similar concerns about climate change impact threats. Ideally, from the human security perspective, the two climate actors should go hand-in-hand. However, the environmental NGOs' opposition to Widodo's climate policy suggests that the government's version of human security is incomplete, because it does not include the participation and aspirations of the local communities. Moreover, Widodo maintains development policies that could endanger the interests of the traditional forest communities in particular.

For future research, the issue of why the Widodo government seems to be more enthusiastic about promoting ecological security globally, rather than domestically, is puzzling. Therefore, it is worth proposing an inquiry to find out what is behind the current government stance of taking on an asymmetrical treatment of human and environmental security in domestic climate politics, but upholding symmetry of human and ecological security in multilateral climate diplomacy.

References

- AntaraNews, 2019: “Menlu minta Dk Pbb lebih tanggap dampak perubahan iklim” [Foreign Minister Asks the UNSC to Respond to Climate Change]; at: <https://www.antaranews.com/berita/791849/menlu-minta-dk-pbb-lebih-tanggap-dampak-perubahan-iklim>.
- Barnett, Jon; Adger, W. Neil, 2007: “Climate Change, Human Security and Violent Conflict”, in: *Political Geography*, 26,6: 639–55.
- Budiyo, Yus; Aerts, Jeroen C. J. H.; Tollenaar, Daniel; Ward, Philip J., 2016: “River Flood Risk in Jakarta under Scenarios of Future Change”, in: *Natural Hazards and Earth System Sciences*, 16,3: 757–74.
- Butt, Simon; Lyster, Rosemary; Stephens, Tim, 2015: *Climate Change and Forest Governance: Lessons from Indonesia* (London: Routledge).
- Cabinet Secretariat of the Republic of Indonesia, 2015: “Presiden Jokowi Sampaikan Komitmen Indonesia Turunkan Emisi 29%”; at: <https://setkab.go.id/presiden-jokowi-sampaikan-komitmen-indonesia-turunkan-emisi-29/>.
- Campbell, Kurt M. (Eds.), 2009: *Climatic Cataclysm: The Foreign Policy and National Security Implications of Climate Change* (Washington, DC: Brookings Institution Press).
- Case, Michael; Ardiansyah, Fitriani; Spector, Emily, 2007: “Climate Change in Indonesia: Implications for Humans and Nature”, in: Indonesian Climate Change Impacts Report 14 Nov 07 (Godalming: World Wide Fund for Nature, UK [WWF]); at: http://awsassets.panda.org/downloads/indonesian_climate_change_impacts_report_14nov07.pdf.
- CNN Indonesia, 2020: “Daftar Lokasi Terendam Banjir Jakarta Dan Sekitarnya” [Lists of Locations Soaked by Floods in Jakarta and the Surrounding Areas] (Jakarta: CNN); at: <https://www.cnnindonesia.com/nasional/20200101100802-20-461539/daftar-lokasi-yang-terkena-banjir-jakarta-dan-sekitarnya>.
- Coordinating Ministry of Maritime and Resource Affairs, 2017: “National Maritime Policy” (Jakarta: Ministry of Maritime and Resource Affairs).
- Debora, Yantina, 2019: “Alasan Pemerintah Pindahkan Ibu Kota Negara” (The Government’s Reason to Move Capital) in: *Tirto.id* at: <https://tirto.id/alasan-pemerintah-pindahkan-ibu-kota-negara-dnkn>.
- Department of Foreign Affairs, 1996: Kebijakan Politik Luar Negeri Republik Indonesia Menghadapi Kritik Barat Di Bidang Lingkungan Hidup Dan Tantangannya Bagi Indonesia [Indonesia’s Foreign Policy in the Face of Western Criticism on Environmental Issues and Their Challenges to Indonesia] (Jakarta: Hasil kerjasama Proyek Penelitian dan Pengembangan Politik Luar Negeri, Badan Litbang, Departemen Luar Negeri dengan Jurusan Hubungan Internasional, Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Indonesia).
- Djalante, Riyanti; Jupesta, Joni; Aldrian, Edwin, 2021: *Climate Change Research, Policy and Actions in Indonesia: Science, Adaptation and Mitigation* (Cham: Springer Nature Switzerland).
- Djani, Dian T., 2020: “Statement at the Arria-Formula Meeting on Peacekeeping Impact on Peace Building and Sustaining Peace” (New York: Ministry of Foreign Affairs); <https://kemlu.go.id/newyork-un/en/read/statement-at-the-arria-formula-meeting-on-peacekeeping-impact-on-peacebuilding-and-sustaining-peace/2883/etc-menu>.
- Elliott, Lorraine, 2015: “Human Security/Environmental Security”, in: *Contemporary Politics*, 21,1: 11–24.
- Elliott, Lorraine; Caballero-Anthony, Mely, 2013: *Human Security and Climate Change in Southeast Asia: Managing Risk and Resilience* (Abingdon: Routledge).
- Farid, Ahmad J. Q., 2019: “Walhi Kritik Jokowi Karena Abai Terhadap Isu Lingkungan” [Walhi Criticizes Jokowi for Ignorance of Environmental Issue], in: *Gatra.com*; at: <https://www.gatra.com/detail/news/430213/ekonomi/walhi-kritik-jokowi-karena-abai-terhadap-isu-lingkungan>.
- Firman, Tommy; Surbakti, Indra M.; Idroes, Ichzar C.; Simarmata, Hendricus A., 2011: “Potential Climate-Change Related Vulnerabilities in Jakarta: Challenges and Current Status”, in: *Habitat International*, 35,2: 372–78.

- Garschagen, Matthias; Surtiari, Gusti A.; Harb, Mostapha, 2018: "Is Jakarta's New Flood Risk Reduction Strategy Transformational?", in: *Sustainability*, 10,8.
- Government of the Republic of Indonesia, 2011: "Masterplan Percepatan Dan Perluasan Pembangunan Ekonomi Indonesia" [Masterplan of Acceleration and Expansion of Indonesian Economic Development] (Jakarta: Government of the Republic of Indonesia); at: <https://www.indonesia-investments.com/projects/government-development-plans/masterplan-for-acceleration-and-expansion-of-indonesias-economic-development-mp3ei/item306>.
- Government of the Republic of Indonesia, 2016: "First Nationally Determined Contribution Republic of Indonesia"; at: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Indonesia%20First/First%20NDC%20Indonesia_submitted%20to%20UNFCCC%20Set_November%20%202016.pdf.
- Greenpeace Indonesia, 2019: "Dua Pesan Utama Greenpeace Untuk Periode Kedua Jokowi" [Two Messages of Greenpeace for Jokowi's Second Term]; at: <https://www.greenpeace.org/indonesia/siaran-pers/4071/dua-pesan-utama-greenpeace-untuk-periode-kedua-jokowi/>.
- Greenpeace Indonesia, 2019a: "Tanggapan Greenpeace Indonesia Terhadap Rencana Pemindahan Ibu Kota Ke Kalimantan Timur" [Greenpeace Indonesia's Response to the Capital City Move Plan to East Kalimantan]; at: <https://www.greenpeace.org/indonesia/siaran-pers/3652/tanggapan-greenpeace-indonesia-terhadap-rencana-pemindahan-ibu-kota-indonesia-ke-kalimantan-timur/>.
- Hadyan, Rezha, 2019: "Menlu Retno Singgung Masalah Perubahan Iklim Di Debat Terbuka Dk Pbb" [Foreign Minister Retno Talks of Climate Change in the Open Debate Meeting of UNSC], in: *Kontan.co.id*; at: <https://internasional.kontan.co.id/news/menlu-retno-singgung-masalah-perubahan-iklim-di-debat-terbuka-dk-pbb>.
- Hardt, Judith Nora, 2017: *Environmental Security in the Anthropocene* (London: Routledge).
- Harris, Paul G. (Ed.), 2007: *Europe and Global Climate Change: Politics, Foreign Policy and Regional Cooperation* (Cheltenham, UK: Edward Elgar).
- Hutagaol, Sarah, 2019: "Walhi Kritik Rencana Pemerintah Pindahkan Ibu Kota" [Walhi Critizes the Government's Plan to Relocate the Capital City], in: *Okezone.com*; at: <https://nasional.okezone.com/read/2019/08/01/337/2086379/walhi-kritik-rencana-pemerintah-pindahkan-ibu-kota>.
- Ihsannudin, 2019: "Presiden Jokowi Ungkap Alasan Mengapa Ibu Kota Harus Pindah" [President Jokowi Reveals the Reasons Why Capital Must Be Moved], in: *Kompas.com*; at: <https://nasional.kompas.com/read/2019/08/26/13475951/presiden-jokowi-ungkap-alasan-mengapa-ibu-kota-ri-harus-pindah?page=all>.
- Intergovernmental Panel on Climate Change, 2022: "Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change" (Geneva: IPCC); at: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_FinalDraft_FullReport.pdf.
- Kaneko, Shinji; Kawanishi, Masato (Eds.), 2016: *Climate Change Policies and Challenges in Indonesia* (Tokyo: Springer).
- Kumolo, Tjahjo, 2017: *Nawa Cita Untuk Kesejahteraan Rakyat Indonesia: Integrasi Pembangunan Nasional Dan Daerah* [Nawa Cita for the Prosperity of the Indonesian People: Integration of National and Local Development] (Jakarta: Penerbit Buku Kompas).
- McDonald, Matt, 2018: "Climate Change and Security: Towards Ecological Security?", in: *International Theory*, 10,2: 153–80.
- Ministry of Defense, 2015: *Indonesian Defence White Paper* (Jakarta: Ministry of Defence of the Republic of Indonesia); at: <https://www.kemhan.go.id/wp-content/uploads/2016/05/2015-INDONESIA-DEFENCE-WHITE-PAPER-ENGLISH-VERSION.pdf>.
- Ministry of Ecology and Forestry, 2018: "Perhutanan Sosial: Aksi Nyata Hadapi Perubahan Iklim" [Social Forestry: Concrete Actions to Face Climate Change]; at: https://www.menlhk.go.id/site/single_post/1200.
- Ministry of Ecology and Forestry, 2020: "Peran Masyarakat Adat Dalam Menanggulangi Dampak Perubahan Iklim" [The Role of Adat Society in Mitigating Climate Change Impact]. <http://ditjenppi.menlhk.go.id/dari-media/339-peran-masyarakat-adat-dalam-penanggulangan-dampak-perubahan-iklim.html>.

- Ministry of Foreign Affairs, 2015: “Rencana Strategis 2015–2019” [Strategic Plan 2015–2019] (Jakarta: Ministry of Foreign Affairs); at: <http://www.bpkp.go.id/public/upload/unit/lampung/files/Renstra15.pdf>.
- Ministry of Foreign Affairs, 2017: “Regional Policy Performance Rupert” (Jakarta: Ministry of Foreign Affairs).
- Ministry of Foreign Affairs, 2019: “Climate Change”; at: <https://kemlu.go.id/portal/en/read/96/view/perubahan-iklim>.
- Ministry of Foreign Affairs, 2019a: “Lensa Satu Tahun Indonesia Id Dewan Keamanan Pbb” [Lenses of Indonesia’s One Year Membership in the UNSC] (Jakarta: Ministry of Foreign Affairs).
- Ministry of Foreign Affairs, 2020: “Presidensi Dewan Keamanan Pbb Indonesia Agustus 2020” [Indonesia’s Presidency in the UNSC in August 2020]; at: <https://kemlu.go.id/vancouver/id/news/7921/presidensi-dewan-keamanan-pbb-indonesia-agustus-2020>.
- Ministry of Foreign Affairs, 2020a: “Rencana Strategis 2020–2024” [Strategic Plan 2020–2024] (Jakarta: Ministry of Foreign Affairs); at: <https://www.kemenperin.go.id/download/25739/Renstra-Pusdatin-2020-2024>.
- Ministry of National Development Planning, 2019: “Temperatur Nasional Diprediksi Meningkat 1,5 Derajat Celsius Di Tahun 2100, Indonesia Dorong Mitigasi Perubahan Iklim Dengan Green Climate Fund” [National Temperature Is Predicted to Rise 1.5 Degree Celsius Di Tahun 2100, Indonesia Calls for Climate Change Mitigation through Green Climate Fund]; at <https://www.bappenas.go.id/index.php/berita/temperatur-nasional-diprediksi-meningkat-15-derajat-celsius-di-tahaun-2100-indonesia-dorong-mitigasi-perubahan-iklim-dengan-green-climate-fund>.
- Monardo, Doni, 2018: “Laporan Kinerja Tahun 2018” [Annual Report of 2018] (Jakarta: National Disaster Management Desk); at: <http://assets.redplanetindonesia.com/files/2019/20190430-Annual%20Report%202018%20RPI.pdf>.
- National Disaster Management Desk, 2019: “Bnpb Menggelar Lokakarya Penilaian Indeks Kethanan Daerah Dalam Rangka Penurunan Risiko Bencana” [Ndmd Holds Workshop on Assessment of Resilience Index to Reduce Disaster Risk]; at: <https://www.bappenas.go.id/index.php/berita/temperatur-nasional-diprediksi-meningkat-15-derajat-celsius-di-tahaun-2100-indonesia-dorong-mitigasi-perubahan-iklim-dengan-green-climate-fund>.
- Nomura, Ko, 2007: “Democratisation and Environmental Non-Governmental Organisations in Indonesia”, in: *Journal of Contemporary Asia*, 37,4: 495–517.
- Poon, Linda, 2019: “Why Indonesia’s Capital Move Has Environmentalists Worried” (Washington, D.C.: Bloomberg); at: <https://www.citylab.com/environment/2019/08/indonesia-new-capital-borneo-jakarta-sinking-environment/596824/>.
- Rahman, Razi M., 2019: “Pemindahan Ibu Kota Sebagai Pemerataan Stimulus Ekonomi” [the Relocation of Capital City as a Means to Create Economic Equality], in: *ANTARANews.com*; at: <https://www.antaranews.com/berita/985144/pemindahan-ibu-kota-sebagai-pemerataan-stimulus-ekonomi>.
- Rizal, Achmad; Anna, Zuzy, 2019: “Climate Change and Its Possible Food Security Implications toward Indonesian Marine and Fisheries”, in: *World News of Natural Sciences*, 22: 119–28.
- Saputri, Dessy S, 2022: “Meski Bangun Ikn, Jokowi Tekankan Akan Tetap Benahi Jakarta” [Although Developing Ikn, Jokowi Pledges to Continue to Improve Jakarta], in: *Republika.co.id*; at: <https://www.republika.co.id/berita/r8jul4485/meski-bangun-ikn-jokowi-tekanakan-akan-tetap-benahi-jakarta>.
- Saturi, Sapariah, 2015: “Pelibatan Masyarakat Adat Bisa Jadi Jurus Ampuh Atasi Perubahan Iklim” [The Involvement of Adat Society Can Be an Effective Way to Manage Climate Change], in: *Mobgabay.com*; at: <https://www.mongabay.co.id/2015/12/06/pelibatan-masyarakat-adat-bisa-jadi-jurus-ampuh-atasi-perubahan-iklim>.
- Sidqi, Almer, 2019: “Walhi Minta Jokowi Adopsi Laporan Ipcc” [Walhi Asks Jokowi to Adapt IPCC’s Report], in: *Gatra.com*; at: <https://www.gatra.com/detail/news/436440/politik/susun-kebijakan-walhi-minta-jokowi-adopsi-laporan-ipcc>.
- Situmorang, Anggun P., 2020: “Ramah Lingkungan, Begini Gambaran Konsep Ibu Kota Baru” [Environmental Friendly, This Is the Concept of the New Capital], in: *Liputan6.com*;

- at: <https://www.liputan6.com/bisnis/read/4176609/ramah-lingkungan-begini-gambaran-konsep-ibu-kota-baru>.
- Sucahyo, Nurhadi, 2020: "Potensi Bencana Mengiringi Pemindahan Ibu Kota Negara" [Potential Disasters Follow the Capital City Shift], in: *VOA*; at: <https://www.voaindonesia.com/a/potensi-bencana-mengiringi-pemindahan-ibu-kota-negara/5637479.html>.
- Sukma, Rizal, 2003: "Democratic Governance and Security in Indonesia", in: *Japanese Journal of Political Science*, 4,2: 241–55.
- Syihab, Muhsin, 2020: "Statement During UNSC Arria-Formula on Climate and Security Risks"; at: <https://onu.delegfrance.org/Event-on-Climate-and-Security-risks>.
- The Guardian, 2019: "Why Is Indonesia Moving Its Capital City? Everything You Need to Know", in: *The Guardian*; at: <https://www.theguardian.com/world/2019/aug/27/why-is-indonesia-moving-its-capital-city-everything-you-need-to-know>.
- Triana, Karlina; Johan Wahyudi, A'an., 2020: "Sea Level Rise in Indonesia: The Drivers and the Combined Impacts from Land Subsidence", in: *ASEAN Journal on Science and Technology for Development*, 37,3: 115–21.
- United Nations Security Council (UNSC), 2019: "Statement by Retno Marsudi During the UNSC Open Debate S/PV.8451" (New York: UNSC); at: <https://undocs.org/en/S/PV.8451>.
- Utama, Abraham, 2019: "Ibu Kota Baru Indonesia: Warga Dayak Paser Khawatir 'Makin Tersingkir' Dari Wilayah Adat, 'Tidak Mau Tambah Melarat'" [Indonesia's New Capital: Dayak Ethnic Groups Are Worried About 'Marginalization' Form Their Customary Lands, 'Don't Want to Be Impoverished'], in: *BBC Indonesia*; at: <https://www.bbc.com/indonesia/indonesia-49591240>.
- Walhi, 2019: "Ibu Kota Negara Baru Untuk Siapa, Publik Atau Elit?" (Jakarta: WALHI); at: <https://www.walhi.or.id/ibu-kota-negara-baru-untuk-siapa-publik-atau-elit>.
- World Bank, 2021: "Climate Risk Country Profile: Indonesia" (Washington, D.C.: World Bank); at: https://climateknowledgeportal.worldbank.org/sites/default/files/2021-05/15504-Indonesia%20Country%20Profile-WEB_0.pdf.
- Yudhoyono, Susilo B., 2004: *Indonesia 2004–2009: Vision for Change* (Bogor: Brighten Press).
- Zikra, Muhammad; Suntoyo; Lukijanto, 2015: "Climate Change Impacts on Indonesian Coastal Areas", in: *Procedia Earth and Planetary Science*, 14: 57–63.

Chapter 9

Conception, Perception, and Approach to Climate Security in Niger



Ousseyni Kalilou

Abstract In January 2020, Niger became a member of the United Nations Security Council (UNSC) for two years. This coincided with an increase in atrocities with armed groups escalating attacks on troops and civilians in Niger and the broader Sahel region. This chapter outlines the current policy positions of Niger regarding climate change and security linkages at national, regional, and international levels during its tenure as a member state of the UNSC. It highlights the extent to which key security stakeholders in Niger view, plan, and act upon national and international security in connection with climate change. The review empirically covers official reports, strategy documents, position statements, and communications from the Niger government. It further considers non-governmental actors, and secondary literature from scholars and think tanks to help analyse and assess national and international security policies and actions in Niger that consider climate change. The primary security concern has been on the potential impact of climate change on human development for Niger. However, more recently, the climate security nexus has been highlighted amongst increased domestic insecurities. This chapter traces and examines the evolution of Niger's approach to the nexus of climate change and security.

Keywords Climate change · Climate security · National security · Human security · Ecological security · United Nations Security Council · Niger · Sahel

9.1 Introduction

Niger is the most militarised state in Africa in terms of number of foreign troops (Cole/Grossman 2020). It is also one of the nations most vulnerable to climate change globally, placing the effects of climate change on inter-personal and large-scale conflict as a potentially significant determinant of national development and security considerations. This chapter provides an overview of the climate change and security of the West African nation of Niger. It highlights conceptualisations of

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climate change by key security actors and what strategies the government of Niger employs, which institutions put theory into action, and to what extent civil society, the expert community, and other non-state actors are involved. Examination of available government documents and public statements indicates that between 2007¹ and 2021 the range of policies enacted, and positions taken, did not directly link security to climate change at the national level. Since Niger became a non-permanent member in 2020, however, domestic policies have progressively taken climate change into account as an element of national security and decision-makers are gradually raising concerns about the impacts of climate change on national security (Ministry of the Interior 2018; Issoufou 2019b, 2019c; Bazoum 2021).

Niger is in the middle of the Sahel, in West Africa. Three-quarters of the country's 1.27 million km² is desert (Ministry of Transportation 2014; World Population Review 2021). Agriculture and livestock are the main activities, practised by more than 83.8% of the population, with more than 80% of the people living in arid rural areas (United Nations Development Programme 2019). Niger is one of the hottest areas in the world with temperatures that steadily increased between 1980 and 2019 (Intergovernmental Panel on Climate Change-IPCC 2021). Future climate scenarios project an increase in temperatures, with a likelihood of warming larger than 3 degrees Celsius in the subregion, which may lead to an increased frequency of dangerous heat waves, unpredictable Niger river flows (both flooding and drought), and other hydrological extremes (IPCC 2021; Ranasinghe et al. 2021).

Niger's population was around 25.5 million inhabitants in 2021, but the country's population is expected to double by 2040, with over half of the current population under 15-years-old (World Population Review 2021). The convergence of the country's exponential population growth with a Human Development Index (HDI) of 0.377 (the lowest in the world) and a Purchasing Power Parity (PPP) of around US\$ 1.90 (among the weakest in the world) increases stressors affecting the likelihood of social unrest (United Nations Development Programme 2019). Additionally, being surrounded by Mali, Burkina Faso, Chad, Nigeria, and Libya, all of which are experiencing escalating domestic and cross-border insurgencies, spillover effects of conflict and insecurity are affecting Niger (Prime Minister 2016b; Ministry of the Interior 2018).

Niger currently faces conflict and insecurity across multiple internal and external fronts. In the East, in the Lake Chad region (shared with Cameroon, Chad, and Nigeria), the country faces instabilities associated with Boko Haram² (President's Cabinet 2018). In the West (the Liptako Gourma border area shared with Burkina Faso, and Mali), terrorist groups affiliated with Da'esh and Al-Qaida are increasing

¹ 2007 was the first time the United Nations Security Council (UNSC) debated the impacts of climate change on the international security.

² Boko Haram (translated as: 'Westernisation is prohibited') was founded in 2002 in Maiduguri, Nigeria, by Mohammed Yusuf as a civil society. In 2009, following the assassination of Yusuf by the local government, the group's insurgency began, and Boko Haram became a terrorist organisation known as Jamā'at Ahl as-Sunnah lid-Da'wah wa'l-Jihād ('Group of the People of Sunnah for Dawah and Jihad'), operating in the Lake Chad area shared by Nigeria, Chad, Cameroon, and Niger.

attacks on civilians and security forces (Ministry of the Interior 2018; Prime Minister 2016). Furthermore, armed groups (trafficking arms, cigarettes, humans, and drugs) are operating through the vast Sahara Desert in the North (President's Cabinet 2018; Ministry of the Interior 2018).

Niger and the Sahel face a humanitarian situation aggravated by inter-communal clashes (especially between herders and farmers) (Prime Minister 2015), and a rising of self-defence militia groups, which are converting to community-led insurgencies to fill the security vacuum created by the absence of the state authorities (Kalilou 2021). Sexual and gender-based violence, environmental and climate change-induced migration and internal displacement, economic and social inequality, and human rights violations and abuse persist in Niger (UNSC 2017). With the deterioration of the social and economic conditions, unemployed and vulnerable youth become a target for recruitment by armed groups (Stockholm International Peace Research Institute-SIPRI 2020; Kalilou 2021). According to the Government of Niger, the collapse of Libya and the war in the Middle East triggered the flow of arms and fighters into Niger and the rest of the Sahel (Issoufou 2019). However, civil society and scholars largely attribute current insecurity to bad governance from successive Nigerien governments (Stockholm International Peace Research Institute 2020).

In the specific case of Niger, the literature on climate security, has not robustly weighed up the current national security issues by explicitly balancing the traditional and the extended actors' understanding and approach to national security, when considering human security and ecological security.

This assessment of the conception, perception, and practice of national security considerations of the impact of climate change emanates from a review of the relevant primary and secondary sources of the literature. The theoretical framework of this analysis draws on the approach to the concepts of security discerned by Hardt (2018) as national security, human security, and ecological security. Hardt (2018) identifies national security as the protection of the state for its territorial integrity, sovereignty, and stability, while human security is the protection and the wellbeing of the individuals within the territory; ecological security is the protection of national and global nature, Earth System functioning, and ecosystems. Furthermore, this case study builds on this theoretical framework to elaborate on the research categories of (a) climate security threat and (b) climate security responses. In part one, this case study portrays how key stakeholders view and plan for climate change and security at the national and international levels. In part two, the case study explores the strategies and responses which the Niger government has provided. It considers how civil society, the expert community, and other non-state actors are involved. Finally, the regional and cross-border aspects are considered.

9.2 Perceptions and Conceptions of Climate Change as a National Security Concern

The aim here is to look into the Nigerien military and Ministry of Defence's understanding and approach to the climate security nexus, before retracing the approaches of the president and the other government sectors. Consultation of the official documents compared to these government actors' approaches at national and the international levels reveals significant progress regarding climate security.

9.2.1 *Traditional Security Sector Acknowledgement and Approach to Climate Change: The Ministry of Defence*

The findings of the first research category (which focuses on the question of whether and how climate change is addressed) from the traditional security sector show that there is no specific climate change conception or practice at the Ministry of Defence. Nevertheless, like all the other branches of the government, the military is involved in projects associated with climate change such as the national reforestation programmes and the *Fête de l'arbre* (Arbour Day).

There are synergies between several civilian, military, and paramilitary policies and strategies providing essential public goods associated with security in the border areas (Ministry of the Interior 2018). As climate change increases the depletion of natural resources, contributing to the mobility of the mass population and cross-border movements, competition and tensions are rising within communities and between host communities and climate migrants. Further, exponential population growth compounds the pressure on the scarce natural resources. While local institutions struggle to provide basic needs and adequate conflict resolution mechanisms, elites, criminals, and extremist armed groups, amongst others, exploit the mounting fragility for political, geopolitical, ideological and economic reasons (Kalilou 2021).

In the northern border areas (Region of Agadez), military posts and bases provide health services and infrastructure for the climate migrants³ and internally-displaced persons. They also guarantee essential social services for returnee fighters (Ministry of the Interior 2018). In these securitisation efforts of the northern border area, the military is, however, yet to stabilise the deteriorating relationship between the host communities and the above-mentioned climate migrants. In the Lake Chad basin (Region of Diffa), an interface between civilians and military actors is organised in the form of committees, which target regional stabilisation that can complement and strengthen military efforts. This interface consists of restoring essential public

³ Climate migration can be referred to as a human mobility resulting from climate change and environmental degradation. See: Kumari et al. (2018) in "Groundswell."

services and the provision of life-saving humanitarian assistance. Civil-military cooperation aims to enhance aid delivery via coordination and logistics between civilians and military personnel. It also facilitates the transition from humanitarian aid to development projects (Lake Chad Basin Commission 2018). In the sub-region of Liptako Gourma, the military has additionally adopted a political approach in terms of reconciliation, dialogue, and humanitarian assistance to promote the development of the border area with Mali (International Crisis Group 2018).

The region's immediate security needs are concentrating policymakers' attention on military actions to the detriment of long-term investments to fight against climate change and environmental-related security risks. The counterterrorism efforts are draining the national budget and military efforts (Cole/Grossman 2020). According to the Stockholm International Peace Research Institute (as cited by Kone 2020), the Government of Niger spent US\$229 million in 2018 on military expenditure to fight against insurgency. Thus, like many other Sahel countries, Niger has led repeated calls for help for military troops, logistics and intelligence from France, Europe, the USA, and the international community (Rühl 2021). The following section will show how, in parallel to the immediate national security actors, the extended⁴ security actors, such as the president and the ministries, contribute to considering the impacts of climate change and environmental degradation in national security.

9.2.2 Extended Security Sector Perception and Conception of the Impact of Climate Change on National Security: The President and Other Branches of the Government

As described above, as a research category national security is defined as the state use of military, diplomatic, or economic means to protect its territorial integrity, sovereignty, and stability from threats. The socio-economic effects of climate change are among these threats (Hardt 2018).

Articles 47 and 63 of the Constitution of Niger, which was ratified in 2010, give the president of the republic the power to influence the debate on the questions of domestic, regional, and international issues and there is no significant opposition party or political voice on climate change or security in Niger. This makes the presidential proclamations a *de facto* proxy of national conceptualisations of security. Climate change and security are treated as separate issues in President Issoufou's framing of emerging security threats, "In addition to the climate challenges, there are other emerging issues such as security, including terrorism" (Issoufou 2019a: Presidential statement at UN). The president acknowledges the link between climate change and key resources: "climate change is having an impact on the availability of resources" (Issoufou 2019c: para 5 - A statement at the Climate Commission for the Sahel Region [CCSR] Summit at Niamey). He directly relates food security to climate

⁴ The concept of extended security refers to the government institutions which contribute to national security beyond the Ministry of Defence and the military.

change; for example, “A real threat to food and food security, climate change, along with conflict, has been one of the causes of the increase in famine in the world over the past three years” (Issoufou 2019c: para 6). But the shift in his opinion is significant when he says: “The Sahel situation also shows the impact of climate change on security, social and political stability” (Issoufou 2019c: para 6). Hence, the perception of a climate change-security nexus is evident when he states: “The link between climate change and terrorism has now been established” (Issoufou 2019c: para 6).

This deterministic presidential statement contrasts with the intellectual debate on climate security, where there is debate over the causal relationship between climate change and insecurity. Giving the presidency of the CCSR to Niger helped shift public statements on the climate-security nexus. President Issoufou gave a speech during the open session of the first summit of the CCSR (on 25 February 2019) in Niamey, Niger. President Issoufou was the president of the CCSR, and Niger and the central part of the Sahel were suffering atrocities from insurgency. These circumstances likely prompted President Issoufou to make the connection, indicating a growing understanding of human security. He further reiterates the climate-security linkage when he states: “As the situation in the Sahel and the Lake Chad Basin illustrates, there is a close link between poverty, terrorism and climate change” (Issoufou 2019c: para 47).

The Ministry of Environment and the Combat Against Desertification (MECAD) coordinates the government’s national environmental policy with other relevant departments and institutions under the umbrella of the prime minister and the president of the republic. The MECAD dominates the climate politics of the country at the government level. Environmental politics covers, but is not limited to, “sustainable land management activities”, “rehabilitation of degraded land, the stabilisation of dunes and assisted natural regeneration”, “combating desertification”, and the “green economy”, which provide a “condition essential to the stability of the environment and its communities” (Issoufou 2017: para 21–22).

Another important insight can be found when focusing on the Ministry of the Interior, which manages national policy by guaranteeing the demarcation of its borders, managing issues of insecurity, alleviating poverty, assuring the presence of the state within its borders, coordinating trans-border cooperation, and harmonising migration issues (Ministry of the Interior 2018). There is a national security strategy to “strengthen people’s resilience to the effects of climate change and actions” and for “building capacity” (Ministry of the Interior 2018: 29). The policy is also about enhancing the resilience of the populations in border areas facing climate change, security crises, and environmental catastrophes through “development of a strategy to promote regular migration” (Ministry of the Interior 2018: 28), “creation of economic employment opportunities”, “supporting and integrating migrants” (Ministry of the Interior 2018: 26), the “principle of free movement of people and goods” (Ministry of the Interior 2018: 8, 9, 14), “[e]nvironmental governance in the border areas and issues of cross-border natural resources” (Ministry of the Interior 2018: 8), and cross-border cooperation (Ministry of the Interior 2018: 8). It is also important to stress that Niger, as a country of transit, can play a significant role affecting climate

migration. Climate change is driving internal displacements, exponential urbanization, and cross border movements, primarily within African regions (Rigaud et al. 2018). An increasing number of people are passing through Niger from sub-Saharan Africa, trying to reach Algeria, Morocco, Libya, and then Europe (Werz/Conley 2012; Ministry of the Interior 2018). Previous security strategies⁵ were developed primarily around the intermittent peace agreements in the West and Northwest with Fulani ethnic groups in the North (in the regions of Tillabery and Tahoua, near Mali, and Burkina Faso), with the Tuareg and Arab ethnic groups (in the region of Agadez, the Sahara Desert near Algeria and Libya), and in the Northeast with the Toubou ethnic groups (near the south of Libya and the Northwest of Chad), (for example the peace agreements of April 24 1995, and October 2009) (Prime Minister 2016).

However, neither Decree No. 96-004/PM of 1996, on the establishment, composition and attributions of the National Council of the Environment for Sustainable Development (CNEDD) (Conseil National de l'Environnement pour le Développement Durable-CNEDD), nor Decree No. 2000-272/PRNIPM of 2000, explicitly mentioned climate change in their texts (Prime Minister 2000). Yet, these two texts highlighted the combat against desertification, environment protection, sustainable development, and coordination of the post-Rio environmental politics in Niger. Nevertheless, the attachment of the CNEDD's Executive Secretariat to the Office of the Prime Minister and the later inclusion of climate change in the CNEDD's thematic issues, along with biological diversity and desertification, illustrate the increasing importance of climate change and the environment to the government of Niger (Prime Minister 2000). Thus, the institutions and framework discussed above prove how much the Nigerien government focuses on the links between climate change, security and development, to the detriment of the climate-security nexus – but this approach is changing, as I will show in the following sections.

9.2.3 *Evolving Approaches to Climate Security*

In political efforts and policies related to the effects of climate change, the security perspectives considering climate change have not been uniform on the national, regional, and international scenes. The conception and perception of the effects of climate change on national security, human security, and ecological security encompass retraceable progress and variation.

⁵ These long-term strategies consist of implementing peace agreements, including the insertion of ex-combatants into the military corps and the administration. Also, these securitisation efforts consider the environment and its natural resources as tools for peacebuilding. The ultimate goal is to enhance social cohesion and livelihood security to prevent conflict relapse.

9.2.3.1 Niger's Security Perspective on Human Security

Since being introduced in 1994 in the United Nations Human Development Report, the concept of Human Security – defined by United Nations Development Programme (UNDP 1994: 23) as “people centred” – has evolved from the traditional concept of security to include “the interdependence between development, security, and peace” (Harrington/Shearing 2017: 47; Brauch 2008: 160).

From 2007 to 2016 the focus of security developments in Niger was primarily on socio-economic and environmental issues. Many expressions in the primary sources illustrate that assessment through “vulnerability” (Prime Minister 2014: 30; 2019: 48; 2020: 1, 2, 3, 4, 5, 8, 9, 13, 16, 17, 20, 24, 43; 2020a: 23; 2021: 3, 26, 38, 39), “water scarcity” (Prime Minister 2014: 38), “impacts on development” (Prime Minister 2020: 52), “food security” (Prime Minister 2019: 1, 7, 15, 45; 2021: 3, 11, 18, 38, 50, 52), and “promoting green jobs” (Prime Minister 2014: 68). The Nigerien government has focused on human security (based on the precedent expressions mentioned) in parallel with hard security for the last decade, for “the phenomena of drought and desertification have been and still are a major concern in economic and social development” (Prime Minister 2006: 24) at the political and institutional levels.

Climate change influences the dominant understanding of human security in Niger. From 2017 onward, additional concepts have progressively emerged in the debates revealing the influence of climate change in the conception of human security (Climate Commission for the Sahel Region 2018). “The anthropogenic bill” (Issoufou 2019c: para 3), “food insecurity” (Issoufou 2019: para 5), “the impact of climate change on our health” (Issoufou 2019c: para 5), and “we can bequeath to future generations a better world in a sanitized environment” (Issoufou 2019c: para 18), used by President Issoufou in his speech of February 25 2019, during the CCRS summit in Niger, are among the concepts which illustrate the increasing prominence of climate politics in Niger. Climate change is a fundamental issue of domestic politics and security, but in practice the primary concern is still military operations and logistics, because of conflicts.

Expressions such as “climate migrant” (Issoufou 2019c: para 7) are employed since Niger – located south of Libya, in the middle of the Sahel between the Sahara and the Sudanese zone – is a country of transit (as previously mentioned), and the climate-induced migration from villages to the cities is increasing. As for the expressions “energy transition,” and “renewable energy” (Issoufou 2019c: para 12; Prime Minister 2015: 67–77), they can be identified in government documents, and there is a campaign – however modest – to change behaviour. In reality, though, the government focus is far from this and echoes the thought of President Issoufou when he stated in an interview at the Conference of the Parties (COP21) in the context of the United Nations Framework Convention on Climate Change: “we have the right to pollute [...] our priority is socio-economic development [...] polluting rich countries have to invest in our energy transition if they want us to abandon our development ambitions that may raise our GHG emission” (Issoufou 2015). The same idea is

repeated in the speech of Mohamed Bazoum, his successor, at COP26 in Glasgow (Bazoum 2021).

Throughout the analysis, this research did not find court cases dealing with climate change in Niger, and records of troops being sent for disaster relief were not found.

Climate change is recognised as a human-made issue by the government and civil society. But many people also believe that climate change and climate-related issues come, somewhat, from God. Hence, researchers, such as Simpson et al. (2021) have shown that climate change literacy across Niger is one of the lowest in Africa and the world (see Table 9.1). In this vein, a report from Afrobarometer (2019) highlights that while the average of climate change literates is 28 % in Africa, only 16% of Nigeriens “have heard of climate change, associated it with a negative change in weather positions and know human activity as a major cause” (Afrobarometer 2019: 18–21).

Table 9.1 Sub-national levels of climate change literacy rates in Niger

Regions in Niger	Climate change literacy rate (%)
Agadez	38
Diffa	5
Dosso	26
Maradi	25
Niamey	36
Tahoua	27
Tillaberi	39
Zinder	8

Source Simpson et al. (2021)

Based on the above studies, expanding the existing climate change awareness programmes may help the regular Nigerien citizens understand the causes and the consequences of climate change, even as they unconsciously already live those consequences on a daily basis. However, those findings do not evoke, nor do they consider, the traditional and indigenous understanding of and approaches to climate change. Nigerien villagers perceive and conceive of climate and environmental changes from norms different from those established by external practitioners and scholars. To this end, it is interesting to explore Niger’s understanding of and approach to ecological security.

9.2.3.2 Niger’s Security Perspective on Ecological Security

The theoretical framework above helps postulate that ecological security, as a category of security, refers to the conservation and improvement of the biophysical and

geophysical environments via sustainable development and environmental protection measures, such as reducing biodiversity loss, CO₂ emissions and deforestation (Hardt 2018).

Internationally recognized breakthroughs and success stories are illustrative of Niger's perception of ecological security. Successful cases of large-scale land restoration initiatives through drought managements, re-greening and carbon sequestrations are progressively contributing to containing climate and environment-related security risks. These lessons learned echo in the statement of the United Nations Climate Change Desertification (United Nations Convention to Combat Desertification 2014) that "the restoration of over 5 million hectares of land by communities that live across Burkina Faso, Niger and Mali has reversed outward migration flows" and has ultimately contributed to "national security and to secure international stability today and in future" (United Nations Convention to Combat Desertification 2014: 14). In the NorthWest, the region of Tahoua (Batodi-Illela), in the Centre East, the regions of Maradi and Zinder, and the region of Diffa (Lake Chad region), tree planting campaigns and farmer-managed natural regeneration (FMNR) combined with sustainable land management (SLM) techniques are enhancing households' resilience to climate change and environmental degradation (United Nations Convention to Combat Desertification 2014). Agro-sylvo-pastoral and fishery activities are improving, the distance travelled and time spent by women and girls fetching water are getting shorter, fodder and wood logs are becoming more available (United Nations Convention to Combat Desertification 2014; United Nations Department of Economic and Social Affairs Sustainable Development 2020). A United Nations Convention to Combat Desertification (2014) report displayed satellite images from 1975 to 2003, proving how the increasing density of trees planted by local communities increase population and urbanisation growth and decrease vulnerability and climate migration in the region of Galma (United Nations Convention to Combat Desertification 2014: 13). Another success story is the carbon sequestration site of Tchida, which uses SML along with the acacia gum trees to help re-green the village and restore the lost biodiversity (Kalilou 2021; Moustapha 2011).

The environmental peacebuilding efforts, including cross-boundary cooperation with international partners, local government, local businesses, and local communities around the degrading environment and its depleting natural resources in Niger, are focusing on attenuating competition over scarce natural resources, reversing climate migration, discouraging the youth from joining armed groups as an economic and social status incentive, and helping the social and economic reintegration of returned combatants (Bruch et al. 2016; Kalilou 2021; United Nations Convention to Combat Desertification 2014). In this vein, Harrington and Sharing (2017: 64) remark that "ideas of nature have always intersected with security in complex ways." The environment and its natural resources can be instrumental values for security, but at the same time however, they can be a threat to security (Harrington/Clifford 2017: 68–83). Consequently, the authors describe Anthropocene security,⁶ which considers

⁶ See Harrington/Shearing (2017: 86–144): The concept is broadly defined as the current geological epoch in which human activity has impacted climate and environmental changes. Hence, the

the rapid ecological shifting of the planet with “the threats, including biodiversity loss, population increases, air pollution, degraded infrastructure, and waste dumping” (Harrington/Shearing 2017: 156). As previously discussed, Niger is facing several substantial challenges, among which are the Saharan Desert (UNCCD 2014) and the recurrent increase of climate change-related security risks (Kalilou 2021), along with one of the highest birth rates in the world (United Nations Development Programme 2019) and the ongoing environmental issues related to the pollution and waste dumping from uranium exploitation (Nahan et al. 2016).

Institutional reforms are, however, giving women land tenure security (United Nations Department of Economic and Social Affairs Sustainable Development 2020). These reforms fit within the scope of the national practices and capacity to counter the environmental and climate-related security risks. By addressing the systematic gender inequalities in access to natural resources, these efforts contribute to climate-resilience and the achievement of sustainable development goals in Niger.

9.3 Political and Institutional Impacts of the Prevailing Climate Security Perceptions

In the following sections, I will show how Niger has engaged in political and institutional efforts to deal with the perceived climate change security threats at national and international levels. Another focus of this section lies in the analysis of Nigerien policymakers’ positions on the issue of addressing climate change in the United Nations Security Council (UNSC).

9.3.1 *Niger’s Domestic Politics Concerning the Perceived Security Threat of Climate Change*

In addition to the Nigerien government, non-state actors participate in climate politics as facilitators of national practices and capacity to provide relative responses to the perceived security threat of climate change.

concept of security in the Anthropocene encompasses the harms, threats, or risks from climate change and environmental degradation on individuals’ well-being, community thriving, and the functioning of state and global institutions. The securitisation in the Anthropocene, thus, considers the interconnectedness of humans, societies, and the Earth. As insecurity emanates from human activity, the securitisation process results from human activities.

9.3.1.1 Niger Government's Efforts in Countering the Perceived Threat of Climate Change

Well before the Earth Summit of 3–14 June 1992 in Rio de Janeiro, Brazil, Niger had already organised a National Debate on combating desertification, on 21–28 May 1984 in Maradi, Niger. This issue has been a central part of development policies, plans, programmes, and strategies (Prime Minister 2016). Consequently, many official government documents have mentioned climate change. Among those documents are: (1) The Sustainable Development and Inclusive Growth Strategy (SDIGS Niger 2035),⁷ which was formulated in 2011 and is defined until 2035; (2) The Economic and Social Development Plan (PDES 2017–2021),⁸ which was the first phase of the implementation of the SDIGS Niger 2035; (3) The Action Plan of the National Strategy for Food and Nutrition Security and Sustainable Agricultural Development (better known as “Initiative 3N” [Nigériens Nourish Nigériens])⁹; and (4) The National Policy on Environment and Sustainable Development.¹⁰ Hence, the political will to combat climate change has aligned with Niger's presidency of the Climate Commission for the Sahel Region (2018).

Niger links issues of security with development around climate risk management from mitigation, adaptation, and resilience programs, such as the Strategy for Accelerated Development and Poverty Reduction (SDRP), the Rural Development Strategy (SDR), the National Action Plan for Adaptation (PANA), the Energy Policy Declaration (DPE), and the National Strategy for Access to Modern Energy Services (SNASEM) to other strategic sub-regional integration documents (Prime Minister 2012). Different policies, strategies, and policy frameworks, with the establishment of CNEDD, carry out the implementation of climate change adaptation and mitigation (Prime Minister 2014, 2016a).

A particular focus on gendered dimensions of the climate-related security risks highlights inequality. In a UNSC resolution 2349 on the Lake Chad Region, women are highlighted as being among the most vulnerable to climate and environmental stress, yet there is much room for improvement for gender roles in climate change and security in Niger and the Sahel (UNSC 2017). Also, Halle et al. (2020) find that in Niger and the Sahel, cultural norms and customary laws disadvantage women, and climate change drives men out of the household or incentivises their enlistment in armed groups, leaving women and girls with socio-economic responsibilities, all of which are worsening vulnerabilities (Halle et al. 2020). In addition, women represent only 25% of the elected officials in Niger (UNSC 2017). The gender dimension of climate security needs more attention, for women represent 70% of agricultural labour and contribute up to 70% of the household food in some regions in Niger (UN Women 2016). Nevertheless, women and girls comprise 54% of migration from,

⁷ SDIGS (2017) *A country and a prosperous people*. www.nigerrenaissant.org.

⁸ Ministry of Planification (2017): *The 2017-2021 Social and Economic Development Plan (PDES)*.

⁹ President's Cabinet (2017): *The 3N Initiative* (Nigériens Nourish Nigériens).

¹⁰ Ministry of Planification (1998): *The National Policy on Environment and Sustainable Development*.

into, and through Niger (Halle et al. 2020). These trends may negatively impact the underlying problems of climate security, such as food security, resource security, and livelihood security. As domestic climate security action requires a multisectoral approach, the involvement of non-state actors is imperative, as I will show in the next section.

9.3.1.2 Inclusion of Non-state Actors in Countering the Perceived Threat of Climate Change

In Niger, non-state actors' understanding of climate-related security risks is not uniform. In fact, this research found a discrepancy between government and civil society at the national level, and between the expert community and civil society regarding climate politics, even though two-thirds of the CNEDD members are from civil society. Until 2016, the expert community viewed underdevelopment, rather than climate change, as a contributor to insecurity (President's Cabinet 2018). Thereafter, stakeholders, including the private sector, authors, local experts from the Niger government, civil society, and external partners, have taken into consideration environmental and climate-sensitive approaches to national security strategy. This paradigm shift resonates closely with the (Shaller et al. 2019) report on the launch of the Adelphi-led two-year research entitled "Shoring up Stability" (Vivekananda et al. 2019). The launch event was co-organised on 24 October 2019 in Niamey, Niger by local policy-makers (Secretary General of the Haute Autorité à la Consolidation de la Paix [High Authority for the Consolidation of Peace]), the Director of the Centre National d'Etudes Stratégiques et de Sécurité (CNESS), experts and practitioners, Adelphi, and the German Embassy in Niger (Shaller et al. 2019). The panel presentation and the launch highlighted the importance of governance and social cohesion, communication, socioeconomic, cultural, and systematic conflict assessments, and verified data in addition to climate-fragility assessments (Shaller et al. 2019). This event is a tangible illustration of the ongoing funded studies related to climate security in Niger as security plans aim to "strengthen the capacity and involvement of local authorities and civil society actors so that they can sustain peace" (Ministry of the Interior 2018: 29; Prime Minister 2014: 122). Hence, these moves attempt to include civil society in the national security strategy, but the leading player remains the government (Ministry of the Interior 2018). Niger's policymakers ought to win over affiliations and include civil society and the expert community – and the country can capitalise on its strategically opportune entry to the Security Council in the year 2020 – to succeed in climate security practices at the regional and international levels.

9.3.2 *Niger's Climate Diplomacy vis-à-vis the Perceived Security Threat of Climate Change*

The Nigerien climate diplomacy – the set of foreign policies and external partnerships to provide relative responses to the perceived security threat of climate change – manifests in regional centres, international organisations and institutions, in the Sahel, and also within the UNSC.

9.3.2.1 Regional Centres and Other Relevant International Organisations and Institutions

In the border areas, the country aims to strengthen the state's presence through border demarcation, security, and migration management with Mali, Chad, and Burkina Faso (Ministry of the Interior 2018). In the Lake Chad Basin in the East and in the tri-border area of the Liptako Gourma in the West, environmental and climate-related security risks decrease communities' livelihood security mechanisms. Those security risks expose the state's fragility and incapacity in managing ungoverned territories (International Crisis Group 2018; Shaller et al. 2019). In response, there are multi-lateral initiatives such as the Regional Project to Support Pastoralism in the Sahel (PRAPS) (World Bank 2020), and the collaboration with Nigerien policy institutions, such as the HACP and the CNESS directing security policies and securitisation efforts that undertake the environmental and climate change dimensions of policy in the Lake Chad Basin (Shaller et al. 2019). These policymakers, experts, and practitioners in Niger highlight the importance of security strategies and practices beyond military operations and intelligence to sustain peace and security via, for example, the Regional Stabilization Strategy (RSS), which is a project of the Regional Stabilization Facility for Lake Chad funded by UNDP and supported by Germany (Shaller et al. 2019).

The trans-border focus on planning and operating security measures zeroes in on selected institutions. Among these institutions are the Authority for the Integrated Development of the *Conseil de l'Entente*, Liptako Gourma Authority, the Lake Chad Basin Commission (LCBC), Niger Basin Authority (cooperation around the Niger river) and the Community of Sahel-Saharan States. The border strategy was also among the topics in the G5 Sahel summit in Ouagadougou, Burkina Faso (2019), and the ECOWAS Summit in Nigeria (2019).

The LCBC, by way of illustration, is responsible for implementing the regional strategy to stabilise the Lake Basin areas that encounter humanitarian crises worsened by the insurgency from Boko Haram. The LCBC's mission is, among other things, the coordination of cross-border cooperation and prevention and management of acute crises, which include environmental and climate-related security threats. The overall objective is to address the root causes of the security crisis in the Lake Chad Basin and enhance resilience by preserving the ecosystem and mitigating the harmful

effects of tensions related to conflict and environmental change (Lake Chad Basin Commission 2018; UNSC 2018).

The Gesellschaft für Internationale Zusammenarbeit's (GIZ) project, which is a project of the German Ministry for Cooperation and Development (BMZ) is another example of cooperation on the climate security nexus. The GIZ project (from 2 January 2019 to 13 December 2021), aligns with climate security practice efforts in Niger. The European Commission and the BMZ funded the project on the relationship between the water, energy, and food security (FREXUS) variables to sustain peace through climate resilience in Niger, Mali, and Chad (Nexus 2019). Thus, Niger's engagement in the LCBC, the Liptako Gourma Authority, and the Niger Basin Authority, along with other regional centres, international organisations and institutions, signifies the country's climate foreign policies in the region. Overall, this overview shows also that international and regional attention to the climate-security nexus in the Sahel region has been relatively high since 2020, when the country entered the UNSC as a non-permanent member.

9.3.2.2 Niger Climate Foreign Policies Specific to the Issue of the Sahel

The region experienced exceptional droughts in the early 1970s and 1980s, but lately, these droughts have become recurrent (Niang et al. 2014; United Nations Convention to Combat Desertification 2014). Niger is losing 100,000 hectares of productive land per year, and pasture and surface water¹¹ are rapidly depleting (Ministry of the Interior 2018). In addition, studies like the IPCC 2014 report on Africa and the UNCCD 2014 report entitled "Desertification, the invisible frontline" calculate that Lake Chad has lost 90% of its waters since the 1960s, and desertification has advanced towards the South (Niang et al. 2014; United Nations Convention to Combat Desertification 2014: 5). According to the Adelphi Report from Vivekananda et al. (2019), climate variabilities still impact the livelihood coping capacities of the inhabitants dependent on unpredictable seasonal patterns, making the climate crisis a crucial factor in the security crisis in the Lake Chad region. Consequently, the climate change-security nexus is increasingly playing a role in the Sahel.

Niger is, in response, the most significant contributor to the Great Green Wall initiative launched in 2007 by the African Union to halt desertification and tackle the environmental and climate change-related biodiversity loss and its unwanted consequences on livelihoods in the Sahel. Niger has produced and planted around 146 million trees, which makes up 47 million hectares of the total 156 million hectares so far extended by all the 11 Sahelian states participating in the project (UNCCD 2020). Hence, Niger's climate diplomacy demonstrates its intent to expand the security mechanism at regional and even international levels.

¹¹ See Kim (March 23, 2023): "Millennium Climate Challenge-MCC financed study finds Niger to be most groundwater-rich country in the Sahel region." <https://www.mcc.gov/blog/entry/blog-032-223-niger-groundwater-rich-country>.

9.3.3 The Focus of Niger's Climate Diplomacy in the UN and Specifically in the UNSC

Recent moves, in December 2021, from Niger regarding climate change as a threat to international peace and security illustrate the country's engagement in stepping forward to address climate change in the UNSC. However, it also needs to be pointed out that the council's governing mechanisms carry significant constraining factors for the success of the Nigerien active climate diplomacy.

9.3.3.1 Niger's Position on the Issue of Addressing Climate Change in the UNSC

Entering the UNSC as a non-permanent member in January 2020, at a time when the climate security concept was frequently debated, accelerated Niger's progressive adoption of a climate change and security nexus. The country has already signed and ratified all major international and regional treaties and accords related to climate change and the environment (Prime Minister 2020). Niger ratified the Paris Agreement on September 21, 2016, ratified the UN Framework Convention on Climate Change (UNFCCC) in June 1992, the Kyoto Protocol on July 25, 1995, the United Nations Convention to Combat Desertification (UNCCD) in 1996, and the Montreal Protocol of 1987. Niger was at the significant post-Paris Agreement conferences: Marrakech in 2016 (COP22), Germany in 2017 (COP23), Katowice, Poland in 2018 (COP24), Madrid, Spain in 2019 (COP25), Glasgow, Scotland in 2021 (COP26), and Sharm el-Sheikh, Egypt in November 2022 (COP27). The country played an essential role in adopting the "3S" strategy (Sustainability, Stability, Security) on Climate Change, launched during COP22 in Marrakech in November 2016 (Issoufou 2017: para 24).

In the UNSC context, Niger supported Germany's proposal of a draft resolution on climate security on July 20, 2020 (UNSC 2020a), but the U.S blocked the resolution (see introduction of this book). Niger is a member of the Group of Friends on Climate Security,¹² and the Niger Mission to the UN has participated in the UNSC Arria Formula¹³ to advocate best practices involving women and youth in peace decision-making process (UNSC 2020). In the year 2020, Niger also joined Belgium, the Dominican Republic, Estonia, France, Germany, Tunisia, St. Vincent and the Grenadines, the U.K., Vietnam, Ireland, Kenya and Norway

¹² An initiative of Germany, the Group of Friends on Climate and Security (GFCS), was launched on 1 August 2018, initially including 27 founding Member States and extending to around 58 members today. The purpose of the GFCS, as a working group, is to regularly discuss in a forum, to join efforts among members to raise public awareness and to increase the UN's involvement in the impact of climate change on peace and security.

¹³ Originated in 1992 by Venezuelan Ambassador Diego Arria, the Arria Formula is an informal meeting convened by a UNSC member state to discuss an important and confidential subject between member states of the UNSC and non-member states, individuals or non-governmental organisations, and non-state actors.

to issue a joint statement requesting that the Informal Expert Group on Climate and Security¹⁴ assist “the Council to achieve a more comprehensive and systematic approach on climate-security risks in situations on the ground” (UNSC 2021: para 6). On Friday, 9 December 2021, President Mohamed Bazoum presided over an open debate meeting on Maintenance of International Peace and Security: Security in the Context of Terrorism and Climate Change (Bazoum 2021a).

On Monday, 12 December 2021, Niger and Ireland introduced a draft resolution, which was aborted, “to see the Council establish the evident nexus between international peace and security on the one hand and the fight against terrorism and the effects of climate change on the other” (Bazoum 2021: para 8), as the newly-elected president of Niger put it when he addressed the council in person on 9 December 2021. This illustrative move of Niger at the end of its 2-year mandate on the Council exemplifies the firm commitment to put climate change on the Security Council agenda. More importantly, the draft resolution contains “appropriate initiatives in the search for lasting solutions to threats to international peace and security and their interactions with the effects of climate change” (Bazoum 2021: para 9). This typical draft resolution, with the second-highest number of supporters in the council’s history (12 out of the 15 Security Council members and at least 113 non-members) (Krampe/de Coning 2021), requests and recommends actions and collaboration of member states, the Secretary-General, special political missions, peacekeeping operations, the Informal Expert Group of members of the Security Council on Climate and Security, the scientific community, international scientific research and data institutions, local experts in the field, and civil society, including community-based civil society, youth, women, peacebuilders, the private sector, academia, think-tanks, media, and cultural, educational, and religious leaders (UNSC 2021). These actions contained in the draft resolution aimed at rebuilding social cohesion and peacebuilding, the collection of data, monitoring and analysis of the effects of climate change, comprehensive conflict-prevention strategies, mediation support, development of online platforms, and other strategies regarding climate-related security risks (UNSC 2021). Thus, Niger’s climate security actions in the UN and the Council retrace a progressive position beyond the two years (2020–2021) of UNSC membership. Still, many factors, such as the proliferating national security threats and geopolitics, may help shift Niger’s position to prioritise short-term national security to the detriment of a long-term commitment to human security and ecological security.

9.3.3.2 Limitation of Niger’s Climate Diplomacy in the UNSC

Many factors in the Council constrained Nigerien climate diplomacy from succeeding in pushing climate change further under the Security Council mandate. First, the Council is a forum where there is informal lobbying, with a balance of power that

¹⁴ Founded in 2020, the Informal Expert Group on Climate and Security of Members of the UNSC is a discussion forum for the council to address the impacts of the climate-related security risks on the UN missions and other operations and to involve experts to find solutions in this area.

does not favour small countries like Niger. Second, the mechanisms of veto, pen-holding,¹⁵ and Groups of Friends¹⁶ make the negotiations at the Council uneven. Third, the ongoing debate since 2007 on the linkage between climate and security on the one hand, and inclusion of climate change in the UNSC mandate on the other hand, reveals division and an unclear position among member states (Conca 2019; Hardt 2021a).

Salient controversy exists on the legal framework within Article 24 of the UN Charter, giving the Security Council the prerogative to have jurisdiction over international peace and security (UN Charter 1945). As an increasing number of states and non-state actors are recognising climate change as a “threat multiplier” (UNSC 2021b: 16), and other member states view climate change as a “security threat” (UNSC 2021b: 2, 14, 15, 17, 18), the debate about including climate change in the mandate of the Council is rising (Shank/Meeks 2019). Some view climate change as beyond the scope or mandate of the Security Council, while others believe such prerogatives should be given to other UN organisations, such as the UNFCCC, the UNDP, the IPCC (Conca 2019), the Economic and Social Council (ECOSOC), or the UN General Assembly’s Second Committee (Russia United Nations Mission 2021). Debate over the direct causal relationship between climate change and conflict has highlighted the need for a “Charter-mandated conflict prevention role that supports addressing climate risks before they deteriorate into violence” (UNSC 2021b: 1–2).

The controversial debates, division, incoherence and “confusion of different climate-security conceptions uncovers shared assumptions of the UNSC-member states over including climate change on the Security Council mandate” (Hardt 2021a: 1, 9) and is illustrated by the stoppage of the thematic resolution on the links between climate change and security introduced by Niger and Ireland on December 12, 2021, with Russia’s veto, India’s “no”, and China’s abstention. Russia’s position aligns with its usual opposition to the extension of the security council’s agenda by criticising the “proposal to establish this automatic link while neglecting all other aspects of situations in countries in conflict or countries lagging behind in their socio-economic development” (Russia United Nations Mission 2021: para 2). This is echoed in the words of Russia’s UN Ambassador Vassily Nebenzia when he says, “positioning climate change as a threat to international security diverts the attention

¹⁵ The penholder system is a UNSC practice with which the P3- France, the UK, and the US- lead or chair the council agenda related to some countries’ situations or thematic issues (UNSC 2018, 2020b).

¹⁶ Started in the 1990s, at the end of the cold war, the Group of Friends initially aimed to consolidate multilateralism beyond geopolitics and other interests between like-minded member states sharing similar views and common interests, to resolve a particular issue. However, as the Groups of Friends proliferate, geopolitics is emerging, leading to a decline in effectiveness, because of the great power politics among the five permanent (P5) members (China, Great Britain, France, Russia, and the USA). Also, the broadening of the Groups of Friends’ initial mediation role to lobbying and advocacy action has been a challenge for the Groups of Friends (among which is the Group of Friends on Climate and Security), who may be used as tools for geopolitical influence. See David Joseph Deutch, 2020: “What are friends for? ‘Groups of Friends’ and the UN system,” Universal Rights Group NYC, March 31 2020, What are friends for? ‘Groups of Friends’ and the UN system | Universal Rights Group (universal-rights.org).

of the council from genuine, deep-rooted reasons of conflict in the countries on the council's agenda" (Russia United Nations Mission 2021: para 1). In the same vein, Russia's veto to block the resolution enters into the framework of *climate injustice*, where "nations that had harmed the climate through swift industrial development [...] impose restrictions on other countries" (Russia United Nations Mission 2021: para 9).

Russia, India, and China's positions are a manifestation of great power politics countering the West's *climate colonialism*, which is, as Nebenzia labelled it, a pretext by wealthy Western powers to justify their interference in other countries' internal affairs by "turning a scientific and socio-economic problem into a political issue" (Russia United Nations Mission 2021: 2). Similarly, India's ambassador, T. S. Tirumurti, asserts that "We always support real climate action and serious *climate justice*. We will always speak up for the interests of the developing world, including Africa and the Sahel region. And we will do so at the right place – the UNFCCC" (India United Nations Mission 2021: para 12). Moreover, as with Russia and India's opposing positions, China's abstention comes within the scope of *climate injustice* and the omission of other security dimensions. Hence, China's representative Zhang Jun explains China's position when he states that "developed countries have the responsibility to help [developing countries] strengthen capacity building and enhanced economic and social resilience. The draft resolution did not address any of these important issues...The discussion on this fundamental dimension has not been pursued, and this is not fair" (China United Nations Mission 2021: para 4). China, India, and Russia jointly submitted an alternative draft resolution to respond to the Sahel region's issues, including climate change.

9.4 Conclusion

This case study on Niger is based on a theoretical framework distinguishing traditional security from human security and ecological security. As such, the traditional perception and conception of "hard security" as a protection of state territory and survival is increasingly being expanded to consider additional risks to the well-being of individuals, communities, the environment, as ultimately being a threat to national security. Hence, this inquiry, which particularly focused on the year 2020, finds that as Niger's understanding and approach to the threat to international peace and security evolves, so does the state's perception of the threat to national security. This research also tries to explore climate security perception and climate security action as the research categories. The study analyses and compares the understanding and practices of the nexus between climate change and security at the national, regional and international levels, especially in the UNSC. It finds that Niger perceives climate change particularly as a threat to national and collective security (Bazoum 2021).

Climate change has been a significant threat to Nigerien human security because of its geographic (Sahelian) position and increased environmental stress. Acknowledgement of and approaches to a new security threat from climate change are evolving but

varying. At the national level, given the mounting insecurity and the acknowledgement of climate change as a threat multiplier, Niger progressively perceives climate change as a national security concern. The traditional security sector (defence and military) understands the impact of climate change on national security. The military attempts to securitise the national territory by combining military operations with civil-military cooperation and development projects (Lake Chad Basin Commission 2018).

Niger is taking action to provide a relative response to the perceived threat of climate change at national and international levels. At the national level, climate politics consists of the Nigerien government laying out and implementing different policies and frameworks regarding climate security dimensions, and attempting to get non-state actors involved in climate security practices. However, in practice, climate change has not been recognised as a national security priority in domestic politics. Instead, the focus lies on the socio-economic effects of climate change (UNSC 2007) and the climate change and development nexus (Ministry of the Interior 2018; Prime Minister 2015, 2016a). That said, policymakers progressively understand and strategise climate change as an impact factor for national security on the international scene, even though the domestic policies are still lagging behind.

At the regional and international levels, Niger undertakes climate and environmental-related risks through climate diplomacy, fostering a securitisation process and collaboration with foreign entities, including taking a leadership role in the Great Green Wall initiative for the Sahel. Niger was very busy in the UN Security Council during its two-year term (2020–2021). In addition to its involvement in significant initiatives with the Arria Formula, the Group of Friends on Climate Security, and the Informal Expert Group on Climate and Security, Niger collaborated with Ireland to introduce a draft resolution on climate security, which led to Russia's veto, India voting against it, and China's abstention. Hence, with these obstacles it may be interesting to construct a scenario planning in order to explore the plausibility of a Security Council resolution on climate security for further research.

References

- Afrobarometer, 2019: "Data: African Nations Are among Those Most Vulnerable to Climate Change. A New Survey Suggests They Are Also the Least Prepared"; at: https://afrobarometer.org/sites/default/files/publications/Policy%20papers/ab_r7_policypaper060_experience_and_awareness_of_climate_change_in_africa.pdf.
- Bazoum, Mohamed, 2021: "Speech by the President of the Republic H.E.M Mohamed Bazoum at the 7th International Forum on Peace and Security"; at: <https://www.presidence.ne/discours-du-president/2021a/12/6/discours-du-president-de-la-republique-sem-mohamed-bazoum-au-7me-forum-international-sur-la-paix-et-la-securite-de-dakar>.
- Bazoum, Mohamed, 2021a: "Speech in Glasgow by the President of the Republic S.E.M Mohamed Bazoum"; at: <https://www.presidence.ne/discours-du-president/2021/11/1/discours-de-glasgow-du-president-de-la-republique-sem-mohamed-bazoum>.
- Bazoum, Mohamed, 2021b: "Speech of the President of the Republic H.E.M Mohamed Bazoum, on the Occasion of the General Debate of the United Nations Security Council, New York"; at:

<http://www.onu-missionniger.org/dalloction-de-son-excellence-monsieur-mohamed-bazoum-president-de-la-republique-chef-de-letat-president-du-conseil-de-securite-des-nations-unies-debat-de-haut-niveau-sur-le-the/>.

- Brauch, Hans Günter, 2008: “Introduction: Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century”; in: Brauch, Hans Günter; Oswald Spring, Úrsula; Mesjasz, Czeslaw; Grin, John; Dunay, Pál; Chadha Behera, Navnita; Chourou, Béchir; Kameri-Mbote, Patricia; Liotta, P. H. (Eds.): *Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century* (Berlin – Heidelberg: Springer): 27–43.
- Bruch, Carl; Slobodian, Lydia; Nichols, Sandra S.; Muffett, Carroll, 2016: “Facilitating Peace or Fueling Conflict? Lessons in Post-Conflict Governance and Natural Resource Management”, in: Slobodian, Lydia; Bruch, Carl; Nichols, Sandra S.; Muffett, Carroll (Eds.): *Governance, Natural Resources, and Post-Conflict Peacebuilding* (London: Routledge): 953–1040.
- China United Nations Mission, 2021: “Explanation of Vote by Ambassador Zhang Jun on the Security Council Draft Resolution on Climate and Security on 13 December 2021”; at: http://un.china-mission.gov.cn/eng/hyyfy/202112/t20211214_10469514.htm.
- Climate Commission for the Sahel Region, 2018: “Plan D’investissement Climat De La Région Du Sahel (Pic- Rs 2018-2030)” [Sahel Region Climate Investment Plan (Pic-Rs 2018–2030)] (Niamey, Niger: Commission Climat Pour la Région du Sahel [CCRS]); at: <http://spn2a.org/wp-content/uploads/2020/05/Rapport-provisoire-PIC-RS-Version-du-25-09-18.pdf>.
- Cole, Emily; Grossman, Allison, 2020: “In Niger, Foreign Security Interests Undermine Stability—What Can Be Done”; at: <https://www.usip.org/publications/2020/11/niger-foreign-security-interests-undermine-stability-what-can-be-done>.
- Conca, Ken, 2019: “Is There a Role for the Un Security Council on Climate Change?”, in: *Environment: Science and Policy for Sustainable Development*, 61,1: 4–15. <https://doi.org/10.1080/00139157.2019.1540811>.
- Deutch David Joseph, 2020: “What are friends for? ‘Groups of Friends’ and the UN system,” Universal Rights Group NYC, March 31 2020, at: <https://www.universal-rights.org/blog/what-are-friends-for-groups-of-friends-and-the-un-system/>.
- Halle, Silja et al., 2020: “Gender, Climate & Security. Sustaining Inclusive Peace on the Frontlines of Climate Change” (New York: UNEP, UN Women, UNDP and UNDP/PA/PBSO); at: <https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/Library/Publications/2020/Gender-climate-and-security-en.pdf>.
- Hardt, Judith Nora, 2018: *Environmental Security in the Anthropocene* (London: Routledge).
- Hardt J.N. 2021a. “The United Nations Security Council at the Forefront of (Climate) Change? Confusion, Stalemate, Ignorance.” *Politics and Governance*. <https://doi.org/10.17645/pag.v9i4.4573>.
- Harrington, Cameron; Shearing, Clifford, 2017: *Security in the Anthropocene: Reflections on Safety and Care* (Bielefeld: Transcript Verlag).
- India, United Nations Mission, 2021: “Action on Draft Resolution on Security in the Context of Climate Change (Moved Jointly by Niger and Ireland)”; at: <https://pminewyork.gov.in/IndiaatUNSC?id=NDQ1NQ>.
- International Crisis Group, 2018: “The Niger-Mali Border: Subordinating Military Action to a Political Strategy Crisis Group” (Brussels, Belgium: ICC); at: <https://www.crisisgroup.org/africa/west-africa/mali/261-frontiere-niger-mali-mettre-loutil-militaire-au-service-dune-approche-politique>.
- Intergovernmental Panel on Climate Change (IPCC), 2021: “Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change” (Cambridge, UK – New York, NY); at: <https://www.ipcc.ch/report/ar6/wg1/>.
- Issoufou, Mahamadou, 2015: “Nous Avons Un Droit À Polluer En Afrique” [We Have the Right to Pollute] (Paris, France: France 24, COP21); at: https://www.youtube.com/watch?v=_929MuyjckI.

- Issoufou, Mahamadou, 2017: "Speech to the Nation on Independence Day, Niamey, Niger"; at: <https://www.ouestaf.com/fete-dindependance-2017-du-niger-le-discours-a-la-nation-du-president-mahamadou-issoufou-texte-integral>.
- Issoufou, Mahamadou, 2019: "Interview by Cyril Payen and Gaëlle Laleix. Rfi and France 24", in: *RFI – France 24*; at: <https://www.youtube.com/watch?v=GwSde-drlSc>.
- Issoufou, Mahamadou, 2019a: "Niger – President Addresses General Debate, 75th Session, New York, USA, 24 September 2020"; at: <https://www.presidence.ne/discours-du-prsident/2019/9/25/allocation-de-sem-issoufou-mahamadou-president-de-la-rpublique-chef-de-ltat-a-la-74me-session-ordinaire-de-lassemblee-gnrale-des-nations-unies>.
- Issoufou, Mahamadou, 2019b: "Issoufou Mahamadou, President of the Conference of Heads of State and Government of the Ecowas". Ouagadougou, Burkina Faso, September, 2019); at: [Speech delivered by President Issoufou at the closing of the Summit of the ECOWAS Authority of Heads of State and Government: "I will give high priority to regional security, the consolidation of democratic institutions and the economic integration of our States", says HE Issoufou Mahamadou, new ECOWAS President \(lesahel.org\)](#).
- Issoufou, Mahamadou, 2019c: "Issoufou Mahamadou Speech at the Official Opening Session of the First Sahel Climate Commission Summit". Niamey, Niger, 25 February 2019); at: <https://www.presidence.ne/actualites/discours-du-prsident/2019/2/25/discours-de-sem-issoufou-mahamadou-louverture-officielle-du-premier-sommet-de-la-commission-climat-sahel>.
- Kalilou, Ousseyni, 2021: "Climate Change and Conflict in the Sahel: The Acacia Gum Tree as a Tool for Environmental Peacebuilding", in: *International Affairs*, 97,1: 201–18. <https://doi.org/10.1093/ia/iaa178>.
- Kone, Hassane, 2020: "Sahel Militaries Need Better Governance to Face the Terror Threat" (Pretoria: Institute for Security Studies, ISS Today); at: <https://issafrica.org/iss-today/sahel-militaries-need-better-governance-to-face-the-terror-threat>.
- Krampe, Florian; de Coning, Cedric, 2021: "Russia's 'Nyet' Does Not Mean Climate Security Is Off the Security Council Agenda"; at: <https://www.sipri.org/commentary/expert-comment/2021/russias-nyet-does-not-mean-climate-security-security-council-agenda>.
- Lake Chad Basin Commission, 2018: "Regional Strategy for Stabilization, Recovery, and Resilience of Lake Chad Basin Areas Affected by the Boko Haram Crisis"; at: <http://www.peaceau.org/en/article/regional-strategy-for-the-stabilization-recovery-resilience-of-the-boko-haram-affected-areas-of-the-lake-chad-basin-region>.
- Ministry of the Interior, 2018: "Draft Document of the National Policy on Border 2019–2035" (Niamey, Niger: Ministry of the Interior and Decentralisation).
- Ministry of Planification, 1998: "The National Policy on Environment and Sustainable Development" [Plan National de Développement Durable]. (Juillet 1998 Niamey, Niger); at: <https://spn2a.org/wp-content/uploads/2020/08/1998-PNEDD.pdf>.
- Ministry of Planification, 2017: "The 2017–2021 Social and Economic Development Plan" (PDES) (Niamey, Niger), at: <https://www.nigerrenaissant.org/en/social-and-economic-development-plan>.
- Ministry of Transportation, 2014: "Niger Project: Climate Change Adaptation, Disaster Prevention and Agricultural Development for Food Security"; at: <https://www.meteo-niger.org/content.php?page=136>.
- Moustapha, Safia, 2011: "Acacia Senegal Farming Project: Case-Study for the Validation of the Standard Climate Community's Biodiversity Community Component".
- Nahan, Siby; Frédérique, Denis; Stéphane, Manier, 2016: "Niger: La Bataille De L'uranium" [Niger, the Battle over the Uranium]; at: https://youtu.be/EMjmb_vUqws.
- Nexus, 2019: "Improving Security and Climate Resilience in a Fragile Context through the Water-Energy and Food Security Nexus (Frexus)"; at: <https://www.water-energy-food.org/resources/resources-detail/project-improving-security-and-climate-resilience-in-a-fragile-context-through-the-water-energy-and-food>.
- Niang, Isabelle et al., 2014: "Africa", in: "Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment

- Report of the Intergovernmental Panel on Climate Change” (Cambridge, UK - New York, NY: Cambridge University Press); at: https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap22_FINAL.pdf.
- Prime Minister, 2000: “Décret N° 2000-272/Pm Du 04 Août 2000, Modifiant Et Complétant Le Décret N° 96-004 Pm Du 09 Janvier 1996, Portant Création, Composition Et Attributions Du Conseil National De L’environnement Pour Un Développement Durable (CNEDD)” [Decree N° 2000-272 / Pm Du 04 August 4, 2000, Modifying and Supplementing Decree N° 96-004 Pm of January 9, 1996, Establishing, Composition and Attributions of the National Council of the Environment for a Sustainable Development (CNEDD)] (Niamey, Niger: Prime Minister); at: ner30747.pdf.
- Prime Minister, 2006: “Conseil National De L’environnement Pour Un Développement Durable (Cnedd)” [National Council on the Environment for the Sustainable Development] (Niamey, Niger: Prime Minister); at: <https://www.adaptation-undp.org/partners/conseil-national-de-lenvironnement-pour-un-d%C3%A9veloppement-durable-cneddniger>.
- Prime Minister, 2012: “CNEDD, *National Report: RIO+20*.” [Rapport de situation sur la mise en œuvre de l’Agenda 21 du Niger Conférence de Rio+20]. Niamey, Niger: Cabinet of Prime Minister. [Rapport de situation Rio+20 - version finale.pdf](http://rapport-de-situation-rio20-version-finale.pdf) (cnedd.ne)
- Prime Minister, 2014: “CNEDD, Stratégie Nationale et du Plan d’Action en matière de Changements et Variabilités Climatiques (SNPA/CVC).” [National Strategy and Action Plan on Climate Change and Variability (SNPA/CVC) Revised: Final version]. Niamey, Niger: Cabinet of Prime Minister; at: [http://www.cnedd.ne/images/documents/PDF/PNA/SNPACVC%20Revis%C3%A9%20_Finale\[20487\].pdf](http://www.cnedd.ne/images/documents/PDF/PNA/SNPACVC%20Revis%C3%A9%20_Finale[20487].pdf).
- Prime Minister, 2015. “CNEDD, Évaluation des Impacts du Changement Climatique et les Coûts, Bénéfices et Avantages de l’Adaptation dans le Secteur Agricole: Version Finale, août 2015.” [Assessment of the Impacts of Climate Change and the Benefits and Advantages of Adaptation in the Agricultural Sector: Final version]. (Niamey, Niger: Cabinet of Prime Minister).
- Prime Minister, 2015a: “National Renewable Energies Action Plan (Paner) Niger Period.” [2015b–2020/2030: Within the Framework of the Implementation of the Ecowas Renewable Energy Policy (Perc)] (Niamey, Niger: Prime Minister); at: https://www.se4all-africa.org/fileadmin/uploads/se4all/Documents/Country_PANER/Niger_Plan_d_Actions_National_des_Energies_Renouvelables.pdf.
- Prime Minister, 2016: “Executive Secretary. Strategy of Development and Security in the Sahelo-Saharan Zones (Sds Sahel- Niger)” (Niamey, Niger: Prime Minister); at: https://www.ipinst.org/wp-content/uploads/2013/04/pdfs_sds_version_english.pdf.
- Prime Minister, 2016a: “CNEED, International Committee for Combating Climate Change: Cilss. Achievements Special Bulletin: Cilss.” [Lutte contre le changement climatique: les réalisations du CILSS]. (Niamey, Niger: Prime Minister); at: bulletin_CC_CILSS2016.pdf.
- Prime Minister, 2016b. “CNEDD, “Troisième Communication Nationale à la Conférence des Parties de la Convention Cadre des Nations Unies sur les Changements Climatiques.” [Third National Communication at the Conference of the Parties to the United Nations Framework Convention on Climate Change]. (Niamey, Niger: Cabinet of Prime Minister).
- Prime Minister, 2019: “Mapping the Vulnerability of Agro-Pastoral Activities in the Regions of Niger within the Framework of the Project for the Development of Climate Information and Forecasting (Pdipc)” (Niamey, Niger: Prime Minister); at: http://www.cnedd.ne/images/documents/PDF/PNA/PDIPC-Cartographie_VF%20.pdf.
- Prime Minister, 2020: “Cnedd. Study on Adaptation Activities Carried out and in Progress between 2006 and 2019” [Étude sur les Activités d’Adaption Réalisées et en cours entre 2006 e 2019]. (Niamey, Niger: Prime Minister); at: <http://www.cnedd.ne/images/documents/PDF/PNA/ETUDE%20SUR%20LES%20ACTIVITES%20D’ADAPTATION%20REALISEES%20ET%20EN%20COURS%20ENTRE%202006%20ET%202019.pdf>.
- Prime Minister, 2020a: “Rapport de l’actualisation de l’évaluation de la vulnérabilité et de l’adaptation (V&A) aux changements climatiques dans le secteur de l’agriculture au Niger. Contribution pour la Quatrième Communication Nationale (QCN) sur les Changements Climatiques.

- Version finale, Octobre 2020.” [Report on the update of the vulnerability and adaptation assessment (V&A) to climate change in the agricultural sector in Niger. Contribution to the Fourth National Communication (QCN) on Climate Change. Final version, October 2020]. <http://www.cnedd.ne/images/documentsPDF/RapportfinalEvaluationAgriculture2020.pdf>.
- Prime Minister, 2021: “CNEED. Progress Report on the Implementation of Niger’s Agenda 21: Rio + 20 Conference”; at: <http://www.cnedd.ne/images/documentsPDF/LCD/Rapport%20de%20situation%20Rio+20%20-%20version%20finale.pdf>.
- President’s Cabinet, 2017: “The 3N Initiative (Nigeriens Nourish Nigeriens). Haut Commissariat A l’Initiative 3N” [The High Commissioner] (Niamey, Niger); at: <http://www.initiative3n.ne/le-haut-commissaire.php>.
- President’s Cabinet, 2018: “Centre National D’études Stratégiques Et De Sécurité (Cness): National Centre of Strategy and Security Studies” In-Depth Studies on the Factors of Radicalization in Rural, Academic, and Detentions in Five Regions of Niger].
- Ranasinghe, Roshanka et al., 2021: “Climate Change Information for Regional Impact and for Risk Assessment (Cambridge, UK – New York, NY. Cambridge University Press); at: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Chapter12.pdf.
- Rigaud, Kanta Kumari et al., 2018: “Groundswell” (Washington, D.C.: World Bank); at: <https://openknowledge.worldbank.org/handle/10986/29461>.
- Rühl, Bettina, 2021: “Why Private Foreign Security Companies Are Booming in Africa”; at: <https://www.dw.com/en/why-private-foreign-security-companies-are-%09booming-in-africa/a-58134009>.
- Russia, United Nations Mission, 2021: “Explanation of Vote by Permanent Representative Vassily Nebenzia before the Vote on Unsc Draft Resolution on Climate and Security”; at: https://russia.un.ru/en/news/statement_131221.
- Shaller, Stella; Vivekananda, Janani; Brown, Oil, 2019: “Shoring up Stability in Niger”; at: <https://www.climate-diplomacy.org/news/shoring-stability-niger>.
- Shank, Michael. J.; Meeks, Gregory, 2019: “It’s Time for the U.N. Security Council to Take on Climate Change”, in: *REUTERS*; at: <https://news.trust.org/item/20190607152311-yrb7p>.
- Simpson, Nicholas P., et al., 2021: “Climate Change Literacy in Africa”, in: *Nature Climate Change*, 11,11: 937–44. <https://doi.org/10.1038/s41558-021-01171-x>.
- Stockholm International Peace Research Institute, 2020: “Reflection: “Understanding Regional Perspectives of Security in the Sahel””; at: <https://www.sipri.org/news/2020/new-video-regional-perceptions-security-sahel>.
- Sustainable Development and Inclusive Growth Strategy (SDIGS), 2017: A Country and a Prosperous People, May www.nigerrenaissant.org (accessed 24 June 2022).
- UN Charter, 1945: “1 Unts Xvi”; at: <https://www.un.org/en/about-us/un-charter>.
- UN Women, 2016: “United Nations Entity for Gender Equality and the Empowerment of Women. Women and Climate Resilient Agriculture Project”; at: https://trainingcentre.unwomen.org/pluginfile.php/66830/mod_folder/content/0/Women%20and%20Climate%20Resilient%20Agriculture%20flagship%20for%20Niger%20v2.pdf.
- United Nations Convention to Combat Desertification (UNCCD), 2014: “Desertification: The Invisible Frontline”; at: <https://www.unccd.int/publications/desertification-invisible-frontline-second-edition>.
- UNCCD, 2020: “The Great Green Wall Implementation Status and Way Ahead to 2030”; at: <https://www.unccd.int/resources/publications/great-green-wall-implementation-status-way-ahead-2030>.
- United Nations Department of Economic and Social Affairs Sustainable Development, 2020: “Farmer Managed Natural Regeneration (FMNR): A Technique to Effectively Combat Poverty and Hunger through Land and Vegetation Restoration”; at: <https://sustainabledevelopment.un.org/partnership/?p=30735>.
- United Nations Development Programme (UNDP), 1994: *Human Development Report 1994: New Dimensions of Human Security* (New York: UNDP); at: <https://hdr.undp.org/system/files/documents/hdr1994encompletenostatpdf.pdf>.
- UNDP, 2019: Human Development Report 2019. Niger Human Development Indicators Trends from 1990 to 2019 (New York: UNDP); at: <http://www.hdr.undp.org/en/countries/profiles/NER>.

- United Nations Security Council (UNSC), 2007: “Security Council Holds First-Ever Debate on Impact of Climate Change on Peace, Security, and Hearing over 50 Speakers” (New York: UNSC).
- UNSC, 2017: “Resolution 2349. Resolution on the Lake Chad Region” (New York: UNSC); at: <https://www.globalr2p.org/wp-content/uploads/2017/03/UNSC-2349-LCB.pdf>.
- UNSC, 2018: “Maintenance of International Peace and Security: Understanding and Addressing Climate-Related Security Risks” (New York: UNSC); at: https://www.securitycouncilreport.org/atf/cf/%7B65BF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_pv_8307.pdf.
- UNSC, 2020: “Letter Dated 28 July 2020a from the President of the Security Council Addressed to the Secretary-General and the Permanent Representatives of the Members of the Security Council (S/2020/ 751)” (New York: UNSC); at: <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N20/200/77/PDF/N2020077.pdf?OpenElement>.
- UNSC, 2020a: United Nations Security Council (UNSC): “Arria-Formula Meeting on Youth, Peace and Security (Dec 09, 2020b).” <https://www.youtube.com/watch?v=hFEjpC60Fsg>
- UNSC, 2020b: “Security Council Report 2019. Climate Change and Security” (New York: UNSC); at: https://www.securitycouncilreport.org/monthly_forecast/2020-02.
- UNSC, 2021: “Climate Change and Security. UNSC Draft Resolution by Niger and Ireland” (New York: UNSC); at: <https://www.securitycouncilreport.org/whatsinblue/2021/12/climate-change-and-security-vote-on-a-resolution.php>.
- UNSC, 2021a: “In Hindsight: The UN Security Council and Climate Change,” July 2021 Monthly Forecast, Climate Change and Security, December 2021 Monthly Forecast : Security Council Report.
- UNSC, 2021b: “The UN Security Council and Climate Change. Security Council Research Report 2021c” (New York: UNSC); at: https://www.securitycouncilreport.org/atf/cf/%7B65BF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/climate_security_2021.pdf.
- Vivekananda, Janani et al., 2019: “Shoring up Stability: Addressing Climate and Fragility Risks in the Lake Chad Region” (Berlin: Adelphi).
- Werz, Michael; Conley, Laura, 2012: “Climate Change, Migration, and Conflict in Northwest Africa: Rising Dangers and Policy Options across the Arc of Tension” (Washington, D.C.: Center for American Progress); at: <https://www.americanprogress.org/article/climate-change-migration-and-conflict-in-northwest-africa/>.
- World Bank, 2020: “Improving Productivity for Pastoralists and Agro-Pastoralists across the Sahel” (Washington, D.C.: World Bank); at: <https://www.worldbank.org/en/results/2020/10/19/improving-productivity-for-pastoralists-and-agro-pastoralists-across-the-sahel>.
- World Population Review, 2021: “Niger”; at: <https://worldpopulationreview.com/countries/niger-population>.

Chapter 10

Climate Change in Security Perceptions and Practices in Russia



Ilya Stepanov

Abstract This chapter investigates the climate-security nexus in Russian political discourse and practices. It is based on an analysis of key policy documents, statements of official representatives of Russia, and data from social polls in the domain of climate change, environment, and security. The analysis covers the time period from 2007 to 2020 and shows that, even though climate change is gaining more room in the Russian national agenda, it is still not considered as a meaningful threat to national, human, and ecological security. The national climate policy is far from one that could effectively manage multiple climate-related risks. Further, the significance of fossil fuels to the economy results in prioritisation of adaptation-focused climate policies over mitigation ones. The analysis shows that climate change is often perceived as an opportunity rather than a threat by officials, state companies, and the general public. An example of this is in the warming Arctic and the corresponding political discourse on potential benefits of growing transport and resource accessibility in the region. However, in recent years, the dominant feature of Russian climate policy discourse – scepticism about the anthropogenic nature of climate change – is changing towards a more science-based policy agenda. Moreover, the analysis shows that over the last few years new dimensions of climate-security discourse have arisen, which emphasise the indirect (rather than direct) risks related to low-carbon transition outside Russia and climate-induced military risks, particularly in the Arctic. These processes might be able to boost climate policies as well as the overall awareness of climate change as a threat to people, ecosystems, and the economy in Russia.

10.1 Introduction

This chapter assesses how Russia has interpreted and practised climate change security between the late 2000s and 2020. It opens with a brief literature review and short description of climate change trends and patterns of their regional and industrial

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impacts, and then proceeds to the analysis of the climate-security nexus in Russian political discourse and practices.

The existing literature on climate change in Russia mostly concentrates on the portrayal and assessment of risks or potential benefits the warming could bring to the country (Shvidenko/Schepaschenko 2013; Svetlov et al. 2019; Porfiriev et al. 2017; Roshydromet 2017). According to the Federal Service for Hydrometeorology and Environmental Monitoring of Russia (Roshydromet 2014), warming in Russia is approximately 2.5 times more intense than the global average. Due to regional diversity, the impacts of climate change vary considerably across the country. The highest growth rate in average annual temperature is observed at the coast of the Arctic Ocean, especially in the Asian part of Russia. Warming in Russia's Arctic is happening 5-6 times faster than the world average.

The same reference states that despite the net-negative effects, climate change could have some positive implications for socio-economic development, including in the Northern regions. These include new opportunities for extraction and shipping of resources, the shortening of the heating season,¹ and reduced energy consumption. Agricultural industry is among the beneficiaries as well: warming expands vegetation zones and increases the efficiency of animal husbandry (Roshydromet 2014). However, most of the consequences from climate change are negative and present significant challenges for national, human, and ecological forms of security in the country.

Take, for instance, the Arctic region, which has a strategic resource and military importance for Russia. It is perhaps the region most exposed to climate threats. Two-thirds of Russia (mostly its Northern and Eastern parts) are covered with permafrost. Although sparsely populated, these territories contain important infrastructure such as pipelines, strategic military facilities, and roads to remote settlements, which increasingly require funds for maintenance (Makarov/Stepanov 2016).

While the thawing of perennial permafrost poses the main threat to the Northern and North-Eastern regions, the main threats for the Southern regions are the risks from changes in humidity: aggravation of dry conditions and an increase in frequency and strength of rain floods (Roshydromet 2017). Siberian and Far Eastern forests are among the regions that are affected by wildfires and floods most often.² Big cities are also vulnerable to climate change. To illustrate, the extremely hot summer in Moscow in 2010 led to a 10% increase in deaths from cardiovascular and respiratory diseases during July and August.³

Other papers focus on the potential policy response needed to reduce greenhouse gas emissions or adapt to the changing climate (Porfiriev 2019; Bashmakov 2020).

¹ The heating season is a period that covers the whole of Winter and parts of Spring and Autumn. At this time, premises are heated with the help of central heating pipes.

² "Last forest fire extinguished in the Irkutsk region"; at: <https://rg.ru/2019/09/11/reg-sibfo/v-irkuts-koj-oblasti-potushili-poslednij-lesnoj-pozhar.html> (12 July 2022); "Deep August 2013: Chronicle of flooding in the Khabarovsk Territory from 'A' to 'Z'"; at: <https://amurmedia.ru/news/837376/> (15 June 2022).

³ "Extreme heat rises due to summer heat officially recognized"; at: https://www.vedomosti.ru/opinion/articles/2010/10/27/zharkij_martiolog (13 May 2022).

There are also some papers providing evidence on the evolution of the position of the Russian government regarding the country's participation in international climate and environmental policies and agreements (Makarov 2016; Sharmina et al. 2013). Overall, the literature rarely dwells on the perception of the climate change and security nexus by policymakers and/or society at the national scale. However, some exceptions focus on depicting this link at the level of regional, local, and indigenous communities (Anisimov/Orttung 2019; Doloisio/Vanderlinden 2020).

This analysis aims to fill this gap. It aims to identify the climate change-security nexus in political and public discourse of Russia based on an analysis of key state documents (plans, programmes, doctrines, laws, strategies), statements of official representatives (including the President of Russia who mostly frames the security agenda in the country), data of social polls as well as academic sources. Based on the discourse analysis, the chapter proceeds with a deeper investigation of the political actions in the domain of climate policy and climate change-risk mitigation. Methodologically, the analysis relates to the framework of the analysis of the climate change-security nexus developed by Hardt (2018) and Harrington/Shearing (2017); however, due to the specifics of the case of Russia, the analysis is mostly focused on the national security risks, leaving little room for issues of human and ecological security.

This chapter consists of six sections. Following this introduction, the second section examines the key policy security documents in Russia and how they view climate change as a security threat. It shows how climate change security is gaining more prominence in a range of strategic policy papers, although it is still far from being portrayed as a fundamental and notable threat to the country's security. The third section depicts climate change across the wider political and public discourse of Russia and describes the current state and evolution of climate change security perception patterns. The fourth section analyses climate change in key practices and government policies that are currently in place. It shows that adaptation-focused climate policies are often prioritised over mitigation-focused ones, while the latter usually come into collision with the development objectives of a country largely dependent on fossil fuels. Nevertheless, the fifth section shows that over the last few years new dimensions of the climate change-security discourse have arisen. This discourse is mostly centred around the indirect risks posed by the global low-carbon energy transition happening globally, rather than climate change itself. Other shifts are also detected that emphasise the military risks from a warming Arctic. In the concluding section, the main outcomes are summarised, followed by a brief discussion.

10.2 Confluence of Climate Change and Security in Policy Strategies

The evolution of national policy documents shows that climate change is gradually gaining space in Russia's national security agenda. The 2009 Climate Doctrine of the Russian Federation, issued by the President, Dmitri Medvedev, represents the first framework climate policy document which calls for the need to consider climate change as one of the "key long-term security factors" of the Russian Federation and to incorporate the issue of climate change both into national and international dimensions of Russian policy (President of the Russian Federation 2009). In the Climate Doctrine, climate change is portrayed as a phenomenon which will "inevitably affect people's lives, the state of the animal and plant world in all regions of the planet and will become a tangible threat to the well-being of the population and sustainable development in some of them" (President of the Russian Federation 2009).

During the last decade, the security perceptions of the risk posed by climate change have been shifting. To illustrate, in earlier strategic security documents, such as the National Security Strategy of 2009, climate-related events were mentioned mainly in a broader framework of environmental problems and disaster security. Terms such as "global environmental problems" ("глобальные экологические проблемы"), "natural and man-made emergencies" ("чрезвычайные ситуации техногенного и природного характера"), and "impact of natural disasters" ("последствия стихийных бедствий") were used (President of the Russian Federation 2009). In the latest National Security Strategy of 2015, the effects of climate change are identified as a separate threat to national security, while climate-related "natural disasters, accidents, and catastrophes"⁴ are singled out as one of the factors threatening Russian "state and social security".⁵

Nevertheless, the importance of climate change within the Russian National Security Strategy should not be exaggerated. In the National Security Strategy of 2015, climate change is not depicted as a fundamental and primary threat to the security of the country. It is placed at the end of the list of eight groups of threats, which may undermine national security (after foreign espionage, terrorism, and corruption). In the text of the Strategy, climate change occupies quite a modest place and is not mentioned directly – in other words, it is "natural disasters, accidents, and catastrophes, including those driven by climate change", which are outlined as a threat to national security, but not climate change itself (President of the Russian Federation 2015). Overall, climate change is not framed as a direct existential threat to Russian national security. Instead, it is presented as only one amongst other, more meaningful, threats to national security.

However, the inclusion of climate change in the 2015 Security Strategy has seemingly allowed it to emerge as a relevant phenomenon across a range of national security documents in different domains, including the environment, the economy,

⁴ Author's translation.

⁵ Ibid.

the Arctic, etc. Most of the documents are updated irregularly but have now shown the relevance of climate change to the policy-planning agenda. According to the Russian Environmental Security Strategy of 2017 the effects of climate change are considered a global threat to environmental security (President of the Russian Federation 2017). The Environmental Security Strategy became the first strategic environmental document after the Strategy on Environmental Protection and Ensuring Sustainable Development issued back in 1994 (President of the Russian Federation 2017a). The Strategy highlights climate change as one of the global environmental challenges, listed before the reduction of natural resources, and negative consequences of environmental degradation, including desertification, drought, and land and soil degradation, as well as biodiversity loss.

The Russian Economic Security Strategy of 2017 highlights the fact that climate-induced factors could impact national economic security through increased shortages of food and fresh water, and intensified competition for access to renewable resources, including the resources of the Arctic and Antarctic zones, and the waters of the Arctic Ocean (President of the Russian Federation 2017a). Climate change as a phenomenon has also appeared in other policy documents, such as the Russian Foreign Policy Concept of 2016 (President of the Russian Federation 2016), the Fundamentals of State Policy in the Field of Civil Defence for the Period until 2030 (of 2016) (President of the Russian Federation 2016a), the Fundamentals of Protection of the Population and Territories from Emergency Situations up to 2030 (of 2017) (President of the Russian Federation 2017d), the Fundamentals of Chemical and Biological Safety up to 2025 and beyond (of 2019) (President of the Russian Federation 2019) and the Energy and Food Security Doctrines (of 2019 and 2020 respectively) (President of the Russian Federation 2019, 2020). In these strategy documents, climate change and its consequences are perceived as a possible threat since they may lead to emergency situations, risk food security, or jeopardise ecosystems.

10.3 The Climate-Security Nexus in Russian Political and Public Discourse

This section examines domestic political and public discourse on the climate change-security nexus, which to a great extent underlies the standpoint of Russia in the United Nations Security Council (UNSC) on the issue of climate change. The ambiguity of domestic discourse which does not reflect definite interpretation of climate change as a human-induced threat to national, environmental and human security results in Russia's strong intention to exclude climate change from the agenda of the UNSC.

10.3.1 Ambiguity of Domestic Political and Public Discourse

In domestic political discourse, climate change has often pictured not only as a problem, but also as a source of new opportunities, especially for the development of the Arctic regions with high resource and transportation potential which can be realised by oil and gas companies. To illustrate, during the international “The Arctic: Territory of Dialogue” forum in 2017, Russian President Vladimir Putin referred to climate change in the Arctic as a potential benefit for the country because it would support plans for the development of the liquified natural gas industry and provide an increase in cargo turnover along the Russian Northern Sea Route.⁶

In recent years, in the political discourse, the perception of climate change as an opportunity rather than a threat is gradually changing. Climate change is still from time to time depicted as an external factor which may strengthen national security, both in political and scientific discussions.⁷ However, President Putin, during a press conference (which is the largest annual meeting of the President with journalists) held in December 2019, highlighted the fact that climate change directly affects Russia and can lead to “severe consequences”, especially for the cities located above the Arctic Circle that are situated on melting permafrost, as well as to desertification, and increased numbers of fires and floods.⁸ Completing his answer to a question on climate change implications in Russia, he stressed the importance of taking necessary steps for managing climate change impacts.

Nevertheless, the dominant feature of Russian climate change political discourse is a deeply ingrained scepticism about the anthropogenic nature of climate change, which is then transmitted to the general public. In other words, the government recognises climate change and climate-induced threats but does not acknowledge that anthropogenic emissions are the main driving force of these challenges. These perceptions are widely shared by the common public. Indeed, the common perception amongst the Russian people is not to view the multiplication and intensification of natural hazards and extremes as being caused by human activity, i.e., resulting from the growth of greenhouse gas emissions. According to one opinion poll, at the beginning of 2020 40% of the Russian population believed that global warming is a “far-fetched” problem.⁹ Another opinion poll, conducted by the Levada Centre at

⁶ Putin: Russia is pleased with climate change in the Arctic; at: <https://regnum.ru/news/polit/2256708.html>.

⁷ The trend for sustainable development opens up new opportunities for Russian business; at: <https://www.moibiz.biz/novosti/news/trend-na-ustoychivoe-razvitie-otkryvaet-novye-vozmozhnosti-dlya-rossiyskogo-biznesa> (13 May 2022); Expert: climate change in the Arctic opens up opportunities for offshore exploration; at: <https://tass.ru/ekonomika/9640915> (15 June 2022).

⁸ Big Press Conference of Vladimir Putin; at: <http://kremlin.ru/events/president/news/62366> (12 July 2022).

⁹ Russian Public Opinion Research Center: about 40% of Russians surveyed called global warming a far-fetched problem; at: <https://tass.ru/obschestvo/7846251> (12 July 2022).

the end of 2020¹⁰ shows that 70% of Russians have experienced changes in climate conditions, yet only one-fifth of them indicates any interest in knowing more about the problem.

At the same annual press conference in December 2019, Vladimir Putin expressed some belief in the theory that natural forces are more responsible than anthropogenic forces in causing climate change. He said that “a slight inclination of the axis of rotation of the Earth and its orbit around the Sun can lead, and, in the history of our planet, has already led, to very serious climate changes on Earth”.¹¹ He emphasised that more research is needed to establish the role of anthropogenic factors. In October 2018, at the energy forum Russian Energy Week, Putin claimed that the reasons for global warming are unclear: “The so-called anthropogenic emissions are most likely not to be the main reason for this warming. These can be global changes, cosmic changes, some shifts that are invisible to us in the galaxy – and we do not even understand all these processes. Probably, anthropogenic emissions somehow affect [climate change] but, according to many experts, their role is insignificant”.¹² This statement to a large extent synthesises the mainstream view on the nature of the climate change issue which prevails in the political discourse and in the minds of the public: climate change is a threat, but it is not likely to be human-caused.

It is not surprising that this statement was made during the main Russian annual Energy Forum which gathers oil and gas giants as well as other stakeholders of fossil fuel energy development in Russia. In 2017, the hydrocarbon energy production and use sectors accounted for 25% of Russian GDP and 39% of federal revenues, 65% of export revenues, and almost a quarter of total fixed capital investments in Russia (Mitrova and Melnikov 2019). The development of fossil fuel energy still plays a substantial role in the social and economic prosperity of ordinary Russians, let alone the country’s economic and political elite. It is telling that the main slogan of the giant state-owned Russian natural gas company Gazprom translates as “Gazprom – national treasure”, indicating the very strong link between the company and the common public.

Public scepticism over the anthropogenic nature of climate change is supported by several popular media figures, such as journalists Yulia Latynina¹³ and Alexandr Gorodnitsky,¹⁴ the writer and ex-geoscientist. Both drove a wave of public scepticism in the public discourse over climate change in reaction to Greta Thunberg’s speech at

¹⁰ Most Russians have experienced climate change, but do not want to know anything about its consequences; at: <https://plus-one.ru/news/2020/12/24/bolshinstvo-rossiyan-oshchutili-izmene-niya-klimata-no-nichego-ne-hotyat-znat-o-ego-posledstviyah> (13 May 2022).

¹¹ Author’s translation.

¹² Russia agreed to fight global warming, although Putin does not believe in it. What made her? at: <https://www.bbc.com/russian/features-49953830> (12 July 2022).

¹³ The Church of Global Warming; at: <https://novayagazeta.ru/articles/2019/11/30/82935-tserkov-globalnogo-potepleniya> (15 June 2022).

¹⁴ The Girl and the Myth; at: <https://www.kommersant.ru/doc/4205270> (12 July 2022).

the 2019 UN Climate Action Summit.¹⁵ This aligns closely to what Poberezhskaya (2018) pointed out, when she stated that public discussions of climate change often lead to “conspiracies of climate change” or “political games of climate change” rather than to acknowledgement of the fundamentals of the problem. The public scepticism about the anthropogenic nature of climate change stems from a lack of scientific knowledge and quality media content, which has been forced out by the state-controlled television network. Public opinion is fed by the state-controlled media and political discourse which is imposed on society.

10.3.2 Foreign Policy Discourse and Russia’s Standpoint in the UNSC

At the international level, Russia fully recognises the issue of climate change and participates in international formats of cooperation. Russia advocates for international action for the sake of climate change mitigation and emphasises the need for all countries to follow the Paris Agreement and the United Nations Framework Convention on Climate Change (UNFCCC). However, Russia opposes the “securitisation” of this problem, i.e., transforming climate change from a normal political issue into an elevated matter of security and including it in the agenda of the UN Security Council. The country’s political leadership believes that climate change does not belong in the Council’s deliberations like other security issues, and is not a main cause of international conflicts. The direct linking of climate change issues with internal socio-political crises prevents the development of the most effective solution to the stated problem. Russian policymakers suppose that climate change can be regulated through the UN, but should be considered only in specialised institutions like UNFCCC.¹⁶

During the last decade, the attitude of the Russian Federation to this topic within the UN Security Council has not changed significantly. To illustrate, in 2007, at a meeting of the UN Security Council, Russia’s Permanent Representative to the UN, Vitaly Churkin, noted that “there are relevant international forums and formats which should consider the problem of climate change, including all its aspects, assessment of new challenges and threats in this area... As for the UN Security Council, it should deal with issues directly related to its mandate”.

Later, in 2011, at the Security Council meeting “Maintaining International Peace and Security: Consequences of Climate Change,” Russia once again called on the UN not to “politicise” the problem of climate change. Alexander Pankin, Russia’s

¹⁵ Greta Thunberg is a Swedish environmental activist who is known for challenging world leaders to take immediate action for climate change mitigation.

¹⁶ Russia’s Position at the Seventy-fifth Session of the UN General Assembly; at: https://www.mid.ru/foreign_policy/news/-/asset_publisher/cKNonkJE02Bw/content/id/4252717?p_p_id=101_INSTANCE_cKNonkJE02Bw&_101_INSTANCE_cKNonkJE02Bw_languageId=en_GB (12 July 2022).

Deputy Permanent Representative to the UN, said that “Russia is sceptical about the practical value of the recurring attempts to bring the issue of climate change threats to international peace and security to the agenda of the Security Council” (BBC News 2011).

At the 2018 Security Council meeting, Russia’s First Deputy Permanent Representative to the UN, Dmitry Polyansky, maintained the course initiated in 2007 and said that “we [Russia] are ready to do and are doing everything to collectively solve the problem [of climate change], but today the Council’s discussion moves things in exactly the opposite direction – speculation on the climate theme, the use of this problem in the interests of solving purely political problems, the imposition of one-sided standards.” According to Polyansky, Russia supports “collective efforts in the fight against climate change ... but we cannot be satisfied with the fact that today’s meeting is another attempt to link environmental issues with threats to international security.” (TASS 2018).

Russia seeks to deliberately exclude climate change from the discussions at the traditionally “hard” security venues like the United Nations Security Council. This is especially important in light of the political crisis that has engulfed its relations with the West in recent years. In 2019, at a regular Security Council meeting dedicated to the impact of the consequences of climate change on security, in particular floods, droughts, and rising sea levels, the Permanent Representative of the Russian Federation to the UN, Vasily Nebenzya, said that Russia “supports the central role of the UN in disaster risk reduction and building resilience to them”, but is against the “securitisation of the topic of climate change and considers it unnecessary and even counterproductive to consider climate issues in the UN Security Council” (RIA News 2019). The politician stressed that “challenges in this area require an integrated approach” and noted that “all states should provide comprehensive assistance to countries in need in strengthening integrated capacity for disaster risk reduction”. According to Nebenzya, climate change should be excluded from the UNSC agenda because it does not represent “a universal challenge in the context of international security, and in this regard should be considered in relation to each specific situation” (RIA News 2019).

In his statement at a UNSC meeting in 2020, Vasily Nebenzya pointed out that “Climate change itself is, indeed, one of the greatest challenges of our time” and added that “our task is to scale up specific practical actions in line with intergovernmentally-agreed instruments. In the case of climate change – it is the UNFCCC and the Paris Agreement”. However, he outlined that “we [Russia] are concerned about continuous efforts to use the Security Council to steer the discussion on climate change away from its adverse impacts on development. ... It seems to us that some donor countries are trying to pull out this ‘security card’ to cover up their lack of action to scale up climate financing and technology exchange in line with their previous commitments and render sufficient practical assistance to those who need it here and now” (Nebenzya 2020).

Overall, during the last few years, Russia’s position on climate change in the UNSC has remained relatively stable. There are no explicit calls for it to change in the near future, due to a strong desire to limit the agenda of the UNSC to “hard”

security issues. This may change with an evolution of Russian domestic and foreign climate change policy. However, as long as Russia is yet to develop a mature climate policy, the introduction of the climate agenda into the Council's negotiations poses a risk for Russia (which traditionally plays one of the key roles in the UNSC) of losing weight in the Council.

10.4 Climate Change in Policies and Practices in Russia

Drawing from the logic of the Russian climate change and security discourse, this section looks at Russian policies in the domain of climate change mitigation and adaptation. It focuses on two particular features of Russian climate action, which are the subordination of domestic climate policy to international multilateral climate change cooperation trends and the prioritisation of adaptation policies over mitigation ones. Both of these result from the ambiguity in the Russian perception of climate change, its nature and the related security challenges, as well as the large role fossil fuel plays in the country's development.

10.4.1 *International Climate Policy as a Driver for Domestic Action*

Historically, Russian climate policy has not been proactive; its development has always remained at the minimum sufficient level to keep it in line with the policies of international partners. Climate change law-making in the country has been predominantly driven by the actions of the international community. In 2004, Russia had powerful leverage to satisfy foreign interests in ratifying the Kyoto Protocol, which, according to many experts, was done in exchange for World Trade Organization accession concessions from the EU (Makarov 2016; KoKorin/Korppoo 2014). During the first phase of the Kyoto Protocol (2008–2012), Russia's first climate policy document – Climate Doctrine – was issued, and new institutions¹⁷ to support the Kyoto Protocol Joint Implementation Projects were created.¹⁸

Domestic climate policy has always remained a function of Russia's foreign climate policy, the country's participation in international agreements, and its formal and informal communication with foreign partners, predominantly led by the Ministry of Foreign Affairs. In recent years, in the aftermath of the joining of the

¹⁷ Governmental Decree no. 843 (from October 28, 2009) "On measures to implement Article 6 of the Kyoto Protocol of the UN Framework Convention on Climate Change" came into force and the Russian state-owned bank Sberbank was made responsible for managing projects in Russia, at: <https://base.garant.ru/12170482/> (15 June 2022).

¹⁸ Ibid.

Paris Agreement, Russia officially announced its first nationally-determined contribution (NDC) to the Paris Agreement¹⁹ based on the new presidential decree on greenhouse gas (GHG) reduction in Russia issued in November 2020. The Russian NDC states that "...large-scale consequences of climate change [that] have a significant and increasing impact on the socio-economic development of the country, living conditions and health of people, [and] natural ecosystems, as well as on the state of economic facilities are observed and predicted" (Federation n.d.). It continues, "the Russian Federation, realising the importance of preserving the climate and ensuring sustainable development, plans to ... [mitigate the] anthropogenic impact on climate and [adapt] to the consequences of its change" (Federation n.d.). Commenting on the Russian NDC announcement, Russia's Deputy Minister for Economic Development, Ilya Tarasov, indicated that the "Russian contribution to global climate change mitigation is hard to overestimate and it is unprecedented".²⁰ However, one should not exaggerate the significance of the announcements, even though they show the willingness of Russia to stay in line with international discourse and standards of communication in the domain of climate change and security.

It is the importance of fossil fuel energy and insufficient socio-economic performance which underlies the lack of ambition in Russia for climate mitigation policies, which are regarded as a drag on economic growth in the country. Over the past 50 years, fossil fuel reserves have been perceived as a key driver of economic growth, poverty alleviation, and social problem-solving. Active climate change policies are usually perceived as leading to the loss of significant corporate profits and tax revenues which would contribute to the loss of overall national wealth (Manley et al. 2017). Therefore, climate mitigation actions are low on the government's priority agenda, considering the country's immediate social and economic challenges (e.g. ~14% of the population is classified as poor²¹).

The main indicator of the weakness of Russian climate change mitigation policies (i.e., greenhouse gas emission-reduction policies) is its emissions reduction targets which are rather unambitious. The Presidential Decree of 2020 sets a target to reduce emissions in Russia to 70% of the 1990-level by the year 2030. In addition to the Presidential Decree, the NDC formulated for the Paris Agreement states Russia's commitment to reduce GHG emissions by the same amount, provided that the maximum absorption capacity of forests is reached. However, it is likely that reducing emissions to 70% of 1990 levels will not require any special efforts (Makarov 2016; Makarov/Stepanov 2017; KoKorin/Korppoo 2014) because, in fact, it means an increase in emissions compared with the present level. When bargaining internationally Russia has insisted on the maximum possible consideration of the absorption potential of its forests. However, even if one discards the additional absorption role

¹⁹ Russia announced its first nationally-determined contribution to the implementation of the Paris Agreement; at: https://economy.gov.ru/material/news/rossiya_soobshchila_o_svoem_pervom_opredelyaemom_na_nacionalnom_urovne_vklade_v_realizaciyu_parizhskogo_soglasheniya.html (12 July 2022).

²⁰ Ibid.

²¹ Rosstat estimated the poverty level in the country at 13.1%; at: <https://www.interfax.ru/russia/782984> (15 June 2022).

of Russian forests, it is highly likely that the goal for 2030 will be fulfilled without any additional efforts. The addition of the forest component of emission reduction will facilitate the task even further (Makarov/Stepanov 2017).

Therefore, it is not national ambition, but rather the need to stay in line with international environmental cooperation, which often drives the forces of change in domestic climate policies. The adoption (in April 2016) and late ratification (September 2019) of the Paris Agreement pushed Russia to further develop national climate change legislation. With the help of research institutions and other ministries and agencies, including the Russian Security Council, the Ministry for Economic Development is in charge of the Strategy for the Long-term Development with a Low Level of Greenhouse Gas Emissions. According to the press centre of the Russian Security Council, “the Strategy will contribute to creation of conditions for technological modernisation, growth in energy efficiency and economic development of the country, as well as contribute to creating the image of Russia as a climatically responsible state”.²²

10.4.2 Climate Change Adaptation Prioritised over Mitigation

The importance of fossil fuels for the Russian economy underlies not only the overall slowness of Russian climate change mitigation policies (Tynkkynen/Tynkkynen 2018) but also translates into the priority of climate adaptation policies over mitigation policies. To date, most of the climate change disasters, like floods or forest fires, have been managed with no direct reference to climate change. Most efforts and real-life practices related to climate change security and risk management are not institutionalized in the Russian legislature and official documents as climate-related ones. These measures include firefighting, flood management, modernisation and the rebuilding of infrastructure and houses affected by climate-related natural processes (permafrost melting), and social assistance to people suffering from natural disasters and extremes. Military forces are frequently used to respond to environmental and climate change damages, including cleaning and garbage collection in the Arctic²³ or firefighting.²⁴

In January 2020, the National Climate Change Adaptation Plan 2020–2022 was issued. It is one of only a few national-level climate documents that details specific actions and targets. Formally, it serves as a main legislative document framing the system of political, legislative, social, and economic measures to strengthen national climate change security, meaning protection of vital interests of the individual,

²² A strategy for reducing greenhouse gas emissions should be adopted in the Russian Federation by the end of 2020; at: <https://tass.ru/obschestvo/6936440> (12 July 2022).

²³ From Household Garbage to Abandoned Buildings and Ships: Large-scale Garbage Collection is taking place in the Arctic; at: <https://tass.ru/v-strane/4478177> (15 June 2022).

²⁴ Putin connected military forces to extinguish fires in Siberia; at: <https://ria.ru/20190731/1557046227.html> (15 June 2022).

Table 10.1 Positive and negative implications of climate change in Russia outlined in the National Climate Change Adaptation Plan of 2022 (*Source* Elaborated by the author on the basis of the National Action Plan for the First Stage of Adaptation to Climate)

Negative	Positive
• increased risk to public health; • an increase in the frequency, intensity and duration of droughts in some regions, extreme rainfall, floods and waterlogging of the soil, which is dangerous for agriculture; • increased fire hazard in forests; • permafrost degradation in the Northern regions with damage to buildings and communications; • violation of ecological balance, including the displacement of some species by others; • the spread of infectious and parasitic diseases; • increased energy consumption for air conditioning in the warm season.	• reduction of energy consumption during the heating period; • improving the ice situation and, accordingly, the conditions for the transportation of goods in the Arctic seas, facilitating access to the continental shelf of the Russian Federation in the Arctic Ocean; • improving the structure and expansion of the plant growing zone, as well as increasing the efficiency of animal husbandry (if a number of additional conditions are met and certain measures are taken); • increased productivity of boreal forests.

society, and the state from the consequences of global climate change. A wide range of ministries and state agencies are outlined as contributors to the implementation of the Plan.²⁵ Nevertheless, it lacks detail; instead of a plan for adaptation it offers a “plan for a plan for adaptation.” It appears that a great number of agencies look to it as a way to blur and hide their responsibility.

The National Climate Change Adaptation Plan stresses that “the wide socio-economic consequences of temperature and pressure contrasts, extreme precipitation and floods noted in recent years prove the growing vulnerability of the population and the economy to extreme weather and climate impacts” (Government of the Russian Federation 2020). The Plan highlights that response measures gain strategic importance in light of the adverse impacts of climate change. Moreover, along with the adverse impacts, it also mentions the positive effects of climate change (Table 10.1).

Illustration of both negative and positive implications of climate change in the Adaptation Plan depicts the general attitude of Russian leadership to the issue of

²⁵ A list of ministries, state agencies and executive bodies involved in implementation of the Adaptation Plan includes: Ministry of Agriculture, Ministry of Emergency Situations, Ministry of Energy, Ministry of Natural Resources and Environment, Ministry of Education and Science, Ministry of Health, Ministry for the Development of the Russian Far East and Arctic, Ministry of Industry and Trade, Ministry of Transport, Ministry of Construction Industry, Housing and Utilities Sector of the Russian Federation?, Ministry of Economic Development, Ministry of Finance, Bank of Russia, Federal Agency of Water Resources, Ministry of Foreign Affairs, Russian Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing, Ministry of Enlightenment, Federal Service for Hydrometeorology and Environmental Monitoring of Russia, Federal Agency for Fisheries, Russian Academy of Science, Russian Federal State Statistics Service, Federal Biomedical Agency, supreme executive bodies of state power of the constituent entities of the Russian Federation, and federal executive bodies and organisations.

climate change and its perception not only as a threat, but as an opportunity for socio-economic development of the country. According to the Plan, these opportunities could be limited in the absence of adequate adaptation measures (Government of the Russian Federation 2020).

There are several security areas and action points outlined in the National Climate Change Adaptation Plan:

- Scientific support for the development and adoption of decisions by government bodies and business entities aimed at improving the level of security (protection of the vital interests of the individual, society, and the state) from the effects of climate change on the population and the economy, including natural hazards and natural emergencies;
- The implementation of decisions to increase the level of security of the individual, society, and the state from the effects of climate change and a significant reduction in losses and damage to the country's economy from natural hazards;
- Obtaining additional benefits in weather-dependent and climate-dependent sectors of the economy by identifying and implementing optimal economic decisions based on information about the current and forecasted state of the environment;
- Updating strategies for the development of economic activities and sectors of the economy, considering the impact of climate change on them and ensuring their implementation in the framework of state programmes and investment projects, as well as public-private partnership projects and programmes;
- Ensuring compliance with the international obligations of the Russian Federation under the UN Framework Convention on Climate Change and other international treaties in which the Russian Federation is involved;
- Reduction of risks of foreign economic activity through the development and implementation of measures to protect Russian producers from unfair actions of foreign partners to limit their competitiveness.

All the action areas, from scientific support of policy actions to climate change adaptation in selected climate-dependent sectors of the economy, look rather conventional for an average adaptation plan of a country, except for the last one which depicts the Russian peculiarity with regard to the climate security agenda. The climate change adaptation plan outlines the need to help energy companies adapt to the changing landscape of the global energy complex. This underlies an emerging climate change and security discourse (disclosed in the next section) in Russian climate policies, centred around global low-carbon transition risks for Russia rather than direct climate change impacts.

10.5 New Emerging Links between Climate Change and Security

This section shows there are two emerging trends which may underlie potential changes in climate change and security perceptions and practices. Both of them are very specific for Russia as a country rich in fossil fuels and having vast Arctic territories and a coastline. The first is the recognition of global low-carbon transitional risks as a threat to Russian national and economic security. The second is the warming of the Arctic, which poses a threat to the stability of the regional legislative regime, expanding military risks at the Northern boundary of Russia.

10.5.1 Global Low Carbon Transition as a Threat to National Security

The risks of the global low-carbon transition are gradually being understood and emphasised by the government and are becoming part of political and expert discourse on climate change security. The global transition to more sustainable energy may undermine the economic security of Russian fossil fuel and energy-intensive industries through decreased demand for Russian goods via the substitution of fossil fuels with renewable energy sources or the introduction of carbon border adjustment mechanisms by trade partners such as the EU²⁶ (European Commission 2021; (Makarov et al. 2020). Therefore, it is not only the climate change itself which represents a threat to Russian security; it is the reaction of other markets and companies to climate change, in other words, a global low-carbon transition.

As part of foreign economic and foreign policy threats to energy security, the Russian Doctrine of Energy Security adopted in 2019 outlines “the discrimination of Russian enterprises of the fuel and energy complex in world energy markets by means of changing international legal regulation in the energy sector, including under the pretext of implementing climate and environmental policies or diversifying sources of energy imports” (The Security Council of the Russian Federation 2019). This indicates the vulnerability of the Russian energy sector to changes in the global energy landscape and the need for adaptation to them.

During the last few years, several important steps with regard to state regulation of the energy complex have been taken. They include tightened environmental requirements in the field of subsoil use, enhanced use of associated petroleum gas, improved environmental characteristics of production and consumption of motor fuels, and transition to “Best Available Technologies” (BAT) in the energy complex.

²⁶ Under the EU’s Carbon Border Adjustment Mechanism (CBAM), a carbon price will be put on imports. The main goal is to encourage foreign companies to reduce industrial CO₂ emissions. It will be phased in gradually and applied to a selected number of goods at high risk of carbon leakage, i.e., iron and steel, cement, fertiliser, aluminium and electricity generation.

Nevertheless, all the steps taken so far are a long way from what is required to sufficiently enhance the efficiency of the Russian energy complex and to hedge against the risks of a low-carbon transition of the global economy.

Considering the dramatic changes in the global and national energy landscapes during the last decade, the latest version of the Energy Strategy up to 2030 (Government of the Russian Federation 2009) (adopted in 2009) has to a large extent become obsolete.²⁷ In June 2020, a new Energy Strategy of Russia was adopted. It states that a decreased environmental impact and an adaptation of the Russian energy sector to climate change is one of four principal areas²⁸ to “break through” towards “more efficient, flexible and sustainable energy that is able to adequately respond to challenges and threats in its field and overcome existing problems” (Government of the Russian Federation 2020). The Energy Strategy also suggests planned practices ranging from extended use of BAT technologies to active participation in international law-making processes.

During recent years, EU policies have pushed forward climate policies in Russia. It has been acknowledged that the EU plans to introduce the Carbon Border Adjustment Mechanism (CBAM) could directly affect Russian exporters of energy-intensive goods (like metals, fertilizers, electricity, etc.) as well as have noticeable negative macroeconomic impacts on the Russian economy, which may threaten Russia’s economic security.²⁹ Without an adequate domestic climate policy, Russia could hardly avoid these risks.

The discourse of the EU CBAM and the need for an adequate response has been mainstreamed in the Russian climate change and security policy discourse. To illustrate, according to the former Special Presidential Representative for Relations with International Organizations, Anatoly Chubais, “In order to reduce the duty of cross-border carbon regulation [of the EU], it is advisable to implement large renewable energy generation projects.” (December 2020)³⁰ Special Presidential Envoy for Climate Issues, Ruslan Edelgeriev, comments that “... one who does not pay for greenhouse gas emissions at the national level within the framework of its national legislation, will be obliged to pay within the framework of trade relations with other countries and companies to other national jurisdictions and systems that have established carbon pricing systems ... In this situation, in fact, the only mechanism to

²⁷ The shale revolution in the US, a sharp decline in costs for renewable energy, the rapid development of energy storage and smart grid technologies, the expansion of the liquified natural gas market, the strengthening of carbon pricing policies in developed and developing countries, etc.

²⁸ Other areas include structural diversification, digital transformation of the economy, and spatial optimisation of energy infrastructure.

²⁹ The red lines of the EU Green Deal. The European Commission has introduced a mechanism for collecting a cross-border carbon tax; at: <https://www.rbc.ru/newspaper/2021/07/15/60eee84c9a7947437acf4b2a> (12 July 2022); CBAM: how much will Russia pay?; at: <https://trends.rbc.ru/trends/green/60e2cbb79a79471e5f514818> (12 July 2022); Author’s translation.

³⁰ Chubais has figured out how to protect Russian companies from the EU carbon tax; at: <https://www.vedomosti.ru/economics/articles/2020/12/13/850779-chubais-pridumal> (12 July 2022).

protect Russian producers from the border carbon tax should be a law that unambiguously fixes a set of national policy measures to reduce emissions and extends the ‘polluter pays’ principle to greenhouse gases” (June 2020).³¹

Since 2019, the federal law on greenhouse gas regulation has been adopted³², while the carbon pricing system in one of the Russian regions – Sakhalin – was launched in 2022. Sakhalin’s experience in emissions regulation is then planned to be applied in other regions of the country and at a national scale. As always, Russian domestic climate policies are being driven by policies outside Russia – but this time, it could lead to a substantial step forward in the promotion of new, cleaner technologies and emission reduction policies, in the absence of which there could be high direct economic losses caused by newly-announced policies of foreign partners.

10.5.2 New Security Challenges in the Arctic

An emerging climate-related security trend in political and scientific discourse is the raising of concerns about climate-induced national security risks in the Russian Arctic. Under the conditions of the Arctic, the climatic threat is now changing from being a purely direct environmental security risk for Russia (due to thawing permafrost, biodiversity loss, etc.) to an indirect military risk caused by “opening” of the warming region to non-regional actors and exposing it to international competition among superpower states.

The importance of the Arctic for Russia stems from its historically crucial role in the Russian development and security and defence policy (Sukhankin 2020). The Northern regions contribute one-fifth of Russia’s gross national product and a quarter of the country’s exports (Federal State Statistics Service). Warming, combined with rapid development of resource extraction and transportation technologies, increasingly draws international attention to the region’s vast resource and transit potential. The role of the region in international relations has been changing, while environmental and climate change security issues are instrumentalised in Arctic diplomacy. To illustrate, in summer 2019, Norwegian Prime Minister, Ine Marie Erickson Sereide, expressed concern about the environmental and economic aspects of the Russian Northern Sea Route and signalled Norway’s intention to check the route for compliance with European standards (RIA News 2019a).

Arctic climate-induced risks are highlighted in a range of policy documents, including the Russian Strategy for the Development of the Arctic and Ensuring National Security until 2035, and the National Climate Adaptation Plan. The Russian Strategy on the Development of the Arctic and Ensuring National Security until 2035,

³¹ “Carbon price” as an instrument of economic and environmental policy; at: <http://www.global-climate-change.ru/index.php/en/component/content/article/108-of-news-cat/4974-nalog> (12 July 2022).

³² For the first time, a legislative system for managing CO₂ emissions has been created in Russia; at: https://www.economy.gov.ru/material/news/v_rossii_vpervye_sozdana_zakonodatelnyaya_sistema_upravleniya_vybrosami_so2.html (13 May 2022).

adopted in October 2020, clearly indicates “risks of increasing conflict potential in the Arctic” (President of the Russian Federation 2020).

The “opening” of the Arctic attracts non-Arctic countries to the region, and these are beginning to compete not only in economic and transport projects, but also in the governance of the region. The “opening” of the Arctic from ice poses a threat to the current international legal regime of navigation in the region, which secures the exclusive rights of the Arctic countries. This may leave the Arctic as uncovered by Art. 234 of the UN Convention on the Law of the Sea “On Ice-Covered Areas,” which gives the Arctic countries exclusive control not only over 12-mile territorial waters, but also over a 200-mile exclusive economic zone. The erosion of the current legal regime in the Arctic based on Article 234 of the UN Convention and its transformation into an “ordinary sea” is fraught, due to the acceleration of the militarisation of the region, increased military and political tensions, and the exacerbation of the risk of direct military confrontation. The “opening” of the Arctic has led to the fact that it has ceased to play the role of a natural buffer between the great powers. As a result, the general rivalry between the United States, Russia, and China is spilling over into this region, and the militarisation of the region is intensifying (Boklan et al. 2021).

These trends make Russian policymakers pay closer attention to the forces of climate change and the complex risks to national security. This emerging discourse contributes to Russian foreign Arctic policy, run by the Security Council, Ministry for Foreign Affairs, and the Ministry for the Development of the Far East and the Arctic. Potentially, this discourse could become one of the mainstream discourses in the domain of climate change and national security in the country in the coming years.

10.6 Conclusion and Discussion

Even though climate change is gradually occupying more room on the national agenda, across the analysed time frame it is not considered as a pre-eminent threat to national security. The inherent feature of Russian climate political discourse is scepticism towards the anthropogenic nature of climate change. This correlates with prominent discourses that emphasise the significance of fossil fuels for the economy. It is common to picture climate change not as a threat, but rather as an opportunity to strengthen security: for example, through resource extraction and transportation through a warming Arctic. In political and public discourse, climate change is perceived rather as a natural and not a human-caused phenomenon, which, however, increasingly poses threats to state and social security. The ambiguity of domestic discourse on the climate change-security nexus supports Russia’s strong intention to exclude climate change from the agenda of the UNSC.

Since 2015, climate change-induced threats are gaining more and more weight in national security documents, including National Security and Energy Strategies. This has led to some state-led climate adaptation policies, which are mostly prioritised

over mitigation policies. In fact, climate mitigation policy measures remain limited and do not go beyond the minimum requirements of international agreements.

Rich in natural resources, especially in mineral fuels, Russia shows moderate results in economic and demographic dynamics and poverty eradication. Regional diversity, the importance of fossil fuels for the national economy, and broader social and economic challenges are key aspects that have led to ambiguity within Russian climate policy and climate change security conceptions in Russian public discourse.

Under the prevailing political and institutional conditions, economic growth, together with emissions reduction, is barely possible without structural economic and socio-political reforms. In the meantime, climate mitigation policy will evolve, following the tightening of international standards and the more active participation of Russia in international environmental cooperative ventures³³ such as the Arctic Council. At the same time, Russia's stance towards the climate change-security nexus will likely remain largely inert. Climate adaptation policies are likely to become more prominent, with a growing awareness of the problem and a regularly increasing number of climate-related measures institutionalised in climate change legislation.

Over the last few years, some new dimensions of the climate change and security discourse have started to appear which may play out as game changers. They are not related to an appreciation of direct climate risks for Russia and its regions, but rather to indirect climate-related risks. These are twofold.

First is the realisation that the global energy transition may threaten national security via an increased pressure on Russian exports of energy and energy-intensive goods. Particularly, the EU's plans to launch a carbon border adjustment mechanism will very likely push Russian national climate policies forward and create new state measures, alongside a rising awareness of climate change as a threat for the people and the economy of Russia. Other external shocks of global low-carbon transition could threaten national security and expose the country's backwardness in key technologies and excessive fossil fuel dependence. This could lead to economic instability and could potentially change the general line of Russian climate policy and add more clarity and ambition. This creates room for a strategy choice of "mitigation through adaptation" to a new low-carbon landscape of the global economy, which may help diminish the inherent contradiction of Russian domestic climate policies.

The second group of risks is related to the climate-driven transformation of the Arctic region's role in international affairs. With the rapid climate changes, the Arctic is moving away from the periphery of international relations and becoming one of the main areas for the collision of the strategic interests of the leading powers. The Arctic plays a colossal spatial and military-strategic role for Russian national security. The melting of Arctic ice raises questions about the gradual transformation of the Arctic Ocean from a zone of exclusive interests for Arctic countries into more "ordinary" international sea waters.

The lack of legal arguments in Russia for non-discriminatory control over navigation in the Arctic waters is fraught with a critical aggravation of environmental

³³ G20, BRICS (association including Brazil, Russia, India, China and South Africa), APEC (forum of Asia-Pacific Economic Cooperation), Arctic Council and other forums.

problems in the region. Thus, the promotion of a climate and environmental agenda with an emphasis on the fragility of the region's ecosystem, supported by intensification of the national climate environmental policies, could serve as a powerful tool for realising Russia's foreign policy interests in the Arctic.

A growing recognition of indirect climate-related risks to national security will likely contribute to a more active Russian foreign climate policy, which may become an efficient instrument of hedging against these risks. Although Russian foreign climate and security policies could evolve rather independently from the domestic discourse and action, they could be strongly backed up by the change in domestic climate and security policy and public discourse, not limited to the domains of national and economic security but extended to human and ecological security. This will require political will to change the political and public perception of the climate change-security nexus towards a more science-based and honest one for the sake of a clear and unambiguous vision of the country's future.

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References

- Anisimov, Oleg; Orttung, Robert, 2019: “Climate Change in Northern Russia through the Prism of Public Perception”, in: *Ambio*, 48,6: 661–71.
- Bashmakov, Igor A., 2020: “Russian Low Carbon Development Strategy”, in: *Voprosy ekonomiki*, 7: 51–74.
- BBC News, 2011: “UN: Climate Change Threatens Peace and Security”; at: https://www.bbc.com/russian/international/2011/07/110721_climate_security_implications.
- Boklan, Daria S. et al., 2021: “Russian Policy in the Arctic: International Aspects”, XXII April International Academic Conference on Economic and Social Development, Moscow, Russia, 13–30 April.
- Doloişio, Natalia; Vanderlinden, Jean-Paul, 2020: “The Perception of Permafrost Thaw in the Sakha Republic (Russia): Narratives, Culture and Risk in the Face of Climate Change”, in: *Polar Science*, 26,100589.
- Government of the Russian Federation, n. d.: “Nationally Determined Contribution of the Russian Federation”: 21; at: https://unfccc.int/sites/default/files/NDC/2022-06/NDC_RF_ru.pdf.
- Government of the Russian Federation, 2009: “Energy Strategy of Russian Federation for the Period until 2030”; at: <https://centerpolit.org/national-security/energeticheskaya-strategiya-rossii-na-period-do-2030-goda/>.
- Government of the Russian Federation, 2020: “National Climate Change Adaptation Plan until 2022”; at: <http://government.ru/docs/38739/>.
- Hardt, Judith Nora, 2018: *Environmental Security in the Anthropocene: Assessing Theory and Practice* (London: Taylor and Francis).
- Harrington, Cameron; Shearing, Clifford, 2017: *Security in the Anthropocene: Reflections on Safety and Care* (Bielefeld: Transcript Verlag).
- KoKorin, Alexey; Korpoo, Anna, 2014: “Russia's Greenhouse Gas Target 2020”.

- Makarov, Igor A., 2016: "Russia's Participation in International Environmental Cooperation", in: *Strategic Analysis*, 40,6: 536–46.
- Makarov, Igor A.; Stepanov, Ilya A., 2016: "The Environmental Factor of Economic Development in the Russian Arctic", in: *Problems of Economic Transition*, 58,10: 847–63.
- Makarov, Igor A.; Stepanov, Ilya A., 2017: "Carbon Regulation: Options and Challenges for Russia", in: *Moscow University Economics Bulletin*, 6: 3–22.
- Makarov, Igor; Chen, Henry; Paltsev, Sergey, 2020: "Impacts of Climate Change Policies Worldwide on the Russian Economy", in: *Climate Policy*, 20,10: 1242–56.
- Manley, David; Cust, James Frederick; Cecchinato, Giorgia, 2017: "Stranded Nations? The Climate Policy Implications for Fossil Fuel-Rich Developing Countries" (Oxford, UK: OxCarre).
- Mitrova, Tatiana; Melnikov, Yuriy, 2019: "Energy Transition in Russia", in: *Energy Transitions*, 3,1: 73–80.
- Nebenzia, Vassily 2020: "Statement by Vassily Nebenzia, Permanent Representative of Russia to the UN, at the VTC of UNSC Members 'Climate and Security'", at: https://russiaun.ru/en/news/climate_240720.
- Poberezhskaya, Marianna, 2018: "Blogging About Climate Change in Russia: Activism, Scepticism and Conspiracies", in: *Environmental Communication*, 12,7: 942–55.
- Porfiriev, Boris N., 2019: "The Low-Carbon Development Paradigm and Climate Change Risk Reduction Strategy for the Economy", in: *Studies on Russian Economic Development*, 30,2: 111–18.
- Porfiriev, Boris N. et al., 2017: "Consequences of Climate Change for Economic Growth and Development of Certain Sectors of the Russian Arctic Economy", in: *Economy and Management of the National Economy of the Arctic Zone*, 4,28: 4–17.
- President of the Russian Federation, 2009: "National Security Strategy of the Russian Federation"; at: <http://kremlin.ru/supplement/424>.
- President of the Russian Federation, 2015: "National Security Strategy of the Russian Federation"; at: <http://kremlin.ru/acts/news/51129>.
- President of the Russian Federation, 2016: "Russian Foreign Policy Concept"; at: <http://kremlin.ru/acts/bank/41451/page/4>.
- President of the Russian Federation, 2016a: "Fundamentals of State Policy in the Field of Civil Defense"; at: <http://kremlin.ru/acts/bank/41544>.
- President of the Russian Federation, 2017: "Russian Environmental Security Strategy"; at: <http://kremlin.ru/acts/bank/41879>.
- President of the Russian Federation, 2017a: "Russian Economic Security Strategy", at: <http://kremlin.ru/acts/bank/41921>.
- President of the Russian Federation, 2019: "Energy Security Doctrine"; at: <http://kremlin.ru/acts/bank/44252>.
- President of the Russian Federation, 2020: "Food Security Doctrine"; at: <http://kremlin.ru/acts/bank/45106>.
- RIA News, 2019: "Russia Objected to Climate Change Discussion at the UN Security Council"; at: <https://ria.ru/20190125/1549941836.html>.
- RIA News, 2019a: "Arctic Doctrine" of the United States: The Northern Sea Route Will Be Blocked"; at: <https://ria.ru/20191018/1559911797.html>.
- Roshydromet, 2014: "The Second Assessment Report of Roshydromet on Climate Change and Its Consequences on the Territory of the Russian Federation".
- Roshydromet, 2017: "Report on Climate Risks at the Territories of Russian Federation".
- Sharmina, Maria, Anderson, Kevin; Bows-Larkin, Alice, 2013: "Climate Change Regional Review: Russia"; in: *WIREs Climate Change*, 4,5: 373–96.
- Shvidenko, A. Z.; Schepaschenko, D. G., 2013: "Climate Change and Wildfires in Russia", in: *Contemporary Problems of Ecology*, 6,7: 683–92.
- Sukhankin, Sergey, 2020: "Russia Steps up Efforts to Dominate Arctic Region", in: *Eurasia Daily Monitor*, 17,25. <https://jamestown.org/program/russia-steps-up-efforts-to-dominate-arctic-region/>

- Svetlov, N. M.; Siptits, S. O.; Romanenko, I. A.; Evdokimova, N. E., 2019: "The Effect of Climate Change on the Location of Branches of Agriculture in Russia", in: *Studies on Russian Economic Development*, 30,4: 406–18.
- TASS, 2018: "Russia Opposed the Discussion of the Problem of Climate Change in the UN Security Council"; at: <https://tass.ru/politika/5366241>.
- Tynkkynen, Veli-Pekka; Tynkkynen, Nina, 2018: "Climate Denial Revisited: (Re)Contextualising Russian Public Discourse on Climate Change During Putin 2.0", in: *Europe-Asia Studies*, 70,7: 1103–20.

Chapter 11

Securing a Climate-resilient Pathway for South Africa



Birgitt Ouweneel and Nicholas P. Simpson 

Abstract This chapter identifies South Africa's international and domestic security obligations that explicitly anticipated or responded to the threat of climate change during the country's tenure on the United Nations Security Council (UNSC) (2019–2020). Analysis of South Africa's official positions on the role of the UNSC in response to climate change is combined with content analysis of the country's policies, plans and strategies on climate change and security. Traditional security apparatuses, such as the army, navy, and police, have been influenced conceptually and operationally by the idea of climate change, notably through emergency response to its impacts. However, the most substantive securing strategies by the State have focused on climate risk to domestic water, food, and energy security. This is derived in part from the recognition that climate change presents a range of risks to essential resources which impact on insecurities that intersect with domestic developmental priorities. South Africa's security landscape is also categorised by an increase in private security actors with climate-related activities. This chapter draws attention to the lack of clarity regarding the roles of the State and non-conventional non-State security entities under climate change. This is particularly important in the South African case, where nodes of security have tended to increasingly commodify domestic security for a privileged minority, while leaving many communities without a State security provider. Reflected explicitly in the country's UNSC positions, the greatest challenge to securing a climate-resilient development pathway for South Africa is ensuring that exposure and vulnerability to climate hazards does not become a proxy of domestic inequality. South Africa therefore emphasises a whole-of-society response to address the root causes of domestic vulnerability and a collective, holistic, and multilateral response from all member states in dealing with global threats exacerbated by climate change.

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Keywords United Nations Security Council • Climate change-security nexus • Threat multiplier • Climate risk • Whole-of-society approach

11.1 Introduction

This chapter describes and explains the South African climate change security perception from both international and domestic perspectives. In 2020, we set out to explore whether new security perceptions and practices are being adopted by traditional and non-traditional security actors in South Africa in response to climate change. We were guided by the hypothesis that the severity of climate change impacts and its projected risks, including those related to national security, might affect changes in the conceptions, perceptions and practices of security. We analysed UNSC speech acts by South Africa's representative during its two-year term on the UNSC (2019–2020), which articulate how South Africa formally frames the climate-security nexus. We combine this analysis of UNSC deliberations with an extensive desk review and content analysis of South African policies, plans and strategies that apply a securing logic to climate change. This analysis concentrated on both traditional security actors (e.g., Ministries of Defence and Foreign Affairs), as well as non-traditional security actors, including the Ministries of the Environment, Home Affairs, Disaster Risk Reduction and others. The South African context required critical investigation of conceptions, perceptions and practices of non-State actors including private entities, civil society and the expert communities.

In the sections to follow we present these findings and highlight the range of sectors, geographies and development themes South Africa perceives to be at threat from climate change. We highlight the domestic threats from climate change that are located within a broader human and ecological security, particularly essential goods such as water, energy and community safety. This highlights how South Africa's engagement with international security endeavours, and its engagements with the UNSC, are explicitly informed by how these domestic threats are conceptualised and managed. We further highlight both conventional and non-conventional actors which are mandated to respond to climate change and security alike. Identifying partiality and gaps in the strategy and observed securing responses to climate change, the chapter concludes with reflection on what is currently being safeguarded and identifies key shortfalls for future climate-security policy and research.

11.2 South Africa's Underpinning Securitisation Logic

Climate-resilient development (CRD) is a process of implementing climate action, including greenhouse gas mitigation and adaptation measures, to support sustainable development for all (Trisos et al. 2022; IPCC 2022). It emphasises equity as a core element of sustainable development, as well as conditions for inclusive

and sustained economic growth, shared prosperity and decent work for all. Without progress towards increasing equity and reduced inequality, development cannot be considered climate-resilient (Schipper et al. 2021; Andrijevic et al. 2020). The IPCC (2022) has recognised that CRD is enabled when governments' planning processes make inclusive development choices that prioritise risk reduction, equity and justice while addressing broader risks to security. Consequently, CRD emphasises the notion of inclusivity as a fundamental characteristic of economies, gender, and governance (Singh/Chudasama 2021; Mikulewicz/Taylor 2020; Hardoy et al. 2019).

To understand the climate-security nexus, one needs to discern South Africa's unique securitisation logic. This first section has therefore been dedicated on its overall development. This is especially important because analysis of the traditional security sector shows that until recently, the South African government had generally maintained a narrow and conventional approach to defence, with the primary function of the Department of Defence (DoD) and the South African National Defence Force (SANDF) being the protection of the sovereign state from external threats (Louw 2013). Post-apartheid reconstruction has, however, led to the withdrawal of the SANDF, particularly the military branch, from domestic security (Chikulo 2014). As a result, the SANDF has suffered public apathy, leading to a lack of public debate on defence matters, a reduced professional status of the military and, ultimately, a reduced budget (1.3% of GDP) (Louw 2013; Department of Defence 2015).

South Africa's history of human rights abuses, armed conflicts and the institutionalisation of violence under the apartheid regime necessitated a new security agenda, one which extends the concept of security from its former preoccupation with foreign military threats, and one which embraces the security of individuals and societies (Chikulo 2014). Therefore, concurrent with the global reconceptualisation of security to include domestic challenges within the broader national security agenda in the early 1990's (United Nations Development Programme 1994), South Africa adopted the human security doxa. With human security now the defining framework, the 1998 Defence Review acknowledged the salience of domestic vulnerabilities and the non-military dimensions of security by noting that socioeconomic problems and public disorder pose the greatest threats to the lives of South Africans (Louw 2013).

In consonance to the disaggregation of a *duty of responsibility* for domestic security from traditional security actors observed in other countries (Bigo 2012), the 1996 Defence White Paper emphasised the need for peace-making and peacekeeping, with "accentuating dialogue and mediation as the key means to resolving security issues rather than confrontation" (Adetiba 2017). With the decrease in the threat of conventional war and the country's strategic orientation being that of collaboration rather than confrontation (Le Roux 2008), the SANDF's role is now largely confined to international peacekeeping operations as part of South Africa's foreign policy, disaster relief and humanitarian aid, both domestically and abroad – as recently demonstrated in the military operation in Mozambique after the 2019 Cyclone Idai (Parliament of South Africa 2019) – and providing border security as well as supporting the South African Police Service (SAPS) and other government departments when needed (Department of Defence [DoD] 2014).

South Africa is committed to ending conflict on the continent and achieving peace and security in Africa by 2063, a cornerstone of its foreign policy (Department of International Relations and Cooperation 2020). In line with South Africa's peacemaker and conflict mediator roles, as part of its Peace Support Operations on the African continent, it strives to resolve conflict peacefully through the "promotion of preventative diplomacy, inclusive dialogue, post-conflict reconstruction and development" (Pandor 2021). During its last membership of the UNSC and as chair of the AU, South Africa's primary mandate was "Silencing the Guns in Africa by 2020" (South African Government 2021) and promoting permanent representation of Africa within the Security Council (Pandor 2021). South Africa therefore advocated strengthened partnerships and closer cooperation between the UNSC and the AU's Peace and Security Council.

Domestically, South Africa has been faced mainly with non-conventional security challenges (Le Roux 2008). Inherent to the fundamental principle that human insecurity is rooted in violence, inequality and poverty (Kumssa/Jones 2010), the country's biggest threat to internal security is the risk factors associated with crime embedded in the prevalence of inequality and poverty (Chikulo 2014; Le Roux 2008), with migration also being recognised as posing critical domestic security threats (Department of Defence 2014). In contrast to rationales provided for legitimisation of militaries as capable climate actors (see for example, Jayaram/Brisbois 2021), those of the SANDF have become institutionally orientated around disaster risk management, including domestic flood relief (Hlahla 2006; The Presidency 2015; Department of Defence (DoD) 2014), despite being inadequately resourced (Parliamentary Monitoring Group 2019). Although criticised as an inappropriate and inadequately resourced actor, the SANDF was, for example, deployed to help rehabilitate the Vaal River water treatment infrastructure and has provided support to healthcare professionals to staff hospitals in the North West province (Parliamentary Monitoring Group 2019). The SANDF, together with the South African Police Service (SAPS), were also on standby during the Cape Town drought in 2018, to ensure general safety in phase two of the Critical Water Shortages Disaster Plan (Cole et al. 2021; City of Cape Town 2018). These two significant domestic deployments signal the role of the SANDF in disaster risk management, including climate-related disruptions, beyond the governance capability of business-as-usual situations.

11.3 Climate Change-Security Nexus in South Africa

Due to South Africa's high rates of domestic inequality and divergent levels of social vulnerability, The National Development Plan (NDP), a strategic action plan for securing a prosperous future, identifies poverty, inequality and unemployment as the country's most serious national development challenges (National Planning Commission 2012). South Africa's approach to addressing climate change is fundamentally informed by and subordinated to these triple domestic challenges. Climate

responsiveness in the security sector therefore cannot be divorced from South Africa's developmental imperatives.

South Africa recognises climate change as a threat multiplier, which could impact on matters of peace and security, particularly human insecurity, underdevelopment, and migration (Serdeczny et al. 2017; Le Roux 2008; Carleton et al. 2016; Mach et al. 2019; Mora et al. 2018). With the referent object being the lives and livelihoods of all South Africans, rather than the state, South Africa moves its climate-security logic away from the eradication of a threat through military solutions and towards the effective *governance* of risks to a socio-economic system, also known as “riskification” (Corry 2012). In contrast to conventional security logic where the management of threats requires “normal” governing rules to be set aside (see Corry 2012: 239), risks such as climate change, are *shaping* the “normal rules governing decision making”. Rooted in South Africa's human-centric security logic and its development trajectory, South Africa has adopted a risk-based approach in dealing with the ramifications of climate change.

As outlined in Fig. 11.1, the analysis of the documents displays an evolution of South Africa's security logic from conventional security to a risk-based security logic. Applying the research categories of “National security”, “Human security” and “Risk-based security”, the following sections will outline how this transition is in line with recent emphasis on the need to integrate the drivers of vulnerability (von Uexkull/Buhaug 2021), and how the climate-security nexus within the South African context can be more appropriately understood as a climate change-poverty and human security nexus.

11.3.1 *Climate Change as a Threat to National Security*

Security apparatuses such as the South African military (SANDF) and the Department of Defence (DoD) have been influenced conceptually and operationally by climate change, locating the climate-security nexus within South Africa's traditional security sector.

The 2015 Defence Strategy recognises that “climate change, poverty and disease continue to exacerbate the social and economic vulnerability of many communities” and act as global and regional stress factors alongside other security threats, such as international terrorism (Department of Defence 2015). This view holds that climate change is linked to conflict due to resource competition and migration (Department of Defence 2015) and is described as being one of the most serious threats to humanity through its impacts, such as hurricanes, floods and wildfires (Department of Defence (DoD) 2014; Department of Defence 2015). With climate change acting as a risk multiplier (Scheffran et al. 2019), of particular concern are the indirect causal pathways between water and food security and forced migration and conflict risks in Southern Africa (Serdeczny et al. 2017; Le Roux 2008; Carleton et al. 2016; Mach et al. 2019; Mora et al. 2018; Chikulo 2014).

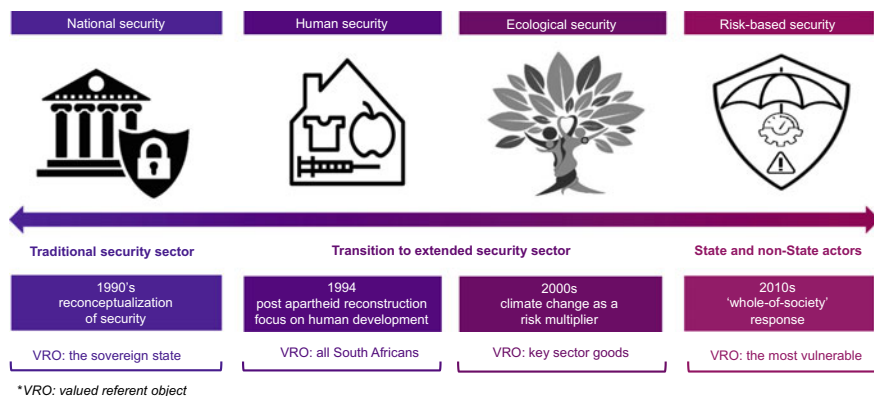


Fig. 11.1 Transition of South Africa's security logic from conventional security to human security, ecological security, and risk-based security. *Source* elaborated by the authors. National security: concerned with minimising the threat and ensuring the survival of the sovereign state; Human security: concerned with protecting fundamental freedoms of all individuals, freedom from threat, freedom from want, freedom to live in dignity and freedom from hazard impact. Ecological security: security that considers the irreversible and existential threat of Anthropocene environmental change, with humanity's existence as a core value to be secured. Risk-based security: concerned with reducing risks to a socio-economic system through enhancing the adaptive capacities of individuals, particularly the most vulnerable

Accordingly, the South African Army Vision 2020 (Le Roux 2008) acknowledges that the competition for resources and the climate change threat are two of the eight most important causes of instability, insecurity and conflict within South Africa and the African continent as a whole. Response objectives are the promotion of well-being and development, protection of the environment and climate for future generations, assurance of the prosperity of the country, region and continent, and sustainable economic growth (Department of Defence 2015). However, in 2009 Lindiwe Sisulu, the defence minister at the time, stated that the DoD had yet to conduct a study on the effects of climate change on regional security (defenceWeb 2009). This still holds true today, with the latest defence review making a meagre acknowledgement of climate change without any new response solutions specified for the SANDF (Department of Defence 2015).

Although traditional security actors recognise climate change as a source of insecurity in South Africa and on the African continent as a whole, the fundamental understanding of this threat diverges away from conventional perceptions of what constitutes a threat as outlined in McDonald (2018b) – a threat to sovereignty – and is instead embedded in the well-being of individuals. Therefore, while the nature of the threat posed by climate change is considered both existential and global in nature, the underlying security concept in South Africa is relatively broad and characterised by the interplay of soft and hard security aspects. In response to perceived insecurity, and in consonance with the broadening of national security to incorporate political, economic, social and environmental matters centred around a concern with

the security of people, and away from a predominantly military and police problem (Republic of South Africa 1996), the DoD (Department of Defence 2015) underscores the importance of the integration and combination of all governing actors in possible responses to climate change.

11.3.2 Perceptions, Strategies and Actors Addressing Climate Change Risk

A considerable amount of work has been undertaken in spheres of government to create an enabling environment for climate change governance and management, broadening the range of actors responsible for securing South Africa against the threat of climate change (Department of Environmental Affairs 2016). This aligns with broader developments re-articulating what needs to be secured against climate change and which actors are capable of and responsible for handling its threat to national security. Figure 11.2 outlines the key positions and developments in the South African climate change-security nexus.

The National Department of Environment, Forestry and Fisheries (DEFF) is the lead domestic government agency on national climate change plans and actions. This mandated role goes some way to explaining the South African reticence towards non-environmentally trained actors leading responses to climate change. The DEFF is committed to mainstreaming climate change and response measures into relevant sectors to ensure coordinated and integrated responses by all spheres of government. A set of key adaptation-related sectors have been identified, namely water, health, human settlements, agriculture and forestry, biodiversity, and ecosystems. Disaster risk reduction and management is further a key sector, reflecting SANDF's main domestic and international priority (Department of Environmental Affairs and Tourism 2019; Department of Environmental Affairs 2011). The DEFF further seeks to enhance adaptive capacity, strengthen resilience and reduce vulnerability to climate change and ensure an adequate national adaptation response in the context of the global response (Department of Environmental Affairs 2011).

Domestically, climate change is entrenched in the country's development directory through the National Development Plan (National Planning Commission 2012). The NDP places people (the key referent object of security) at the centre, by recognising that climate change has the potential to reduce food production and the availability of potable water, with consequences for food security, migration patterns and levels of conflict. This reflects a move away from securitisation through military interventions to the need for sustainable development as outlined in the UNDP's Human Development Report of 1994 (United Nations Development Programme 1994).

In response, the country has enacted climate change policies such as the National Climate Change Response Policy (NCCRP) (Department of Environmental Affairs 2011) the National Climate Change Adaptation Strategy (Department of Environmental Affairs and Tourism 2019), Nationally Determined Contribution (NDC)

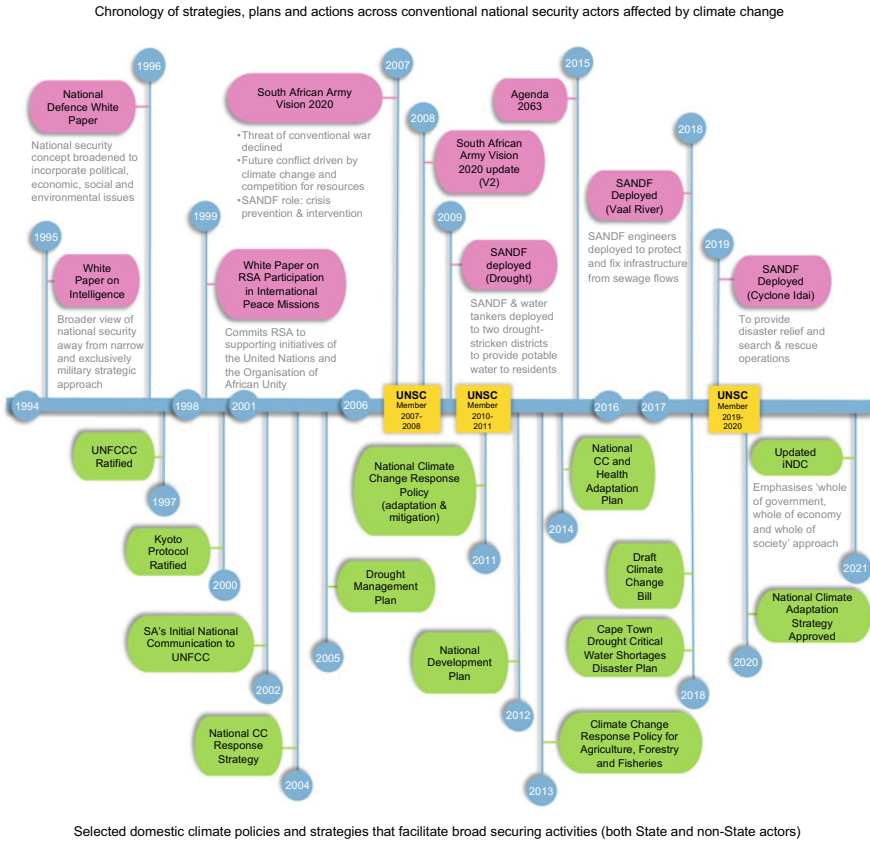


Fig. 11.2 Overview of key climate change and security developments in South Africa (1994–2021). South Africa has served as a non-permanent member of the United Nations Security Council for three terms: 2007–2008; 2011–2012; and 2019–2020. South Africa’s national security responses are represented by developments in light green above the timeline, while developments in pink below the timeline display South Africa’s growing human security and domestic imperatives which fundamentally inform South Africa’s response to the climate change–security nexus. *Source* elaborated by the authors

(Department of Environmental Affairs 2015; DFF&E 2021) and the Climate Change Bill adopted by cabinet in September 2021 (Department of Forestry/DFF&E 2021).

The NCCRP prioritises mainstreaming of climate change considerations and responses into all relevant sectors. It outlines the government’s role in developing and implementing a suite of policy measures and strategies aimed at both mitigating and adapting to the impacts of climate change. In line with the constitution of South Africa, which mandates all three spheres of government to address the environmental problems, the NCCRP directs the integration of climate change planning and action between the key governing actors and the three different spheres of local, provincial and national government (Department of Environmental Affairs 2011). All provinces

have subsequently developed sub-national climate change adaptation strategies and plans; however, only a few sectors have mainstreamed climate change into policies, plans and strategies (Department of Environmental Affairs and Tourism 2019) as the inability of local government to provide sustainable basic services (such as water and sanitation) to most of its people deters from the additional commitment to address climate change. The compounding challenges of poverty, unemployment and inequality further complicate the implementation of climate change objectives due to their financial and economic constraints (Mogano/Mokoele 2019).

The National Climate Change Adaptation Strategy (NCCAS), approved in 2020, pays particular attention to water resources as South Africa's latest Annual Climate Change Report states that these will be affected the most by climate change (Department of Environmental Affairs 2018). The NCCAS further emphasises the need for a unified sustainable development path which is anticipatory, adaptive and able to recover from a changing climate, in order to ensure a climate-resilient South Africa. Recognising that "good governance and civil society engagement is among the most important factors in achieving human security" (Kumssa/Jones 2010), the NCCAS speaks to "society as a whole", including non-governmental actors such as the private sector, the research community and civil society (Department of Environmental Affairs and Tourism 2019).

Similarly, the Climate Change Bill outlines an integrated and coordinated response by the economy and society to climate change. It commits South Africa to making a fair contribution to the global effort to reduce greenhouse gas emissions, while strengthening South Africa's social, economic and environmental resilience and emergency response capacity and reducing vulnerability (Department of Forestry and [DFF&E] 2021). As a result, South Africa's updated NDC (Department of Forestry and [DFF&E] 2021) commits the country, through the UNFCCC and the Paris Agreement, to addressing climate change based on "science, equity and sustainable development" through an even stronger mitigation target (DFF&E 2021). With South Africa being a carbon-intensive economy, together with the host of development challenges outlined earlier, a just transition to a lower carbon economy is increasingly being recognised as imperative (Department of Forestry and [DFF&E] 2021; Chikulo 2014; National Treasury 2021).

At the end of 2020, President Cyril Ramaphosa appointed the Presidential Climate Commission (PCC), a multi-stakeholder group tasked with advising on the country's climate change response. Centred around responding to the threat of climate change to human security, it largely focuses on mitigation and adaptation, particularly emissions reduction and adaptation goals. Cognisant of the environmental, technical and socio-economic consequences of climate change, its main goal is to facilitate a just transition (National Treasury 2021). As highlighted by Strambo et al. (2019), "the debate about energy transitions has already been highly politicised" with truck driver protests "express(ing) concern about potential job losses due to closing coal plants". In accordance with Uexkull/Buhaug's (2021) 6th research priority (climate change response impacts), by effectively adopting a just transition policy in this tense socio-economic context, the country could prevent further exclusion and violence. The

country's focus on a just transition is therefore responding to its *duty to prevent* (Bigo 2012).

11.3.3 *Extended Security Sector*

It is clear that climate change can no longer be discerned as an environmental challenge only (Brown et al. 2007; Scheffran et al. 2019). Of more general concern are unmanageable climate extremes and the compounding threat climate change poses to key sectors such as water and food (in)security that are already known to increase forced migration (Serdeczny et al. 2017), raise tension and trigger conflict (Le Roux 2008; Carleton/Hsiang/Burke 2016; Mach et al. 2019). Accordingly, climate change is seen as a risk multiplier (Scheffran et al. 2019) which escalates tensions and conflict both domestically and internationally, by placing additional strain on scarce resources (Mach et al. 2020), with a disproportionately greater effect on the poor, especially women and children (Chikulo 2014; Carleton et al. 2016; Mach et al. 2019; Moore 2019).

Climate change poses a considerable risk to the country's economy and threatens the lives and livelihoods of all South Africans (Ramaphosa 2019; Department of Environmental Affairs 2017; South African History Online 2020; Department of Environmental Affairs 2018; Department of Defence 2015). Natural disasters such as droughts and floods are projected to become increasingly more likely in South Africa and compound existing developmental challenges to human security (Department of Environmental Affairs 2017; Chikulo 2014). As an example, the Western Cape's premier, Helen Zille, referred to the "Day Zero" of the Cape Town drought as a "challenge (that) exceeds anything a major city has had to face anywhere in the world since the Second World War or 9/11" (Flanagan 2018). Embedded in South Africa's developmental pathway, climate change is hence predominantly seen as a socio-economic threat because of its effects on resources (such as water) which determine the productivity of key sectors of the economy (Department of Environmental Affairs 2017; Niang et al. 2014).

In line with the conceptual position of von Uexkull/Buhaug (2021) on the need to explore the interaction of climate effects with the drivers of vulnerabilities, South Africa's climate change context cannot be explored in isolation from the development challenges inherited from the Apartheid regime. The DoD recognises the triple challenges of inequality, unemployment and poverty as potent drivers of conflict over access to scarce resources, through social undercurrents along ethnic, racial and xenophobic lines, as well as by increasing violent behaviours and activity (Department of Defence 2015). As a result of this, together with the inability of local governments to supply reliable and adequate water and sanitation services, many communities have chronic disaster vulnerabilities, spurring violent protests and conflict across the country (Colvin et al. 2016; South African History Online 2020; De Juan/Wegner 2019; Patrick 2020). From 2010 to 2018, service delivery failures and high rates of unemployment and corruption spurred 1330 violent service delivery protests

across the country (South African Special Risk Insurance Association 2019). Climate change therefore not only increases the risk of conflict along socio-economic lines, but also fundamentally undermines the ability of already fragile municipalities to ensure fair and equitable service delivery (Chikulo 2014; Krampe et al. 2021), build trust amongst its citizens (City of Cape Town 2019), and ultimately to secure “peace, order and prosperity” (Krampe et al. 2021).

Water is recognised as a critical sector through which the impacts of climate change are driving insecurity in South Africa (Department of Environmental Affairs 2017). South Africa’s intended Nationally Determined Contribution (NDC) therefore includes a strong focus on water and food security in relation to climate change (Department of Environmental Affairs 2015). In addition, the Disaster Management Amendment Act (The Presidency 2015) explicitly provides for the inclusion of climate change in disaster risk assessments through all spheres of government. It mandates measures to reduce the risk of disaster through adaptation to climate change and the development of early warning mechanisms (The Presidency 2015).

With a marked increase in political disenchantment, expressed through service delivery protests and strikes (Bar-Yam et al. 2015; De Juan/Wegner 2019), South African insurers have begun to insure against the risk of damage or loss from public disorder, civil commotion, protest, riots and strikes (South African Special Risk Insurance Association 2019). The South African Special Risk Insurance Association (SASRIA) is the only insurer offering coverage for political violence. They estimate the most recent riots in July 2021, exacerbated by poverty and inequality and which saw more than 300 deaths and approximately 3,000 stores looted, as costing 8 billion Rand (\$1.19 billion) (Rumney/Mukherjee 2021). It is therefore not surprising within the broader governance domain that there are calls for social security law as a climate change adaptation strategy in South Africa (Jegede/Mokoena 2019). In response to these socio-economic imperatives spurring conflict across the country, and upon the recognition of climate change as a threat multiplier, South Africa has developed a new security logic that acknowledges novel domestic actors, means and purposes, and notions of emergency, contingency, prevention and management to orientate around the threat of climate change through a risk-based approach. When considering who the existing security professionals engaged in actively responding to climate change are, the extension of actors goes beyond government bodies, to also include non-State actors.

11.3.4 Non-State Actors: A Whole-of-Society Approach to Dealing with Risk-Based (In)security

South Africa hosts the largest number of private security companies and employees on the continent – both per capita and in terms of raw numbers (Berg/Howell 2017). By 2016, there were over 8,692 security companies and approximately 488,666 registered and active private security employees in South Africa, compared to 151,834

police officers in the South African Police Service (excluding civilians) and members of the armed forces (Berg/Howell 2017). Compared to the State security apparatus, private security outnumbers the public police by 3–1 (Berg/Howell 2017). As a result, private security in South Africa has gone from an industry worth 600 million Rand (USD44 million) in 1986 to current estimates of 60 billion Rand (USD4 billion) (Berg/Howell 2017).

The significance and influence of this shift to private actors in South Africa is demonstrated in the fact that there are no functions performed by the public police that are not also performed by private security organisations (Berg 2010). Further, it is argued that there is an “integration” or diffusion of mentalities (not just practices and intentions) across the public-private realm (Berg 2010). City Improvement Districts (CIDs), together with heightened surveillance, have increased steadily for two decades (Berg 2010). Security is the main service offered by CIDs in South Africa, and many have hired private security companies to patrol public spaces, thereby “topping up” policing and security provision in their designated spaces (Berg 2010; Berg/Shearing 2020; Abrahamsen/Williams 2011). Although this does not necessarily reflect a decline in State power or engagement in security, it does align closely with the neoliberal notion that to “govern less is to govern better” (Abrahamsen/Williams 2007; O’Malley et al. 1997). Critics have highlighted that such an approach in South Africa has amounted to the possibility of pursuing a form of individualised political peace while neglecting broader State imperatives of security (Kempa/Singh 2008). As a consequence, contradictorily, just as traditional international security responses leave those without adaptive capacity to respond fully exposed to climate change and the most vulnerable (e.g. climate migrants) to being categorised as “state ‘enemies’” (Jayaram/Brisbois 2021), those who cannot afford bubbles of private security are excluded from its perceived benefit or confined to socio-economically delineated geographies of insecurity (Simpson et al. 2019a, 2020).

Although security was once seen as the exclusive domain of the State, in South Africa – as in much of Africa (Berg/Howell 2017), and elsewhere (Boutellier/Van Steden 2011) – security is increasingly in the hands of private actors (Abrahamsen/Williams 2007a, 2007b; Berg/Shearing 2020). Although early scholarship concentrated on private military companies (Abrahamsen/Williams 2011), emerging scholarship has begun to consider what reach non-military and private actors (non-State), who could legitimately be thought of as security actors (Stenning/Shearing 2018), might have in an “Anthropocene” world (Mutongwizo et al. 2019; Simpson 2020; Simpson et al. 2019, 2020, Harringtonand/Shearing 2017). This is premised on the recent recognition that human and environmental insecurities arise out of negative feedback from damaged environments (such as a warming and unpredictable climate) which pose direct and indirect threats to people, their securing capabilities and their livelihoods (Simpson 2018; Simpson/Daehnhardt 2021). Amongst practices of security, however, there is little understanding of the specific role or efficacy of such private actors under a changing climate (Holley/Shearing 2018). There is lack of clarity regarding the mandate and scope of operations between private actors and their overlap with conventional (State) security operations, rules, institutions,

governance arrangements and actors (Simpson et al. 2020). However, their active engagement and scale have important implications for adaptation to climate change and, where that adaptation is effective, human security.

Peters (2018) has noted that other members of the UNSC, such as the UK, have adopted a “partial securitisation of climate change” in their approach to the climate change-security nexus (see chapter on United Kingdom in this book). The South African approach highlights characteristics of unequally distributed security (Simpson et al. 2020a). At a government level, the full range of impacts is considered a threat to national security concerns (Department of Environmental Affairs and Tourism 2019). But non-State actors are also recognised to have an important role to play in the absence or incapacity of a state disrupted by the impacts of climate change (Simpson et al. 2019, 2020). As a result, “gated” and private nodes of security are emerging across South Africa for those who can afford the private services or technologies enabling security (Simpson et al. 2019, 2019a, 2020). What emerged out of a trend in private security – in the conventional policing sense – in the early 2000s (Berg 2010), now extends to elite securing of broader essential goods such as water, electricity, food, insurance and education (Simpson et al. 2019; Jaglin 2013; Hursh 2005; Chapman 2014; Peyton et al. 2015).

An emerging term that recognises the overlapping securing roles and need for cooperation between State and non-State actors in response to climate change is a “whole-of-society” approach (City of Cape Town 2019; Simpson et al. 2019). This is a mutual coverage of the provision of public (security) goods by public and private actors (Dubé et al. 2014), essentially a hybridisation of public and private security (Berg 2010). As provincial and local governments in South Africa seek to provide enhanced water and energy security, they are increasingly using a “whole-of-society” approach as a means of recognition of the need for involvement of private actors in response to climate-induced disruptions, the limited response capacity of the State, and the importance of coordination between all available security actors (City of Cape Town 2019; Simpson et al. 2019). This notion has also entered more formal policy positions of security in provincial-level approaches to community policing in South Africa, as demonstrated in the Western Cape’s Security Plans (Western Cape Provincial Government 2010, 2019), and at the local government level in the Critical Water Shortages Disaster Plan (City of Cape Town 2018) and Water Strategy (City of Cape Town 2019), both developed by the City of Cape Town in response to the Cape Town drought (2015–2018).

With the NCCRS anchored in a participatory framework and the Climate Change Bill’s promise to “leave no one behind”, for South Africa, a whole-of-society approach includes civil society. This is reflected by (Chikulo 2014), who states that in order to achieve inclusive sustainable development, climate change and development as well as service delivery decision-making needs to be participatory; and (Kumssa/Jones 2010), who state that “collective action” is required to govern the “commons” and therefore that civil society engagement is critical to achieving human security. Accordingly, the PCC gathers government, the private sector, organised labour and civil society to work towards a just transition (Department of Forestry and [DFF&E] 2021).

Table 11.1 South Africa’s internal climate change literacy rates are some of the lowest in Africa. South Africa ranks 29th out of 33 African countries studied, with large disparities in sub-regional (provincial) climate change literacy rates (data extract)

South African province	Climate change literacy rate (%)
Mpumalanga	41
Western Cape	38
Northern Cape	35
Gauteng	32
Free State	29
North West	27
Limpopo	27
Eastern Cape	23
Kwazulu-Natal	15

Source Simpson et al. (2021)

However, despite being a key climate change negotiator on the continent, with progressive climate change and environmental legislation, South Africa’s domestic climate change literacy rates are one of the lowest on the continent, with large disparities across the country (Table 11.1). Within a risk-based approach, this has implications for risk perception and subsequently places a ceiling on potential response capacities (Simpson et al. 2021).

Civil society engagement not only motivates greater tolerance and allows for the accommodation of diverse interests, subsequently reducing violence and building trust, but it can also work to empower marginalised and more vulnerable groups (Kumssa/Jones 2010). Enhancing’s the country’s climate literacy therefore not only equips the country with the required tools to respond to inherent vulnerabilities and exposure to climate change (Simpson et al. 2021), but can also work to prevent the most vulnerable from falling through the cracks of siloed security networks.

11.4 International Action and the UNSC

With the country’s strategic orientation being that of collaboration (Le Roux 2008), in a public lecture on South Africa’s two-year non-permanent membership in the UNSC, Deputy Minister of International Relations and Cooperation, Luwellyn Landers, stated that South Africa aims to continue “the legacy: Working for a Just and Peaceful World” by contributing to “peace, justice and reconciliation” on the African continent through “the peaceful resolution of conflicts” and “inclusive dialogue” (Landers 2019). Reflecting Kumssa/Jones (2010) and the country’s domestic imperatives highlighted in previous sections, he further emphasised the need for “collective action” to ensure good governance, sustainable development and, ultimately, human security.

South Africa’s future foreign relations will be based on our belief that human rights should be the core concern of international relations, and we are ready to play

a role in fostering peace and prosperity in the world we share with the community of nations (President Nelson Mandela in 1993, quoted in Braga/de Rezende 2017).

South Africa aligns with other UNSC members in recognising climate change as an imminent threat to peace and security, both internally and across borders. South African policy relates to climate change as a “conflict multiplier”, highlighting the contribution of climate change to conflicts in the Sahel, Lake Chad, and the Horn of Africa (UNSC 2020). South Africa is signatory to numerous international human and ecological security imperatives, amongst which are the 2030 Agenda for Sustainable Development, the Paris Agreement (PA), the UNFCCC, the Kyoto Protocol, the Addis Ababa Action Agenda on Financing for Development as well as the SENDAI agreement. This aligns with the broader trend in the UNSC of members working through and with intergovernmental organisations (IGOs) on climate security issues (Dellmuth et al. 2018).

On the African continent, South Africa has become the main driver of climate negotiations (Nhamo 2011). Consequently, South Africa plays a vital role in ensuring the implementation of the AU Agenda 2063 and the UN’s 2030 Agenda for Sustainable Development, as well as a critical role within the UNSC, to enhance the cooperation with regional organisations like the African Union and other partners (Landers 2019). In line with this, it is highlighted as absolutely critical that the UN coordinate a collective response to this existential threat, through multilateral solutions in which the United Nations Framework Convention on Climate Change (UNFCCC) plays an important role (UNSC 2015).

South Africa’s opinion of the appropriateness of the UNSC in dealing with the existential threat of climate change has altered over the years (Table 11.2). Despite the recognition that climate change poses a threat to *human* security within the country, South Africa initially questioned the positioning of climate change within the United Nations Security Council, arguing that if the council engages with climate change it will undermine the sovereignty of states, fracturing the international system (Murphy 2021). During the Security Council’s first-ever debate on the impact of climate change on peace and security, and during its previous memberships in 2007 and 2011, South Africa argued that climate change went beyond the Security Council’s mandate and needed to be addressed in other UN forums (United Nations Security Council 2007; UNSC 2011). South Africa took this stance despite UNSC and NATO’s recognition that, “non-military sources of instability [such as environmental degradation] ... have become threats to the peace and security” as far back as 1992 (Elliott 2003).

In 2019, Ambassador Jerry Matjila recognised the “existential and global” nature of climate change, stressing the need for a “multilateral response... with a strong role for all stakeholders”. Despite this, he continued to question the appropriateness of the Council dealing with climate change, arguing that “we should be aware that the Security Council’s limited membership and specific peace and security focus means that it may not be the appropriate forum for addressing the issue of climate change. Consequently, we should be cautious to duplicate efforts of other bodies in the UN system that are better placed to address this matter” (Matjila 2019). He further argued that the high level of uncertainty makes it difficult “to determine a direct causal connection between climate change and disasters... and threats to

international peace and security” (Matjila 2019). This is not surprising given that, at that time, the role of the UNSC in response to climate change was heavily debated in both political and scientific discourses (UNSC 2011; United Nations Security Council 2007; Conca 2019). Therefore, South Africa’s reticence regarding a securitisation of non-conventional sectors and their incongruence with a logic of war (UNSC 2011; United Nations Security Council 2007) helped align the country with other BRICS UNSC members – Brazil, China, India and Russia – all of whom rejected inclusion of climate change as an operational focus for the UNSC (Peters 2018).

In July 2020, Xolisa Mabhongo, Deputy Permanent Representative of South Africa to the United Nations, warned against UNSC mandate creep and the possibility of it outpacing its own resources and capacities (Mabhongo 2020). He stressed that the international community must channel its resources appropriately and efficiently through the various bodies in the United Nations system that are best suited for a particular task. He further emphasised the need to contextualise risk within each country, through close partnerships with relevant regional organisations, including the African Union (Mabhongo 2020). Owing to the UNSC’s experience with conflict resolution, in September 2020, Jerry Matjila extended this notion by stating that South Africa encourages the Security Council to support the lead UN organisations (for example, the UNFCCC, Convention on Biological Diversity [CBD]) in addressing the underlying development issues that spark initial conflict and in dealing with the consequences of an outbreak of conflict when they occur. He stated that “these collaborations will ensure that the Security Council may obtain information on the potential impact of climate or environmental-related security risks in conflict settings” (Matjila 2020).

The UNSC Arria Formula meeting in 2020 showed that the COVID-19 pandemic had shifted South Africa’s position of rejecting inclusion. While still questioning the exact role of the Council with respect to climate change, the South African representative stated that it has become clear that climate change is a matter of security that acts as a “conflict multiplier” and which needs to be addressed “holistically” by considering as many voices as possible and through the integration of sustainable development (Mogashoa 2020). The Minister of International Relations and Cooperation of South Africa, Naledi Pandor, extended this notion by highlighting, later that year, the need for a collective, holistic response in dealing with these increasingly complex system-wide social and ecological stressors (Pandor 2021).

Although this recognition of the security threat posed by climate change does not mark a transformative shift in alignment of traditional security actors with broader changes in security logics concerning securitisation of the environment, representatives state that South Africa is of the opinion that coordinated action between the Security Council, its “sister UN agencies” (for example, UNFCCC, CBD, UN Department of Economic and Social Affairs, UNDP) as well as relevant regional organisations, particularly the AU, is required to ensure a safer Africa and a safer world (Matjila 2020). Embedded within a human-centric risk-based security logic, such an approach is necessitated in order “to mitigate the effects of contemporary drivers of conflict and insecurity” – “to address the root causes of under development... [and] to deal with the ramifications of threats and risk multipliers, which

Table 11.2 Summary of South African representatives' statements on the appropriateness of placing climate change within the mandate of the UNSC

Date	Which representative & where statement made	South African position articulated on the appropriateness of placing climate change within the UNSC mandate	Reference
2007	<i>China and South Africa</i> UNSC first open debate	Undermines states' sovereignty; will fracture international system	Murphy (2018)
April 2007	<i>Dumisani Kumalo</i> UNSC Open Debate	Beyond UNSC's mandate	UNSC (2007)
July 2011	<i>Dr Mashabane</i> UNSC Open Debate	Beyond UNSC's mandate	UNSC (2020a)
January 2019	<i>Jerry Matjila</i> UNSC Open Debate	Duplicates other UN efforts; questioned appropriateness	Matjila (2019)
March 2020	<i>Kgaugelo Mogashoa</i> Arria Formula meeting on climate and security risks Statement	Climate crisis: threat multiplier which impacts on matters of peace and security; acknowledges UN has critical role in coordinating our collective international response but questions the exact role of Security Council; need scientific consensus on this issue & therefore welcomes research	Mogashoa (2020)
July 2020	<i>Xolisa Mabhongo</i> UNSC Meeting on the Maintenance of International Peace and Security: Climate and Security	Little scientific evidence on direct causality between climate change and threats to international peace and security; wary of introducing climate change into UNSC: • UNSC mandate creep, • Diffuses importance of the UNFCCC, • Detract attention and resources	Mabhongo (2020)
September 2020	<i>Jerry Matjila</i> UNSC Meeting on the Humanitarian Effects of Environmental Degradation and Peace and Security	Climate pressures are threat and risk multipliers; collective, holistic and multilateral response from all Member States needed; UNSC's experience with conflict useful at climate change-caused conflict; Security Council to support the lead UN organisations	Matjila (2020)

(continued)

Table 11.2 (continued)

Date	Which representative & where statement made	South African position articulated on the appropriateness of placing climate change within the UNSC mandate	Reference
November 2020	<i>Alvin Botes</i> UNSC Meeting on the Humanitarian Effects of Environmental Degradation and Peace and Security	Maximise collective capabilities & resources; coordinated action between UNSC, other UN organisations and processes as well as relevant regional organisations such as AU	Botes (2020)

Source elaborated by the authors

escalate tensions and conflict” (Botes 2020). As various experts continue to question the relationship between climate change and conflict (Hsiang et al. 2013; Burke et al. 2014; Mach et al. 2020; Conca 2019; Adams et al. 2018), South African representatives (for example, Mabhongo 2020; Matjila 2020) continue to emphasise the need for further research, to unpack the linkages between climate change and security fully and to highlight possible ways in which the UNSC can help address these challenges efficiently.

11.5 Conclusion

In South Africa climate change is predominantly seen as a threat to socio-economic progression, through its effects on resources (Department of Environmental Affairs and Tourism 2004, 2019). In this context, security imperatives are subordinated to human development imperatives which can contribute towards climate resilience. Subsequently, South Africa largely focuses on its ramifications for the lives and livelihoods of people, particularly vulnerable groups. Although South Africa sees climate change as a “threat multiplier” country-wide, it is becoming increasingly apparent that it will have a disproportionately greater effect on the poor (National Planning Commission 2012). South Africa’s risk-based approach to addressing climate change is therefore fundamentally informed by the country’s development imperatives, particularly the triple challenge of poverty, inequality, and unemployment. This is in line with current thinking in the IPCC, which emphasises equity as a core element of sustainable development as well as conditions for inclusive and sustained economic growth, shared prosperity, and decent work for all. Without progress towards increasing equity and reduced inequality, development cannot be considered climate-resilient (Schipper et al. 2021; Andrijevic et al. 2020).

This extension of security to second-generation rights demands a suite of novel domestic actors and hence reflects the SANDF’s long-standing concern over the role

of traditional security actors in response to climate change, apparent in their response to climate change, which remains limited to disaster relief and humanitarian aid.

Although provincial and local governments are increasingly seeking the hybridisation of public and private security to provide enhanced water and energy security, they tend to exclude those who cannot afford “bubbles” of private security. Subsequently, climate-induced instability and conflict are set to manifest themselves in already socio-economically delineated geographies of insecurity, resulting in the most vulnerable groups being left to deal with the ramifications of climate-induced disruptions themselves. South Africa therefore not only fails to respond to the climate change-security nexus through conventional security mechanisms, but particularly through its inability to address fundamental developmental problems (including basic service delivery, such as water and sanitation, and electricity). As one of the most unequal countries in the world, partial domestic security arrangements may be exacerbated under climate change. Pessimistic climate change scenarios anticipate inequalities between countries, or regional rivalry, with their associated national security concerns (Shared Socio-economic Pathways 3 and 4). Here, the limited capacity of the State and the increasing privatisation of security in South Africa within a highly unequal society raises cautions about the distributional effects of domestic climate insecurities.

The suitability of conventional security actors in dealing with the climate change-security nexus in South Africa is therefore contested. Firstly, the South African security space is largely dominated by soft security issues, and the existing security actors engaged in actively responding to climate change therefore extend beyond conventional government bodies of security. Secondly, South Africa’s developmental state is impeding its ability to uphold international commitments to combat climate change. Thirdly, despite South Africa being positioned as a peacemaker and conflict mediator in African crises, South Africa’s military capabilities and operational output are in rapid decline. Lastly, the increased privatisation of security, particularly soft security (i.e., water and energy security), has led to the hybridisation of public and private security, which may leave the most vulnerable falling through the cracks.

Transformations of conventional international relations, which fail to incorporate non-traditional security sectors are inappropriate to deal with system-wide social and ecological stressors, such as climate change (Trombetta 2008). Consequently, as various South African representatives to the UNSC have articulated, South Africa recognises the need for a “collective response” (Botes 2020; Matjila 2020; Mogashoa 2020). South Africa therefore believes that the UNSC needs to work together with other UN organisations and processes to “maximise their collective capabilities and resources, and to focus their efforts where it is most needed” (Botes 2020). Ultimately, South Africa’s conception is embedded in the need for a whole-of-society approach to appropriately and holistically “address the root causes of under development” to “mitigate the effects of contemporary drivers of conflict and insecurity” (Botes 2020). South Africa therefore emphasises the important connection between addressing the causes and consequences of insecurity associated with climate change and promoting an environment conducive to human development. This human-centred approach to national security thus places a legitimate, credible and cohesive developmental

state at the centre of driving the overarching agenda for security. South Africa's position on the appropriateness of the Security Council in dealing with the climate change-security nexus is embedded in this perception.

Further progress in recognising the role of securing actors will give a broader and more nuanced view of roles and responsibilities for building climate-resilient development. For sectors like security, health, insurance, or education the emergence of securing actors and their roles in a situation of climate change are novel. However, they mark a fundamental shift to mainstreaming climate action across all of society. Future research can build on these observations by identifying the coordination space and actors involved in a "whole-of-society" approach that safeguards the needs of those most vulnerable to climate change and climate-related insecurities. In particular, South Africa needs research that focuses on social-ecological tipping points arising from impacts of climate change that might lead to conflict or violence at multiple scales, including the political and economic drivers of these tipping points that would be associated with a just transition. This aligns with broader projects on climate change and security (Mach et al. 2020), and would require greater understanding of climate-conflict linkages and conditions under which they manifest, development of new methodologies which develop and integrate social and climate science data, and exploring risk and response options relating to security decision-making.

References

- Abrahamsen, Rita; Williams, Michael C., 2007a: "Introduction: The Privatisation and Globalisation of Security in Africa", in: *International Relations*, 21: 131–41.
- Abrahamsen, Rita; Williams, Michael C., 2007b: "Securing the City: Private Security Companies and Non-State Authority in Global Governance", in: *International Relations*, 21: 237–53.
- Abrahamsen, Rita; Williams, Michael C., 2011: *Security Beyond the State: Private Security in International Politics* (Cambridge: Cambridge University Press).
- Adams, Courtland; Ide, Tobias; Barnett, Jon; Detges, Adrien, 2018: "Sampling Bias in Climate–Conflict Research", in: *Nature Climate Change*, 8,3: 200–03.
- Adetiba, Toyin C., 2017: "Regional and Economic Security: A Driver for South African National Security?", in: *Journal of African Union Studies*, 6,2/3: 199–223.
- Andrijevic, Marina; et al., 2020: "Overcoming Gender Inequality for Climate Resilient Development", in: *Nature Communications*, 11,1: 6261.
- Bar-Yam, Yavni; Lagi, Marco; Bar-Yam, Yaneer, 2015: "South African Riots: Repercussion of the Global Food Crisis and Us Drought", in: Fellman, Philip Vos; Bar-Yam, Yaneer; Minai, Ali A. (Eds.): *Conflict and Complexity: Countering Terrorism, Insurgency, Ethnic and Regional Violence* (New York, NY: Springer): 261–67.
- Berg, Julie, 2010: "Seeing Like Private Security: Evolving Mentalities of Public Space Protection in South Africa", in: *Criminology and Criminal Justice*, 10,3: 287–301.

- Berg, Julie; Howell, Simon, 2017: "The Private Security Complex and Its Regulation in Africa: Select Examples from the Continent", in: *International Journal of Comparative and Applied Criminal Justice*, 41,4: 273–86.
- Berg, Julie; Shearing, Clifford, 2020: "Polycentric Security Governance and Sustainable Development in the Global South", in: Blaustein, Jarrett; Fitz-Gibbon, Kate; Nathan, W. Pino; White, Rob (Eds.): *The Emerald Handbook of Crime, Justice and Sustainable Development* (Bingley: Emerald Publishing Limited): 153–73.
- Bigo, Didier, 2012: "Globalization and Security", in: Amenta, Edwin; Nash, Kate; Scott, Alan (Eds.): *The Wiley-Blackwell Companion to Political Sociology* (London: Blackwell Publishing): 204–13.
- Botes, Alvin, 2020: "Statement Delivered by Mr Alvin Botes, Deputy Minister of the Department of International Relations and Cooperation of South Africa, During the UN Security Council High-Level Debate on Peacebuilding and Sustaining Peace: Contemporary Drivers of Conflict and Insecurity, 3 November 2020" (Pretoria: Department of International Relations and Cooperation [DIRCO]); at: <https://www.dirco.gov.za/blog/2020/11/03/statement-delivered-by-mr-alvin-botes-deputy-minister-of-the-department-of-international-relations-and-cooperation-of-south-africa-during-the-un-security-council-high-level-debate-on-peacebuilding-a/>.
- Boutellier, Hans; Van Steden, Ronald, 2011: "Governing Nodal Governance: The 'Anchoring' of Local Security Networks", in: Crawford, A. (Ed.): *International and Comparative Criminal Justice and Urban Governance: Convergence and Divergence in Global, National and Local Settings* (Cambridge: Cambridge University Press): 461–82.
- Brown, Oli; Hammill, Anne; McLeman, Robert, 2007: "Climate Change as the 'New' Security Threat: Implications for Africa", in: *International Affairs*, 83,6: 1141–54.
- Burke, Marshall; Hsiang, Solomon; Miguel, Edward, 2014: "Climate and Conflict", in: *Annual Review of Economics*, 7,1: 577–617.
- Carleton, T.; Hsiang, S. M.; Burke, M., 2016: "Conflict in a Changing Climate", in: *The European Physical Journal Special Topics*, 225,3: 489–511.
- Chapman, Audrey, 2014: "The Impact of Reliance on Private Sector Health Services on the Right to Health", in: *Health Hum Rights*, 16,1: 122–33.
- Chikulo, Bornwell C., 2014: "An Analysis of Climate Change, Poverty and Human Security in South Africa", in: *Journal of Human Ecology*, 47: 295–303.
- City of Cape Town, 2018: "Critical Water Shortages Disaster Plan" (Cape Town: City of Cape Town Local Government Municipality); at: <https://resource.capetown.gov.za/documentcentre/Documents/City%20strategies%2C%20plans%20and%20frameworks/Critical%20Water%20Shortages%20Disaster%20Plan%20Summary.pdf>.
- City of Cape Town, 2019: "Cape Town Water Strategy (2019): Our Shared Water Future" (Cape Town: City of Cape Town); at: <https://resource.capetown.gov.za/documentcentre/Documents/City%20strategies,%20plans%20and%20frameworks/Cape%20Town%20Water%20Strategy.pdf>.
- Cole, Hugh D.; et al., 2021: "Managing City-Scale Slow-Onset Disasters: Learning from Cape Town's 2015–2018 Drought Disaster Planning", in: *International Journal of Disaster Risk Reduction*, 63 (September): 102459.
- Colvin, Christine; et al., 2016: "Water: Facts and Futures Rethinking South Africa's Water Future" (Cape Town: WWF-SA); at: <https://www.greenagri.org.za/assets/documents-/Projects-Research/Water/WWF009-Fresh-Water-Report-Web-lowres.pdf>.
- Conca, Ken, 2019: "Is There a Role for the Un Security Council on Climate Change?", in: *Environment: Science and Policy for Sustainable Development*, 61,1: 4–15.
- Corry, Olaf, 2012: "Securitisation and 'Riskification': Second-Order Security and the Politics of Climate Change", in: *Millennium - Journal of International Studies*, 40,2: 235–58.
- De Juan, Alexander; Wegner, Eva, 2019: "Social Inequality, State-Centered Grievances, and Protest: Evidence from South Africa", in: *Journal of Conflict Resolution*, 63,1: 31–58.

- Dellmuth, Lisa M.; Gustafsson, Maria-Therese; Bremberg, Niklas; Mobjörk, Malin, 2018: "Inter-governmental Organizations and Climate Security: Advancing the Research Agenda", in: *WIREs Climate Change*, 9,1: e496.
- Department of Defence (DoD), 2014: *South African Defence Review 2014* (Pretoria: Department of Defence); at: https://www.gov.za/sites/default/files/gcis_document/201409/dfencereview2014.pdf.
- Department of Defence, 2015: *South African Defence Review 2015* (Pretoria: Department of Defence of the Republic of South Africa); at: <https://static.pmg.org.za/170512review.pdf>.
- Department of Environmental Affairs, 2011: *National Climate Change Response Policy, White Paper* (Pretoria: Department of Environmental Affairs); at: https://www.gov.za/sites/default/files/gcis_document/201409/nationalclimatechangeresponsewhitepaper0.pdf.
- Department of Environmental Affairs, 2015: *South Africa's Intended Nationally Determined Contribution* (INDC): Discussion Document (Pretoria: Department of Environmental Affairs); at: https://www.dffe.gov.za/sites/default/files/docs/sanational_determinedcontribution.pdf.
- Department of Environmental Affairs, 2016: *South Africa's First National Climate Change Report* (Pretoria: Department of Environmental Affairs); at: https://www.dffe.gov.za/otherdocuments/reports/southafricas_firstnational_climatechange.
- Department of Environmental Affairs, 2017: *South Africa's 2nd Annual Climate Change Report, 2016* (Pretoria: Department of Environmental Affairs); at: https://www.dffe.gov.za/sites/default/files/reports/southafrica_seconddnational_climatechnage_report2017.pdf.
- Department of Environmental Affairs, 2017a: *South Africa's 2nd Biennial Update Report* (Pretoria: Department of Environmental Affairs); at: https://unfccc.int/files/national_reports/non-annex_i_parties/biennial_update_reports/application/pdf/south_africa_2nd_bur.pdf.
- Department of Environmental Affairs, 2018: *South Africa's Third National Communication under the United Nations Framework Convention on Climate Change* (Pretoria: Department of Environmental Affairs); at: https://unfccc.int/sites/default/files/resource/South%20African%20TNC%20Report%20to%20the%20UNFCCC_31%20Aug.pdf.
- Department of Environmental Affairs and Tourism, 2004: *A National Climate Change Response Strategy for South Africa* (Pretoria: Department of Environmental Affairs and Tourism); at: https://www.dffe.gov.za/sites/default/files/legislations/national_climatechange_response_whitepaper_0.pdf.
- Department of Environmental Affairs and Tourism, 2019: *National Climate Change Adaptation Strategy* (Pretoria: Department of Environment, Forestry & Fisheries); at: https://www.dffe.gov.za/sites/default/files/docs/nationalclimatechange_adaptationstrategy_ue10november2019.pdf.
- Department of Forestry, Fisheries and the Environment, and (DFF&E), 2021: *Important Climate Change Measures for South Africa Adopted by Cabinet* (Pretoria: Department of Forestry, Fisheries and the Environment); at: https://www.dffe.gov.za/mediarelease/cabinetapproves_cop26sandc_climatechangebill.
- Department of International Relations and Cooperation, 2020: "Media Statement by the Minister of International Relations and Cooperation, Dr Naledi Pandor on South Africa's Presidency of the United Nations Security Council, 18 November 2019" (Pretoria: South Africa: Department of International Relations and Cooperation); at: <https://www.dirco.gov.za/blog/2019/11/18/media-statement-by-the-minister-of-international-relations-and-cooperation-dr-naledi-pandor-on-south-africas-presidency-of-the-united-nations-security-council-18-november-2019/>.
- DFF&E, 2021: *South Africa's Intended Nationally Determined Contribution* (INDC) (Pretoria: Government Printer).
- Dubé, Laurette; Add, Nii; Blouin, Chantal; Drager, Nick, 2014: "From Policy Coherence to 21st Century Convergence: A Whole-of-Society Paradigm of Human and Economic Development", in: *Annals of the New York Academy of Sciences*, 1331: 201–15.
- Elliott, Lorraine, 2003: "Imaginative Adaptations: A Possible Environmental Role for the UN Security Council", in: *Contemporary Security Policy*, 24,2: 47–68.

- Flanagan, Jane, 2018: "Cape Town Is Warned It Faces Riots as It Prepares for 'the Worst Crisis Any City Has Faced since 9/11' with Water Due to Run out by April 12" (Cape Town: MailOnline); at: <https://www.dailymail.co.uk/news/article-5324817/Drought-hit-Cape-Town-braces-9-11-level-crisis.html>.
- Hardoy, Jorgelina; Gencer, Ebru; Winograd, Manuel, 2019: "Participatory Planning for Climate Resilient and Inclusive Urban Development in Dosquebradas, Santa Ana and Santa Tomé" in: *Environment and Urbanization*, 31,1: 33–52.
- Harrington, Cameron; Shearing, Clifford, 2017: *Security in the Anthropocene: Reflections on Safety and Care* (Bielefeld: Transcript Verlag).
- Hlahla, Patrick, 2006: "SA Army Preparing for Future Warfare" (Pretoria: IOL News); at: <https://www.iol.co.za/news/south-africa/sa-army-preparing-for-future-warfare-268674>.
- Holley, Cameron; Shearing, Clifford, 2018: *Criminology and the Anthropocene* (London and New York: Routledge).
- Hsiang, Solomon M.; Burke, Marshall; Miguel, Edward, 2013: "Quantifying the Influence of Climate on Human Conflict", in: *Science*, 341,6151: 1235367.
- Hursh, David, 2005: "Neo-Liberalism, Markets and Accountability: Transforming Education and Undermining Democracy in the United States and England", in: *Policy Futures in Education*, 3,1: 3–15.
- IPCC, 2022: "Summary for Policymakers" (Cambridge, UK - New York, NY: Cambridge University Press); at: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf.
- Jaglin, Sylvie, 2013: "Urban Energy Policies and the Governance of Multilevel Issues in Cape Town", in: *Urban Studies*, 51,7: 1394–414.
- Jayaram, Dhanasree; Brisbois, Marie Claire, 2021: "Aiding or Undermining? The Military as an Emergent Actor in Global Climate Governance", in: *Earth System Governance*, 9,100107.
- Jegade, Ademola Oluborode; Mokoena, Untalimile Crystal, 2019: "Thinking into the Future: Constructing Social Security Law as Climate Change Adaptation Strategy in Urban South Africa", in: Brandful Cobbinah, Patrick; Addaney, Michael (Eds.): *The Geography of Climate Change Adaptation in Urban Africa* (Cham: Springer International Publishing): 329–53.
- Kempa, Michael; Singh, Anne-Marie, 2008: "Private Security, Political Economy and the Policing of Race: Probing Global Hypotheses through the Case of South Africa", in: *Theoretical Criminology*, 12,3: 333–54.
- Krampe, Florian; Hegazi, Farah; VanDeveer, Stacy D., 2021: "Sustaining Peace through Better Resource Governance: Three Potential Mechanisms for Environmental Peacebuilding", in: *World Development*, 144,105508.
- Kumssa, Asfaw; Jones, John F., 2010: "Climate Change and Human Security in Africa", in: *International Journal of Sustainable Development & World Ecology*, 17,6: 453–61.
- Landers, Luwellyn, 2019: "Statement by Deputy Minister Luwellyn Landers, Deputy Minister of International Relations and Cooperation, at a Public Lecture on South Africa's Two-Year Non-Permanent Membership in the United Nations Security Council (UNSC)" (Pretoria: Department of International Relations and Cooperation); at: <https://www.dirco.gov.za/blog/2019/04/05/statement-by-deputy-minister-luwellyn-landers-deputy-minister-of-international-relations-and-cooperation-at-a-public-lecture-on-south-africas-two-year-non-permanent-membership-in-the-united/>.
- Le Roux, Len, 2008: "South African Army Vision 2020: Volume 2, the South African Army Relevant and Ready for Future", Paper presented at the Institute for Security Studies, Pretoria.
- Louw, Gerhard Martin, 2013: "South African Defence Policy and Capability: The Case of the South African National Defence Force" (PhD Dissertation, Stellenbosch: Stellenbosch University, Faculty of Military Science).
- Mabhongo, Xolisa, 2020: "Statement by Ambassador Xolisa Mabhongo, Deputy Permanent Representative of South Africa to the United Nations, During the United Nations Security Council Video Teleconference Meeting on the Maintenance of International Peace and Security: Climate

- and Security” (Pretoria, South Africa: Department of International Relations and Cooperation [DIRCO]); at: <https://www.gov.za/speeches/ambassador-xolisa-mabhongo-united-nations-security-council-meeting-maintenance>.
- Mach, Katharine J.; et al., 2019: “Climate as a Risk Factor for Armed Conflict”, in: *Nature*, 571, 7764: 193–97.
- Mach, Katharine J.; et al., 2020: “Directions for Research on Climate and Conflict”, in: *Earth’s Future*, 8, 7: e2020EF001532.
- Matjila, Jerry, 2019: “Statement by Ambassador Jerry Matjila, Permanent Representative of South Africa to the United Nations During the UN Security Council Open Debate on Addressing the Impacts of Climate Related Disasters on International Peace and Security” (Pretoria: Department of International Relations and Cooperation); at: <https://www.dirco.gov.za/blog/2020/01/21/statement-by-ambassador-jerry-matjila-permanent-representative-of-south-africa-to-the-united-nations-during-the-un-security-council-open-debate-on-addressing-the-impacts-of-climate-related-disasters/>.
- Matjila, J.M., 2020: “Statement by HE Ambassador J. M. Matjila, Permanent Representative of South Africa to the United Nations, Open Video Teleconference (Vtc) Meeting of the United Nations Security Council Titled, ‘Humanitarian Effects of Environmental Degradation and Peace and Security’” (Pretoria: Department of International Relations and Cooperation).
- Mikulewicz, Michael; Taylor, Marcus, 2020: “Getting the Resilience Right: Climate Change and Development Policy in the ‘African Age’”, in: *New Political Economy*, 25, 4: 626–41.
- Mogano, Palesa; Mokoee, Ngoako, 2019: “South African Climate Change Adaptation Politics: Urban Governance Prospects”, in: *International Journal of Social Sciences and Humanity Studies*, 11, 1: 68–83.
- Mogashoa, Kgaugelo, 2020: “South Africa’s Statement During the Arria-Formula Meeting on Climate and Security Risks”; at: <https://onu.delegfrance.org/Event-on-Climate-and-Security-risks>.
- Moore, Gerald, 2019: “The Climate Change-Violent Conflict Nexus in Global Perspective” (Cape Town: University of Cape Town); at: <https://www.saferspaces.org.za/blog/entry/the-climate-change-violent-conflict-nexus>.
- Mora, Camilo, et al., 2018: “Broad Threat to Humanity from Cumulative Climate Hazards Intensified by Greenhouse Gas Emissions”, in: *Nature Climate Change*, 8, 12: 1062–71.
- Murphy, Ash, 2018: “Climate Change Is a Security Threat – So Where is the UN Security Council?” (Newcastle-under-Lyme: Keele University); at: <https://theconversation.com/climate-change-is-a-security-threat-so-where-is-the-un-security-council-96658>.
- Murphy, Ashley, 2021: “Exploring the Securitisation of Climate Change within the Meaning of Article 39: Mapping the Narratives of UN Security Council Intervention” (PhD dissertation, Keele University, Faculty of Humanities and Social Sciences, School of Law).
- Mutongwizo, Tariro; Holley, Cameron; Shearing, Clifford D.; Simpson, Nicholas P., 2019: “Resilience Policing: An Emerging Response to Shifting Harm Landscapes and Reshaping Community Policing”, in: *Policing: A Journal of Policy and Practice*, 15, 1: 606–21.
- National Planning Commission, 2012: *National Development Plan 2030: Our Future-Make It Work* (Pretoria: National Planning Commission); at: https://www.gov.za/sites/default/files/gcis_document/201409/ndp-2030-our-future-make-it-workr.pdf.
- National Treasury, 2021: “Financing a Sustainable Economy” (Pretoria: National Treasury); at: <http://www.treasury.gov.za/publications/other/Sustainability%20technical%20paper%202020.pdf>.
- Nhamo, Godwell, 2011: “South Africa in Climate Negotiations: Challenges from Copenhagen Via Cancún to Durban 9/12”, in: *International Journal of African Renaissance Studies*, 6, 2: 5–35.
- Niang, Isabelle, et al., 2014: “Africa”, in: Barros, V. R.; Field, C. B.; Dokken, D. J.; Mastrandrea, M. D.; Mach, K. J.; Bilir, T. E.; Chatterjee, M.; Ebi, K. L.; Estrada, Y. O.; Genova, R. C.; Girma, B.; Kissel, E. S.; Levy, A. N.; MacCracken, S.; Mastrandrea, P. R.; White, L. L. (Eds.): *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects: Working Group*

- II Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK - New York, NY: Cambridge University Press): 1199–265.
- O'Malley, Pat; Weir, Lorna; Shearing, Clifford, 1997: "Governmentality, Criticism, Politics", in: *Economy and Society*, 26,4: 501–17.
- Pandor, Naledi, 2021: "South Africa's Foreign Policy: Reflections on the UN Security Council and the African Union. Discussion on South Africa's Role in Pursuing Its Regional and Global Goals" (London: Chatham House, Research Event, Alex Vines); at: <https://www.chathamhouse.org/events/all/research-event/south-africas-foreign-policy-reflections-un-security-council-and-african-parliament-of-south-africa>.
- Parliament of South Africa, 2019: "Parliament on SANDF Assistance in Aftermath of Tropical Cyclone Idai - Defence committee welcomes SANDF assistance in aftermath of Tropical Cyclone Idai" (Pretoria: Parliamentary Communication Services); at: <https://www.gov.za/speeches/parliament-sandf-assistance-aftermath-tropical-cyclone-idai-29-mar-2019-0000>.
- Parliamentary Monitoring Group, 2019: "Sandf Deployment to Vaal River System: Dws & Sandf Briefing; Rand, Sedibeng, Bloem Water Boards 2017/18 Annual Report; Tembisa and Ekurhukeni Petitions, with Minister and Deputy Minister" (Pretoria: Parliamentary Monitoring Group); at: <https://pmg.org.za/committee-meeting/28170/>.
- Patrick, Hosea O., 2020: "Climate Change, Water Security, and Conflict Potentials in South Africa: Assessing Conflict and Coping Strategies in Rural South Africa" in: Leal Filho, Walter; Luetz, Johannes; Ayala, Desalegn (Eds.): *Handbook of Climate Change Management: Research, Leadership, Transformation* (Cham: Springer International Publishing): 1–18.
- Peters, Katie, 2018: "Disasters, Climate Change, and Securitisation: The United Nations Security Council and the United Kingdom's Security Policy", in: *Disasters*, 42,S2: S196–S214.
- Peyton, Stephen; Moseley, William; Battersby, Jane, 2015: "Implications of Supermarket Expansion on Urban Food Security in Cape Town, South Africa", in: *African Geographical Review*, 34,1: 36–54.
- Ramaphosa, Cyril, 2019: "Statement by H.E. President Cyril Ramaphosa of South Africa to the United Nations Secretary-General's Climate Summit, 23 September 2019" (Pretoria: Department of International Relations and Cooperation); at: <https://www.dirco.gov.za/blog/2019/09/23/statement-by-h-e-president-cyril-ramaphosa-of-south-africa-to-the-united-nations-secretary-generals-climate-summit-23-september-2019/>.
- Republic of South Africa, 1996: "White Paper on National Defence for the Strategic Review for Southern Africa" (Pretoria: Republic of South Africa); at: <https://www.files.ethz.ch/isn/155722/SouthAfrica1996.pdf>.
- Rumney, Emma; Mukherjee, Promit, 2021: "South Africa's State Insurer to Raise Cover for Unrest Following Riots" (Reuters); at: <https://www.reuters.com/world/africa/south-africas-state-insurer-raise-cover-unrest-following-riots-2021-08-24/>.
- Scheffran, Jürgen; Link, Peter Michael; Schilling, Janpeter, 2019: "Climate and Conflict in Africa" (Oxford: Oxford University Press); at: <https://oxfordre.com/climatescience/view/10.1093/acrefore/9780190228620.001.0001/acrefore-9780190228620-e-557>.
- Schipper, Emma Lisa. F.; et al., 2021: "Turbulent Transformation: Abrupt Societal Disruption and Climate Resilient Development". in: *Climate and Development*, 13,6: 467–74.
- Serdeczny, Olivia; et al., 2017: "Climate Change Impacts in Sub-Saharan Africa: From Physical Changes to Their Social Repercussions", in: *Regional Environmental Change*, 17,6: 1585–600.
- Simpson, Nicholas P., 2018: "Applying the Capability Approach to Enhance the Conceptualization of Well-Being in Environmental Assessment", in: *Journal of Human Development and Capabilities*, 19,3: 365–97.
- Simpson, Nicholas P., 2020: "Insurance in the Anthropocene: Exposure, Solvency and Manoeuvrability", in: Holley, Cameron; Phelan, Liam; Shearing, Clifford D. (Eds.): *Criminology and Climate: Insurance, Finance and the Regulation of Harmscapes* (London, UK: Routledge): 135–52.
- Simpson, Nicholas P.; Daehnhardt, Madleina, 2021: "Design Principles for Sustainability: Tearfund's Expanding International Development Approach", in: *Development in Practice*, 11.

- Simpson, Nicholas P.; Shearing, Clifford D.; Dupont, Benoit, 2019: "Climate Gating: A Case Study of Emerging Responses to Anthropocene Risks", in: *Climate Risk Management*, 26,100196.
- Simpson, Nicholas P.; Shearing, Clifford D.; Dupont, Benoit, 2019a: "When Anthropocene Shocks Contest Conventional Mentalities: A Case Study from Cape Town", in: *Climate and Development*, 12,2: 163–68.
- Simpson, Nicholas P.; Shearing, Clifford D.; Dupont, Benoit, 2020: "Gated Adaptation During the Cape Town Drought: Mentalities, Transitions and Pathways to Partial Nodes of Water Security" in: *Society & Natural Resources*, 33,8: 1041–49.
- Simpson, Nicholas P.; Shearing, Clifford D.; Dupont, Benoit, 2020a: "'Partial Functional Redundancy': An Expression of Household Level Resilience in Response to Climate Risk", in: *Climate Risk Management*, 28,100216.
- Simpson, Nicholas P.; et al., 2021: "Climate Change Literacy in Africa"; in: *Nature Climate Change*, 11,11: 937–44.
- Singh, Pramod K.; Chudasama, Harpalsinh, 2021: "Pathways for Climate Resilient Development: Human Well-Being within a Safe and Just Space in the 21st Century", in: *Global Environmental Change*, 68,102277.
- South African Government, 2021: "International Relations" (Pretoria: Government of South Africa); at: <https://www.gov.za/about-sa/international-relations>.
- South African History Online, 2020: "Public Protest in Democratic South Africa" (SAHO); at: <https://www.sahistory.org.za/article/public-protest-democratic-south-africa>.
- South African Special Risk Insurance Association, 2019: "Cover for Riots, Protests and Violent Strikes Essential" (SASRIA); at: <https://cover.co.za/cover-for-riots-protests-and-violent-strikes-essential/>.
- Stenning, Philip C.; Shearing, Clifford D., 2018: "Governing Plural Policing Provision: Legal Perspectives, Challenges and Ideas", in: Den Boer, Monica (Ed.): *Comparative Policing from a Legal Perspective* (Cheltenham, UK - Northampton, USA: Edward Elgar): 45–62.
- Strambo, C.; Burton, J.; Atteridge, A., 2019: *The End of Coal? Planning a 'Just Transition' in South Africa* (Stockholm: Stockholm Environment Institute); at: <https://www.sei.org/publications/the-end-of-coal-planning-a-just-transition-in-south-africa/>.
- The Presidency, 2015: "Disaster Management Amendment Act 16 of 2015" G (Cape Town: Government Gazette); at: https://www.gov.za/sites/default/files/gcis_document/201512/39520act16of2015disastermanamendact.pdf.
- Trisos, Christopher H.; et al., 2022: "Africa": in: *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK - New York, NY: Cambridge University Press); at: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_Chapter09.pdf.
- Trombetta, Maria Julia, 2008: "Environmental Security and Climate Change: Analysing the Discourse", in: *Cambridge Review of International Affairs*, 21,4: 585–602.
- United Nations Development Programme (UNDP), 1994: *Human Development Report 1994*. (New York: Oxford University Press).
- United Nations Security Council (UNSC), 2007: "Security Council Holds First-Ever Debate on Impact of Climate Change on Peace and Security (Sc/9000)" (New York: UNSC); at: <https://www.un.org/press/en/2007/sc9000.doc.htm>.
- UNSC, 2007: "Statement of Dumisani Kumalo During UNSC Open Debate" (New York: UNSC); at: <https://press.un.org/en/2007/sc9000.doc.htm>.
- UNSC, 2011: "'Contextual Information' on Possible Security Implications of Climate Change Important When Climate Impacts Drive Conflict" (New York: UNSC); at: <https://www.un.org/press/en/2011/sc10332.doc.htm>.
- UNSC, 2015: "United Nations Shares Responsibility for Peace with Regional Organizations, Says Secretary-General, Opening All-Day Security Council Debate (Sc/12011)" (New York: UNSC); at: <https://www.un.org/press/en/2015/sc12011.doc.htm>.

- UNSC, 2020: “Sahel, Lake Chad Region Walking ‘Tightrope of Survival’ as Result of Environmental Degradation, Humanitarian Organization President Tells Security Council (Sc/14307)” (New York; UNSC); at: <https://press.un.org/en/2020/sc14307.doc.htm>.
- UNSC, 2020a: “Statement by Advocate Doctor Mashabane During UNSC Open Debate on the Maintenance of International Peace and Security. Impact of Climate Change” (New York: UNSC); at: <https://undocs.org/S/PV.6587>.
- von Uexkull, Nina; Buhaug, Halvard, 2021: “Security Implications of Climate Change: A Decade of Scientific Progress”, in: *Journal of Peace Research*, 58,1: 3–17.
- Western Cape Provincial Government, 2010: “Delivering the Open Opportunity Society for All: The Western Cape’s Draft Strategic Plan” (Cape Town: Western Cape Provincial Government); at: https://www.westerncape.gov.za/assets/departments/social-development/western_cape_draft_strategic_plan_2010.pdf.
- Western Cape Provincial Government, 2019: “Western Cape Safety Plan” (Cape Town: Western Cape Provincial Government); at: https://www.westerncape.gov.za/sites/www.westerncape.gov.za/files/assets/departments/premier/western_cape_government_safety_plan.pdf.

Chapter 12

Climate Security and Global Climate Injustice: The Case of St. Vincent and the Grenadines



Rose-Ann Smith

Abstract St. Vincent and the Grenadines (SVG), like other Small Island Developing States (SIDS), have experienced the debilitating effects of the existential threat of climate change despite their negligible contribution to global greenhouse emissions. These impacts are no longer simply an environmental or economic challenge, but are increasingly discussed as threats to national, human, and ecological security. This chapter explores the different ways climate change manifests itself as a security issue in SVG and the island's response, especially in light of its election as a non-permanent member of the United Nation Security Council (UNSC) for the 2020–2021 term. The study draws on empirical material from a number of government reports, policies, papers, and news articles on SVG from 2007 to 2020 to examine how climate change is framed within the context of climate security and climate justice. The findings show that climate change security issues were less important in the traditional sense in terms of instigating violent conflict and were more important in relation to protecting the rights of vulnerable people and communities. The findings also demonstrate an interplay between ecological and human security issues, encompassing food security, water security, and financial security. In response, the country seeks to reduce these impacts through mitigation and adaptation efforts. However, given its constraints as a SIDS, the study also puts forward a climate justice argument built on the premises that global emitters have a responsibility to honour commitments to reduce their contribution to greenhouse gases significantly and for major donors to uphold and scale up financial commitments to help SIDS respond effectively to climate impacts.

Keywords St. Vincent and the Grenadines · Climate security · Climate justice · Human security · Small Island Developing States

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12.1 Introduction

Small Island Developing States (SIDS), such as the Caribbean islands, are among the most vulnerable to climate change (United Nations Environment Programme (UNEP) 2005; Intergovernmental Panel on Climate Change (IPCC 2012). Their small size, insularity and remoteness, environmental factors, limited disaster mitigation capability, and demographic and economic structure are important determinants of their vulnerability (Pelling/Uitto 2001; Mimura et al. 2007; Gomes 2014; Scandurra et al. 2018). Their vulnerabilities are further compounded by their reliance on economic activities such as agriculture, fisheries, and tourism, which are highly susceptible to climate change (Barnett/Adger 2003), especially since a high concentration of these economic activities and settlements are located along coastal zones (University of the West Indies Center for Environment and Development 2012; Smith/Rhiney 2016).

This is true for St. Vincent and the Grenadines (hereafter SVG), a SIDS in the Eastern Caribbean comprised of more than 32 islands and cays, 9 of which are inhabited. The country has a small open economy and is highly susceptible to external shocks and natural hazards.

Although the islands lie towards the southern end of the Atlantic hurricane belt and only face moderate levels of varying hazards (Spence et al. 2005, cited in Campbell 2011) the high and steep topography exacerbate the impact of climatic events by increasing peak winds and their susceptibility to landslide events (Simpson et al. 2012). According to the Caribbean Natural Resources Institute (CANARI), the island has experienced significant hurricane impacts in the past, including from Hurricane Ivan in 2004 and Hurricane Tomas in 2010 (Caribbean Natural Resources Institute 2018). Furthermore, heavy rainfall from trough systems, such as in April 2011 and December 2013, as well as droughts in 2009–2010, 2014, and 2019, exacerbated the island's vulnerabilities. Sea level rise (SLR), storm surges and coastal erosion also pose a risk to the island since most of its population (85%) and the majority of critical infrastructure (more than 90%) such as utilities, airports, hotels and roads are located in the coastal zone (John 2015). Additionally, the island is heavily dependent on climatically sensitive industries, including export agriculture, which is declining, and tourism, which is on the rise (UNDP SGF Country Programme Strategy 2014; Caribbean Natural Resources Institute 2018). Impacts from climate-related events on these industries between the periods 2010 and 2014 were in excess of US \$600 million, equating to approximately 35% of the Gross Domestic Product (GDP) of SVG in 2014 (Government of St. Vincent and the Grenadines 2015).

The impacts and implications of climate change on SVG bring to the forefront questions surrounding climate security and climate justice. Climate change is no longer simply perceived as an environmental or economic problem, but has been placed within the security debate as an existential threat to human, ecological, and national security (Barnett 2003; Scheffran 2015; Parry n. d.). Barnett (2003: 14–15) argued that it “encapsulates danger much better than concepts like sustainability, vulnerability, or adaptation, and... serves as an integrative concept which links local (human security), national (national security), and global (international security)

levels of environmental change and response.” In relation to ecological security, McDonald (2018) posited a discourse based on ecological resilience that is oriented towards present and future vulnerable populations and other living beings. This recognition of climate change as a security issue has become particularly prominent in 2007 when the United Nations Security Council (UNSC) debated climate change as a potential security threat for the first time. In this debate, the representative for Papua New Guinea likened the seriousness of this threat to SIDS to that of guns and bombs affecting nations and peoples (United Nations Security Council [UNSC] 2007).

As a human security issue, the Intergovernmental Panel on Climate Change (IPCC) argues that climate change is “(i) undermining livelihoods, (ii) compromising culture and identity, (iii) increasing migration that people would rather have avoided, and (iv) challenging the ability of states to provide the conditions necessary for human security” (IPCC 2014: 25). Willcox (2012) also described the implications of climate change for human rights, including the right to life and to an adequate standard of living, including an affordable, accessible, and sustainable source of food, shelter, and clean water, which are also impacted by climate change and climatic variabilities.

Climate change is not only debated within the context of climate security but also in terms of climate justice i.e. with a view on the the social, economic, and environmental inequities that have been generated by climate change (Smith/Rhiney 2016). For Füssel/Klein (2006), it is a form of “double inequality” since developing countries like SIDS contribute little to climate change, but they also have limited capacity to adapt and thus are hit much harder by its adverse consequences. SIDS have been very vocal and strong about the security of their nations and the future of their populations, highlighting their vulnerabilities to climate change, which threatens the very existence of their territories in spite of their negligible contribution to global greenhouse gas emissions (Smith/Rhiney 2016; Betzold 2010). For example, the Alliance of Small Island States (AOSIS), which has been representing the interests of 30 small islands as far back as 1990, continuously advocates for limiting global warming through the United Nations Framework Convention on Climate Change (UNFCCC) (Betzold 2010). They also played an active role in doing this with their “1.5 °C to Stay Alive” campaign, which was part of the global temperature goal in the 2015 Paris Agreement (Benjamin/Thomas 2016).

While there are different theoretical understandings and tensions surrounding both climate security and climate justice, I want to adopt the notion that security and justice should not be viewed “as opposites to be weighed against each other... [but rather] be intertwined or even merged to the point where justice *is* security” (von Lucke et al. 2021: 58–59). The purpose of this chapter, however, is not to provide a discussion of the theoretical arguments surrounding the relationship between securitization and climate justice, but rather to use the case study of SVG as a representative of SIDS to justify some of the arguments that have already been made for the interdependence of climate security and climate justice for these islands. Consequently, this chapter examines different forms of climate security in SVG and argues that climate change security issues were less important in the traditional sense in terms of instigating violent conflict and were more important in relation to protecting the

rights of vulnerable people and communities. Secondly, the chapter discusses SVG's response to these security issues, with specific emphasis on climate justice and the country's position on climate security as a non-permanent member of the UNSC. In 2019, in what was called a "historic win", SVG became the smallest island ever to acquire a non-permanent seat on the UNSC (United Nations News [2019](#); King [2020](#)) for the period of 1 January 2020, to 31 December 2021.

This chapter is the first of its kind to systematically approach the national case study of SVG within the framework of climate security. The methodological approach for this study was two-fold. Firstly, the study draws its empirical material from a number of government reports, policies, papers, and news articles on SVG from 2007 to 2020. The materials were gathered mainly through an internet search using keywords and phrases in combination with SVG, such as "climate change impacts," "climate change policy," "climate change response," and "adaptation and mitigation". Further, government sites for the island, such as the Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry, and Labour, were used to collect other material of interest. The acquired documents were also cross-referenced for other important material. The study also incorporated information gained from recordings and statements made by representatives for SVG at the annual General Debate of the United Nations General Assembly from 2009 to 2018.

Secondly, in-depth discourse analysis was done to understand the different types of security perceptions in St. Vincent, that is, how security is expressed within the empirical material, whether explicitly or implicitly, and to what extent climate change can be viewed as a security and justice issue. In this way, I accept the perspective that the climate-security debates do not only construct climate change as an existential threat but also involve different security conceptions, different measures to tackle threats, and often overlap with a variety of justice conceptions (von Lucke et al. [2021](#)). Closely building on the framework of von Lucke et al. ([2021](#)) and the editors in the introduction chapter of "Climate Security in the Anthropocene-Exploring the Approaches of United Nations Security Council Member-States" (see Chapter [1](#)), in the following sections, I address climate change security perception in SVG and how the country has responded to climate change. Specifically, and perhaps groundbreaking in relation to SVG and other SIDs, is the situating of the climate security arguments within a broader climate injustice framework.

The text is structured into five sections. Following section one, I describe how climate security is conceptualized, whether explicitly or implicitly, within the literature on SVG. In section two, I focus on who or what is being threatened and the impact of climate change, and in section three, I discuss the country's response to the threat, including regional and international relationships. Section four explores climate security within the broader frame of climate injustice. Specifically, I focused on SVG's arguments on the United Nations Security Council from 2007 to 2020, with particular emphasis on the 2019–2020 tenure of the island as a non-permanent member of the council. The arguments described the country's perception of the scale of climate change threats and the national capacity (or incapacity) to adequately and effectively

respond to the challenges posed. The final section contains the conclusions, which summarize the major insights of the analysis for SVG and the opportunities for future research.

12.2 Towards a Conceptualisation of Climate Security in St. Vincent and the Grenadines

In this section, I explore how climate change is framed as a security issue in SVG, specifically, the nature of the threat and whose security is at stake. Climate change is well established and accepted as a threat by the IPCC (2018) and also several local reports on St. Vincent (Simpson et al. 2012; John 2015; Caribbean Natural Resources Institute 2018; Government of St. Vincent and the Grenadines 2019). The threats are viewed both in terms of the changes in climate such as an increase in average atmospheric temperature, reduced average annual rainfall, increased Sea Surface Temperatures (SST) (Government of St. Vincent and the Grenadines 2019; Simpson et al. 2012) and the resulting hazards from these changes such as coastal erosion, landslides, flash flooding, drought, storms, flood, heat waves, bush fires and pests and diseases (Government of St. Vincent and the Grenadines 2019; John 2015; Caribbean Natural Resources Institute 2018). These climatic changes and variability have impacted lives, livelihoods, infrastructure and the general economy (Simpson et al. 2012; Caribbean Natural Resources Institute 2018). According to Caribbean Natural Resources Institute (2018: 8):

the continued threat of climate change is expected to exacerbate already existing environmental concerns related to natural hazards, biodiversity loss, deforestation and land degradation, poor waste management (burning and illegal dumping) and pollution, and put increased stress on water availability, coastal investments, national infrastructure and livelihoods.

Here, climate change can be interpreted as an ecological security issue with additional implications for human security. While this and other reports (discussed in subsequent subsections), provide some indication that climate change is a human security issue for the island, the concept of ‘human security’ is not mentioned explicitly. On the contrary, in reviewing the climate change strategy and implementation plan (Caribbean Natural Resources Institute 2019a) and climate change policy for the island, there were only explicit mentions of climate change as a national security issue (Caribbean Natural Resources Institute 2019). National Security was mentioned about 10 times within the policy. For instance, the climate change policy indicated that:

The impacts on lives, infrastructure, and livelihoods in SVG will be significant given the small size of the islands and their economic dependence on climate-sensitive sectors like agriculture and tourism. National security impacts must also be taken into account, particularly migration, resettlement, and threats to law and order triggered by climate-related disasters and related issues of food, water, and energy security (Caribbean Natural Resources Institute 2019: 36).

Here, human insecurities are indicated but implicitly, while national security is central and explicit. McDonald (2018: 164) argued that there is a “tendency to invoke the powerful and often resonant language of ‘national security’ to justify progressive climate practice.” This is quite possibly true, as there is no evidence that climate change has resulted in security challenges for SVG in the traditional sense, such as civil unrest or violent conflict, and there is no evidence of militarised practices of security. What is more evident from the reports and other empirical material examined is the human security challenges that have been attributed to climate change, which may have implications for national security.

The Human Development report 1994 outlined seven interrelated elements of human security: economic, food, health, environmental, personal, community and political security (UNDP 1994). As I will show in the following for SVG, the first four concepts are dominant within the reports. Climate change is expressed as a threat to life and also a threat to livelihoods characterized by food, water and financial insecurities, and is mainly connected to agriculture, fisheries and tourism which are key sectors as identified in the country’s National Economic and Social Development Plan (NESDP) 2013–2025 (Simpson et al. 2012; Economic Commission for Latin America and the Caribbean 2011; Government of St. Vincent and the Grenadines 2015, 2019, n.d.; Caribbean Natural Resources Institute 2019). These insecurities are also linked to the vulnerability of these sectors and require appropriate responses to combat the threats attributed to climate change. This argument has led to another paradigm shift in the human security discourse that speaks to “freedom from hazard impacts” through vulnerability reduction and capacity building (Brauch 2005). Accordingly, climate change-related security issues and concepts as observed in local reports on SVG are centred around who is being threatened, how they are being threatened and why. Following the analysis along with these questions, I develop three different potential research categories as observed in the local reports in SVG:

1. Category one is related to what/who has been or is being impacted and is expressed through concepts such as food security, financial security, water security and energy security
2. Category two is related to why they are impacted, and this is expressed by terms such as vulnerability and risk, and finally,
3. Category three pertains to response, or how to minimize or eliminate the threat posed by climate change and is conveyed by concepts such as adaptation, mitigation, and resilience.

These will be explored more in-depth in the subsequent sections that examine the human security concerns in relation to lives and livelihoods and how the country has responded to these.

12.2.1 Climate Change, Food and Water Insecurities

Applying the first category, the research findings show that climate change is a human security concern for St. Vincent because it undermines livelihood security and exacerbates issues surrounding food, income, water and health. The main security concerns that fall under the umbrella of human security are economic security, food security, ecological security, and health security. Agriculture remains the main economic activity in St. Vincent and the Grenadines and the main livelihood for rural communities. This economic sector has faced debilitating impacts from extreme climatic events such as tropical storms, hurricanes and their related hazards, and droughts, which have had detrimental impacts on the country's economy, resulting in millions of dollars in damage. The security risk posed by these threats is compounded when they occur in close proximity to each other. For example, in 2009, St. Vincent was affected by a drought that affected crop yield, and in 2010, hurricane Tomas resulted in losses totalling EC \$35 million, mainly to banana and plantain production (John 2015). The following year, flooding and landslides also affected agriculture on the island. Apart from the impacts on crops, fisheries have also been affected. The Food and Agricultural Organisation (2018) reported that fishing communities will be negatively affected by low fish stock as a result of migratory species and low catches, which will impact food security. These impacts emphasize the vulnerability of agriculture to climate change and climate-related hazards and their general implications for human security since food insecurity and economic devastation may result in famine, displacement, and also health challenges due to poor nutrition.

Tourism is another economic activity that has become of increasing importance to the national economy in St. Vincent and is sensitive to climate change as well. St. Vincent's tourism sector is affected by beach loss and erosion. Many tourism properties and other critical infrastructure are at risk of a 1 metre sea level rise (Caribbean Natural Resources Institute 2018). CARIBSAVE, a partnership between the Caribbean Community Climate Change Centre (CCCCC) and the University of Oxford, reported estimates of annual reductions in tourism's contribution to SVG's GDP due to beach loss of between US \$46 million by 2050 and US \$174 million by 2080 with an SLR of about 2 m (100 m of erosion) (Simpson et al. 2012; Caribbean Natural Resources Institute 2018). Travel and tourism contributed 5.4% of the island's GDP in 2014 and are expected to grow at a 4.8% annual rate from 2015 to 2025 (World Travel & Tourism Council 2014). This suggests the potential of climate change to significantly affect income and employment and highlights concerns in relation to economic security. Economic security is also compromised by the need to address the challenges brought on by climate change impacts, as governments are limited in their financial or technical capacity to address these challenges (Caribbean Natural Resources Institute 2018).

Climate change is also expected to create challenges related to water availability and accessibility, presenting another security challenge (Economic Commission for Latin America and the Caribbean 2011; Caribbean Natural Resources Institute 2018; John 2015). In 2013, St. Vincent was affected by severe flooding and subsequent

landslides, which resulted in an estimated 55% of the population experiencing challenges in accessing water resources (Government of St. Vincent and the Grenadines 2019). Further, the Government of St. Vincent and the Grenadines (2015) reported that watersheds have been affected by land degradation due to poor agricultural techniques, global weather patterns, deforestation, and excessive use of agrochemicals. Here, the nexus between ecological security and human security is once again emphasized. The Grenadines islands of St. Vincent are especially vulnerable because their annual rainfall averages around 1000 mm (Simpson et al. 2012). Climate change has implications for human health, especially in areas where there is little to no access to potable water and inadequate sanitation facilities. According to Simpson et al. (2012), a significant 30% of the island uses pit latrines, ventilated pit latrines, or has no sanitation facilities. Water security issues have serious implications for other areas given its significance for life, livelihoods, health, and sanitation (Economic Commission for Latin America and the Caribbean 2011).

While still mainly a human security issue, there is the potential for water issues to become a national security crisis, as was demonstrated by the devastating impact of the La Soufrière volcanic eruption on St. Vincent on the 9th of April, 2021. As a result of the eruption, about 85% of the population was without water for 2 days, and others for even longer (Thorsberg 2020). Several videos emerged on social media with people stealing bottled water from water trucks that were charged with delivering water to homes and shelters (Loop News 2021). This not only led to the arrest of at least one person, but also resulted in a police presence on these trucks as they take water to various destinations. The security issue that arose within a somewhat short timeframe of water scarcity suggests that any lengthened period without water may lead to conflict, notwithstanding the potential for other complex issues such as migration, human displacement, and food insecurity. Gleick/Iceland (2018) argued that diminished water supply in conjunction with increased water demand may undermine national security if there is a limited quantity of water of satisfactory quality to sustain livelihoods, human well-being, and socioeconomic development. Consequently, the water issues on account of the volcanic eruption provide an opportunity to learn an important lesson and to put systems in place to address potential security issues since climate change generates similar threats.

12.2.2 Health Security: Climate Change as a Direct Threat to Lives

With greater focus on the second research category, I examined climate change as a direct threat to human lives from hazards such as floods, landslides, pests and diseases (examples: vector-borne diseases like dengue and malaria) in SVG. For instance, the 2013 December flood directly affected 11,000 people, and 9 lives were lost (Government of St. Vincent and the Grenadines 2019). People living in poverty, single parents, the elderly, people with disabilities, and those who do not own a home

are particularly vulnerable to climate change and its consequences (Government of St. Vincent and the Grenadines 2019; John 2015). Those located in high-risk areas such as coastal zones are also highly vulnerable. These socioeconomic and physical factors weaken human security and may hamper future development (Brauch 2005). In the community of Sandy Bay, located on the northeastern side of St. Vincent, major beach erosion and storm surge from hurricane impacts is a major threat to persons who continue to occupy the coastal region. Beach monitoring under the Sand Watch programme out of the University of Puerto Rico reported coastal erosion exceeding 3m per year (2000–2006) on the northeastern end of St. Vincent (Ministry of Health Wellness and the Environment 2013). Past events have had a significant impact and have resulted in the displacement of some community members (Fig. 12.1).

Climate security discourse in this sense is one that suggests the need to identify and address the inherent vulnerabilities of groups and communities but also addresses these by offering options to strengthen capacity, reduce vulnerability, and ultimately lead to “freedom from hazards impacts” (Brauch 2005). Climate change creates changes in geophysical systems that increase the exposure of the population and may exacerbate existing socio-economic vulnerabilities.



Fig. 12.1 Impact of past storm on the coastline of Sandy Bay. *Source* Photo taken by the author

12.3 Navigating Climate Security: SVG's Response and Challenges

My third research category focuses on responses, that is, what are the response mechanisms employed against the security issues climate change presents and who are the key agents of security? McDonald (2018) argued that the discourses on climate security matter not only in an analytical sense to comprehend the climate-security relationship but also in a practical sense in terms of the responses or actions that are employed. He argued that the national security discourse is more aligned with adaptive measures that aim to protect the sovereignty and territorial integrity of the state, and the mitigation actions are more aligned with human security and safeguarding the wellbeing and resilience of vulnerable communities. In earlier discussions (Section 12.2), I highlighted that the reports on SVG demonstrate an explicit recognition of climate change as a national security issue, while human security was more implicit. However, in responding to the climate security issues, SVG advances both mitigation and adaptation strategies, which indicates that, whether explicitly or implicitly expressed, climate change is perceived as both a human and a national security issue. Barnett (2003) argued that mitigation and adaptation can both be part of the response to the threats posed by climate change. In SVG, this response to climate change is congruent with the island's ascription to international and regional frameworks which are used to shape the national plans, strategy, and policy for climate change in SVG (Caribbean Natural Resources Institute 2018). The subsequent sub-sections are a description of the responses SVG has employed locally.

12.3.1 *Mitigation and Adaptation – Local Responses to Climate Change in SVG*

In spite of SVG's negligible contribution to greenhouse gas (GHG) emissions, which account for approximately 0.001% of global emissions (Caribbean Natural Resources Institute 2018, 2019; John 2015), local response to climate change encompasses both mitigation and adaptation efforts, demonstrating the country's commitment to protecting its territory and its people. While it is problematic to establish a direct causal link between climate security debates and responses in terms of mitigation and adaptation from the empirical data on the island, the response of SVG can be understood as addressing both human and national security issues, as shown by McDonald (2018). Climate change actions in St. Vincent and the Grenadines have been described as relatively young, growing in importance following COP15. Nevertheless, the country has made significant strides to create the frameworks and systems for developing and implementing mitigation and adaptation strategies through the Ministry of Finance, Economic Planning, Sustainable Development, and Information Technology, specifically, the Sustainable Development Unit, which encompasses

climate change. The commitment to these efforts can be seen in climate change funded projects, some of which have targeted the vulnerability of sectors and people, and others focused on developing laws, policies, and strategies to effectively respond to climate change at the national level and meet its obligations under regional and international agreements. Among them are SVG's Initial National Communication (INC) on Climate Change, which was prepared in 2000, and a Second National Communication (SNC), which was done in 2015.

More importantly, the National Climate Change Policy, Climate Strategy and Implementation Plan, and National Adaptation Plan (NAP) were developed. The National Climate Change Policy provides an overarching guidance document for resilience building and low-carbon and sustainable growth through adaptation and mitigation. It provides clear goals and specific objectives for 12 priority areas for adaptation: agriculture, fisheries and aquaculture; waste management, forest and terrestrial ecosystems, coastal and marine zones, finance and banking; tourism; water; human health; settlements; infrastructure and physical development; energy and education; and 6 areas for mitigation: energy, forest and carbon sinks; maritime affairs; tourism; transport and waste management (Caribbean Natural Resources Institute 2019, 2019a). While there was only explicit mention of security within the objectives under adaptation for the areas of agriculture (food security) and energy (energy security), the objectives for the other areas allude to some form of security and protection. Within the varying objectives for each priority area, resilience is most commonly used, followed by safety, disaster risk reduction, and sustainability (Caribbean Natural Resources Institute 2019).

Also evident in the climate change policy and the strategy and implementation plan, which provide guidance on implementing the appropriate measures for adaptation and mitigation for vulnerability reduction and increased resilience to climate change, is a recognition of the interplay between climate change and national security (Caribbean Natural Resources Institute 2019, 2019a). The integration of disaster risk management and national security is the fourth of five cross-cutting issues within the policy with the objective of ensuring "the health, safety, and security of residents and visitors through an integrated approach to climate change, disaster risk management, and national security" (Caribbean Natural Resources Institute 2019: 7). Supporting this objective are a number of sub-objectives which encompass, *inter alia*, strengthening legal and institutional frameworks, which involves "reviewing and updating SVG's Comprehensive Disaster Management Policy and current legislation to address existing and emerging disasters and national security concerns" (Caribbean Natural Resources Institute 2019: 37). The strategy and implementation plan further provide guidance on the lead agency to achieve the varying objectives under each priority and the local partners that will support the process, along with the time frame within which the objectives should be accomplished.

Another important stride for the island is the development of the NAP, which spans from 2018 to 2030 and aims to address longer term adaptation needs by mainstreaming climate change adaptation into new and existing policies, programmes, and activities (Government of St. Vincent and the Grenadines 2019). It is described as "the adaptation arm of SVG's Nationally Determined Contribution (NDC) in the

medium to long term, contributing to the fulfilment not only of the Paris Agreement, but also of the Development Agenda 2030 and its sustainable development goals (SDGs), the Sendai Framework on Disaster Risk Reduction (SFDRR) and other United Nations conventions” (Government of St. Vincent and the Grenadines 2019: 19). This plan explicitly mentions food security (most popularly used), energy security, and social security.

Despite these developments, the country is limited in its capacity to manage the threats posed by climate change. One of the major challenges affecting the island’s ability to respond effectively is funding, not only locally but through donors, and the effective use of the funding in targeting climate change. In the Second National Communication for Climate Change, adaptation efforts were described as low and dependent on annual budget allocation given to some line ministries that bear some responsibility for environmental protection but not directly targeting climate change or through grants or project funds that directly focused on climate change adaptation efforts (Government of St. Vincent and the Grenadines 2019, John 2015). The recent development of the NAP, climate change policy, and the strategy and implementation plan demonstrate the efforts to address this by mainstreaming and prioritizing climate change goals relating to clean energy and climate action through different ministries and sectors. The strategy and implementation addressed domestic resource mobilization by “leveraging direct budgetary support to mainstream climate change into key sectors of the economy, as well as extra-budgetary support through discretionary funds, debt for climate swaps, and public-private partnerships” (Caribbean Natural Resources Institute 2019a: 60). Generally, SVG has established the necessary climate change policies, plans, and programmes to advance climate change mitigation and adaptation, but they are limited locally, among other things, by financial resources. I will therefore now look at the crucial role of regional and global partnerships in providing and leveraging the support for an effective response to the impacts of climate change.

12.3.2 International and Regional Partnership for Dealing with the Security Risks of Climate Change

Responses at the international and regional level demonstrate the importance of partnerships and connections to different groups and organisations in addressing climate change impacts. On the international level, the country is a signatory to several frameworks, including the United UNFCCC, the Kyoto Protocol, the Paris Agreement, the United Nations 2030 Sustainable Development Goals (SDGs) and the Sendai Framework for Disaster Risk Reduction (2015–2030). Generally, these frameworks provide a platform for sustainable, low-carbon, and resilient development (Caribbean Natural Resources Institute 2019).

In the regional context, SVG belongs to several organisations that have established institutional frameworks and responsive actions to manage the existential threats of climate change. Among these are the CARICOM Liliendaal Declaration on Climate Change and Development, the Commonwealth of Nations, the Regional Framework for Achieving Development Resilient to a Changing Climate and its Implementation Plan (2011–2021) and the Comprehensive Disaster Management Strategy (2014–2024). The regional framework response to climate change is led by the Caribbean Community Climate Change Centre (CCCCC) (Caribbean Natural Resources Institute 2019). Furthermore, in 1991, CARICOM established the Caribbean Disaster Emergency Management Agency, which embraces “an integrated and proactive approach to disaster management and seeks to reduce the risk and loss associated with natural and technological hazards and the effects of climate change to enhance regional sustainable development” (Caribbean Disaster Emergency Management Agency n.d). The island is also a member of the Organisation for Eastern Caribbean States (OECS) and, together with other member states, is tackling climate change impacts through the establishment of a comprehensive resilience framework and the Eastern Caribbean Regional Climate Change Implementation Plan. Generally, these seek to reduce large-scale emissions and increase green growth within the region through energy efficiency, renewable energy, and disaster risk reduction (Caribbean Natural Resources Institute 2019).

The regional and international partnerships are important given the country’s limited capacity to adapt to climate change (Caribbean Natural Resources Institute 2018). Consequently, St. Vincent has subscribed to international and regional frameworks to leverage financial resources through multi-lateral donors such as the Green Climate Fund (GCF), bi-lateral donors such as the European Union and North American governments, and regional programmes with the CCCC and sub-regional programmes with the Organisation of Eastern Caribbean States (OECS), which are responsible for the majority of the funding relating to climate change planning and implementation (Caribbean Natural Resources Institute 2018; John 2015; Ministry of Health Wellness and the Environment 2013). In addition to funding, these partnerships permit technology transfer and capacity-building support to help further reduce emissions, especially in the areas of transport, renewable energy, and energy efficiency (John 2015). In relation to climate finance, questions still remain about the availability and extent of climate finance as the island, like other SIDS, has acknowledged the need for a global political effort in targeting and committing to climate finance (UNGA 2011). Regional and global partnerships are important in strengthening capacity and tackling the existing and emerging challenges of climate change.

12.4 The Bigger Picture? Reframing Climate (in) Security as Injustice

Within the previous section, I provide mainly a description of SVG's action on climate change within the context of climate security. In the following, I present an analytical argument on climate (in) justice, drawing on some of the earlier discussions. Climate justice is a normative framework that presents the issues surrounding climate change as political and ethical, not simply environmental (Thomas et al. 2020). A key argument is that the most vulnerable to climate change contribute little to greenhouse gases, are affected disproportionately and have little capacity to adapt (Thomas et al. 2020). Central to this argument is the concern over responsibility and accountability in relation to greenhouse gas emissions, including who is liable to compensate for the cost incurred from climate change impacts (Thomas et al. 2020; Caney 2010). The philosopher Caney (2010) assessed the practicality of two principles in this regard: the *Polluters Pay Principle*, which indicates that those who caused the problem should pay, and the *Ability to Pay Principle*, which speaks to those who have the greatest ability to pay. Other discourses in relation to climate justice put forward arguments surrounding distributive justice, which describe inequity in the benefits and burdens of climate change spatially and temporally, and also procedural justice, which posits the involvement of the affected in the decision-making process (Thomas et al. 2020; Ikeme 2003). In the following sections, I ask how these discourses capture the realities of SVG within the context of climate security and examine the role SVG played during its tenure as a non-permanent member on the UNSC.

12.4.1 *Climate Justice in the United Nations General Assembly (UNGA)*

The previous discussions highlight three important realities for SVG. Firstly, SVG is affected disproportionately by the existential threat of climate change. Secondly, the island contributes minimally to greenhouse gases but still addresses mitigation through 6 priority areas, and thirdly, adaptation to climate change is limited by, inter alia, funding. Prior to St. Vincent's position on the UNSC, the country advocated, quite starkly, their position in relation to the impacts and solutions to the threats faced by the country and other SIDS. Strong evidence of this was shown by the unequivocal and undiluted statements of the Prime Minister of St. Vincent and the Grenadines, the deputy Prime Minister and also the Permanent Representative of SVG to the United Nations in speaking on global issues at the annual General Debate of the United Nations General Assembly (see Table 12.1).

The statements made over the years at these meetings have highlighted several arguments within the context of climate injustice. The first argument emphasized the security challenges of SIDS in terms of the impacts of climate change (see 2016 quote, Table 12.1). The second highlights responsibility in line with the distributive justice

Table 12.1 Quotes from summary statements made at the annual General Debate of the United Nations General Assembly

Direct quotes from summary statements	Year of debate and session	Whose statement
“The prospects for an effective international solution are receding...Major emitters that fail to set and honour ambitious mitigation pledges are committing a direct act of hostility against small island developing States” (UNGA 2018)	2018 (73th Session)	Prime Minister of SVG
[It is a] “bare-faced insult to the intelligence and experience of the peoples of island States and coastal areas to call climate change a hoax”. The global community had come together to craft the Paris Agreement, he said, adding that his country viewed any attempt to disavow its commitments as an “act of hostility” (UNGA 2017)	2017 (72th session)	Deputy Prime Minister of SVG
“Marginalized nations and peoples had “thirsted too long at the dry spigot of promised trickle-down prosperity”, and the long-foretold “rising tide that lifts all boats” had come in the form of rising seas which threatened to inundate small island developing States” “As big emitters continued to dither, more frequent and intense hurricanes washed away large swaths of his country’s GDP in a matter of hours” (UNGA 2016)	2016 (71th session)	Prime Minister of SVG
“The posturing and recalcitrance of some major emitters of global warming gases indicated that the upcoming Climate Conference in Paris, or COP21, might be yet another empty diplomatic dance that prioritised process over progress” (UNGA 2015)	2015 (70th session)	Prime Minister of SVG
“He remained baffled by the intransigence of major emitters and developed nations that refused to shoulder the burden for stopping climate changes that were linked to the excesses of their own wasteful policies” (UNGA 2011)	2011 (66th session)	Prime Minister of SVG

(continued)

Table 12.1 (continued)

Direct quotes from summary statements	Year of debate and session	Whose statement
“As a small island archipelagic state, we, more than most, are affected and threatened by the ravages of climate change... However, we do not simply want to “seal the deal” at Copenhagen, as posited by the sloganeers in the UN. We want to seal the right deal, the just deal, and the deal that ensures our continued survival. We most emphatically will not seal a suicide pact that will assure the elimination of small island states and our way of life... We trust that our blameless position on the front lines of climate change fallout will be considered and respected in the global effort to “seal the deal.” We cannot, as in the case of the world economy, be excluded in any way from the solutions to a problem that so fundamentally affects us” (United Nations General Assembly (UNGA) 2009)	2009 (64th session)	Permanent Representative of SVG to the United Nations

Source elaborated by the author on the basis of statements made in relation to the threat of climate change at the General Assembly of the United Nations General Debate from 2009 to 2018

argument and the Polluter Pay Principle, as the larger emitters are not sufficiently committed to the task of mitigating climate change. The third argument draws a connection to procedural justice, which is the role SIDS should play in decisions that affect them. The general perspective of the ministers of governments is that, in spite of the commitment of smaller islands to fight climate change through mitigation and adaptation, the efforts are futile and the battle will be lost without the full pledge and support of the global emitters who continue to maintain an “empty diplomatic dance that prioritizes process over progress” (see Table 12.1).

Overall, it becomes apparent that SVG’s stance, like those of other SIDS, exudes frustration, anger, and even humiliation imposed by the constant inaction of the global emitters. Looking at this issue through the lens of justice as non-domination¹, (von Lucke et al. 2021: 20–21) argued that there is a power imbalance between the larger emitters and smaller states, like SIDS, which perpetuates global climate injustice as “the rules and practices of the [climate] regime privilege large, industrialized states through their weight in negotiations and the protection of their established wealth (‘grandfathering’). This is an important argument, and SVG’s tenure as a

¹ Global justice as non-domination focuses on freedom from dominance or arbitrary interference, arguing for ways to address power imbalances between states (von Lucke et al. 2021: 17–21).

non-permanent member of the UNSC provided an opportunity for the smallest ever island to be on the council to articulate the unprecedented challenges climate change posed to SIDS and its link to economic and human security. Further, SVG hopefully can represent the interests of SIDS by convincing the council that addressing these challenges is critical for the survival of SIDS.

12.4.2 New Non-Permanent Member, Same Advocacy: Addressing the Issue of Global Climate Injustice and Climate Insecurity in the UNSC

SVG's commitment to addressing climate and security concerns is marked by its involvement and cooperation with regional and international organisations. The island is a member of the Climate and Security friendship group, which was launched in 2018 to strengthen efforts to build climate resilience systems for peace and security (Ministry for Europe and Foreign Affairs n.d.). In 2019, and SVG acquired a seat as a non-permanent member of the Group of Latin America and the Caribbean (GRULAC) on the UNSC, the smallest island ever to achieve such a status (UNSC) (King 2019; United Nations News 2019). The fact that SVG won the seat may be viewed as some progress towards climate justice as the country has gained the opportunity to represent the interests of SIDS and to have a voice in key decision-making processes concerning climate change and climate security.

The country's Ambassador to the UN acknowledged the need for SIDS to "be bold and advocate vociferously in the international arena for climate justice now... fight for its protection, fight to hold carbon emitters accountable, fight for behaviour change" (King 2020). The arguments highlight the seriousness of what appears to be a political war against the "creators" of climate security issues. Her sentiments were echoed by the Prime Minister, who reiterated the importance of SVG's position on the council because of the nexus between adverse climate change and security consequences for SIDS (United Nations News 2019). In his most recent address to the UNSC in the virtual meeting held in February 2021, the Prime Minister argued that climate change is a threat to sovereignty and, by extension, international peace as it "exacerbates the food security and humanitarian crisis, stokes conflicts over resources, fans the flames of political turmoil and creates significant socioeconomic challenges" (UNSC 2021), hereby recognising again the interrelationships between climate change as a human security and national security issue. Again, he impressed upon the council the need for the large global emitters to fulfil and exceed their commitment to the Paris agreement so that global temperatures can be kept below 1.5 °C and suggested several other solutions to reduce the security issues that may arise from climate change. Among these solutions are an improved system for reporting climate change issues by the Secretary-General, making informed decisions based on climate risk data, the appointment of a Special Envoy on climate and security, increased training

for UN personnel to deal with the security implications of climate change, and the inclusion of climate advisors in peacekeeping missions (UNSC 2021).

Within this context of climate security and climate justice, SVG's position has not changed since 2009, when it addressed the climate change issue at the annual General Debate of the United Nations General Assembly (see Table 12.1). However, despite the lofty and audacious declarations made by several leaders of SIDS, there appears to be little progress, and it begs the question, who is listening and how effective are these debates? In his own words, at the 2018 debates, the Prime Minister of SVG declared that:

The prospects for an effective international solution to climate change are rapidly receding. Our carefully calibrated climate accords are teetering on the brink of irrelevance, wounded not only by high-profile withdrawals but also by the cynical and foolhardy non-compliance with voluntary mitigation pledges that major emitters have loudly declared, but quietly disregarded... (UNGA 2018: 6).

On the basis of these research findings, the continued call for global cooperation, solidarity, and the observance of moral responsibility appears to be ineffective. Beyond advocacy on behalf of SIDS and the individual efforts of these islands to fix their own problems, there has been little progress towards tangible and effective solutions since the inception of climate change as a security issue at the 2007 UNSC debate. The questions to be answered include how effective these debates are and how much more impact St. Vincent could have made as a non-permanent member of the UN Security Council. Other authors point to the general consensus on the inadequacy of global efforts to minimize greenhouse gas emissions (Thomas et al. 2020) or prevent sea-level rise (Oels/von Lucke 2015 cited in von Lucke et al. 2021), which is a serious threat to SIDS. This is of grave concern, even as one considers the arguments in a recent IPCC report that stated current national pledges to stay below the Paris Agreement temperature and achieve the adaptation goals are not enough and that there is also a need for all countries to significantly raise their ambition in order to strengthen the global response (de Coninck et al. 2018).

So, what is the way forward? One of the major issues to address is the structures of domination that affect vulnerable countries. In this regard, (von Lucke et al. 2021: 17) argued for the attenuation of the influence of powerful states so that they would be unable to "directly or unlawfully pressure weaker states, ignoring international agreements or dominating the outcome of the negotiations, contribute to more just solutions to global problems." Caney (2010) also submitted and addressed several concerns in relation to the practicality of the *Polluters to Pay* and *Ability to Pay* principles, which, arguably, could be an obstacle and explanation for the limited progress, and suggested a hybrid approach. A number of other recommendations have been made in the most recent IPCC report, but their activation and execution require financial, technical, and other support to build the capacity of SIDS.

As a security issue, the Permanent Representative for SVG, while again calling for global emitters to be held accountable in relation to the Paris Agreement and

also suggesting to honour climate financial pledges as a “floor and not a ceiling”, identified several gaps that must be addressed in an effort to minimize the security risk posed by climate change, which she described as “global, multidimensional, and cross-cutting reality and a threat of existential proportions” (UNSC Security Debate 2020: 25–26). One of the barriers she identified is the lack of political will to incorporate and integrate the concerns in relation to climate and security within the Council’s resolutions, as “the necessary climate-sensitive assessments and expertise are often not incorporated into the key actions of many peacekeepings and special political missions” (UNSC Security Debate 2020: 25). As such, she argued for the following:

- Mainstreaming climate change into the peace and security pillar of the United Nations.
- Better utilization of the expertise of all relevant stakeholders.
- Greater collection of climate security assessment data that is unique to the context of countries and regions, and integration of this data into all security council reports that speak to situations.
- The appointment of a special representative on climate and security who is charged with coordinating response within the United Nations system and fostering greater collaboration and promoting comprehensive action between the United Nations and regional and subregional organizations.

These recommendations, made by SVG during its tenure on the UNSC, can be viewed as benchmarks for assessing the extent to which the Council accepts climate change as a security issue and recognizes the importance of addressing these critical elements as a major part of providing a structure for climate security.

12.5 Conclusion

This case study analysis provides some critical insights into this threat to St. Vincent and the Grenadines as a Small Island Developing State (SID) within the context of climate security and climate justice. Firstly, it shows that SVG recognises climate change as a security issue and has responded through mitigation and adaptation. In this regard, I provide insights that highlight the climate security issues SVG faces, particularly in relation to human security, notwithstanding the interplay with other security issues such as water security and food security and the broader implications for national security. Further, I describe the country’s response through the creation of the frameworks and systems for developing and implementing mitigation and adaptation strategies and the significance of their prescription to regional and international frameworks for the time period 2007–2020.

One of the major findings is oriented towards the capability of SIDS to address the root of the problem, including their needs as vulnerable states. The arguments made by different representatives at the UNGA SVG have been largely about large emitters taking on greater responsibility in climate mitigation and also supporting SIDS to

adapt given their vulnerabilities. This positions climate security issues within the justice discourse.

Additionally, I showed that at a domestic level, SVG is limited in its ability to effectively respond to climate change issues despite the progress made in terms of a climate change policy and strategy and a National Adaptation Plan. The analysis showed a general emphasis on adaptation rather than on mitigation, which signifies an implicit recognition that the country has to identify the best ways of living with climate change until the main emitters accept that the true responsibility to mitigate lies with them. Additionally, there is also limited technical and economic capacity to respond effectively. Consequently, the island, like other SIDS, has advocated strongly and frequently on the international level for global emitters to accept their responsibility, a stance it maintained when it acquired a non-permanent seat on the United Nations Security Council (UNSC).

This is how based on these case study insights I agree with von Lucke et al. (2021), that there is a need to address the power imbalance that favours larger countries and larger emitters of greenhouse gases in negotiations. In addition to this, accountability of global emitters must be addressed as future projections of climate change indicate greater security challenges for SIDS. In addition, the eloquent and bold arguments made at the United Nations General Assembly (UNGA) may be described as repetitive suggesting that they have not led to meaningful changes. Future research should therefore focus on whether meaningful and tangible progress has been made to minimize the impact of climate change on SIDS since these discussions on climate change as a security issue were started at UNGA and also within the UNSC. During SVG's tenure/membership, it has identified several gaps, including the lack of political will to fully recognize climate and security concerns within the Council's resolution and recommended some areas to address in relation to this. It would be important to assess whether these gaps were addressed in any future research.

From a methodological standpoint, future research can examine similar research questions using a mixed-methods approach that includes interviews with key actors. This would help to dissect perceptions of actors and experts on the security risks posed by climate change nationally, how climate change is understood as a security issue and, based on these interpretations, to what extent responses to climate change are linked to this perception.

References

- Barnett, Jon, 2003: "Security and Climate Change". in: *Global Environmental Change*, 13,1: 7–17.
- Barnett, Jon; Adger, Neil W., 2003: "Climate Dangers and Atoll Countries", in: *Climatic Change*, 61,3: 321–37.
- Benjamin, Lisa; Thomas, Adelle, 2016: "1.5 to Stay Alive? Aosis and the Long Term Temperature Goal in the Paris Agreement", in: *SSRN Working Paper 3392503*.
- Betzold, Carola, 2010: "'Borrowing' Power to Influence International Negotiations: Aosis in the Climate Change Regime, 1990–1997", in: *Politics*, 30,3: 131–48.

- Brauch, Hans Günter, 2005: *Environment and Human Security: Towards Freedom from Hazard Impacts* (Bonn: UNU_EHS); at: <http://collections.unu.edu/eserv/UNU:1856/pdf4031.pdf>.
- Campbell, Donovan R., 2011: "Domestic Food Production and Hazard Vulnerability in Jamaican Agriculture: Adaptation and Change in Southern St. Elizabeth" (Doctor of Philosophy [Ph.D.], Department of Geography and Geology, University of the West Indies.)
- Caney, Simon, 2010: "Climate Change and the Duties of the Advantaged", in: *Critical Review of International Social and Political Philosophy*, 13,1: 203–28.
- Caribbean Disaster Emergency Management Agency, n.d.; at: https://www.cdema.org/index.php?option=com_content&view=article&id=89.
- Caribbean Natural Resources Institute, 2018: "Climate Change Issues Paper: Towards the Development of a Climate Change Policy, Strategy and Implementation Plan for Saint Vincent and the Grenadines" (Kingstown: Caribbean Natural Resources Institute); at: <https://canari.org/wp-content/uploads/2019/10/SVG-Climate-Change-Issues-Paper-26.11.18.pdf>.
- Caribbean Natural Resources Institute, 2019: "National Climate Change Policy of St. Vincent and the Grenadines (Draft)" (Kingstown, Saint Vincent: Economic Planning Ministry of Finance, Sustainable Development & Information Technology); at: <http://islands.irena.org/-/media/Files/IRENA/Sids/Publications/Saint-Vincent-and-the-Grenadines--National-Climate-Change-Policy-of-Saint-Vincent-and-the-Grenadines.ashx?la=en&hash=A8DEC50A39BD4ACA1E4EC20C6BEC09D302681573>.
- Caribbean Natural Resources Institute, 2019a: "National Climate Change Strategy and Implementation Plan of Saint Vincent and the Grenadines" (Kingstown, Saint Vincent: Economic Planning Ministry of Finance, Sustainable Development & Information Technology).
- de Coninck, Heleen, et al., 2018: "Strengthening and Implementing the Global Response" (Cambridge, UK – New York, NY: Cambridge University Press); at: https://www.ipcc.ch/site/assets/uploads/sites/2/2019/02/SR15_Chapter4_Low_Res.pdf.
- Economic Commission for Latin America and the Caribbean, 2011: "An Assessment of the Economic Impact of Climate Change on the Water Sector in Saint Vincent and the Grenadines" (Santiago, Economic Commission for Latin America and the Caribbean [ECLAC]); at: https://repositorio.cepal.org/bitstream/handle/11362/38579/LCCARL330_epdf?sequence=1&isAllowed=y.
- Food and Agricultural Organisation, 2018: "Boosting Agricultural Productivity and Building Resilience" (Rome: FAO); at: <http://www.fao.org/documents/card/en/c/f32b8420-ddcc-41f5-8a89-725c9d990464/>.
- Füssel, Hans-Martin; Klein, Richard J. T., 2006: "Climate Change Vulnerability Assessments: An Evolution of Conceptual Thinking", in: *Climatic Change*, 75,3: 301–29.
- Gleick, Peter; Iceland, Charles, 2018: "Water, Security and Conflict" (Washington, DC.: World Resource Institute and Pacific Institute); at: <https://files.wri.org/d8/s3fs-public/water-security-conflict.pdf>.
- Gomes, Charmaine, 2014: "The Case of Small Island Developing States of the Caribbean: The Challenge of Building Resilience" (Santiago: Economic Commission of Latin America and the Caribbean); at: <https://www.cepal.org/en/publications/38366-case-small-island-developing-states-caribbean-challenge-building-resilience>.
- Government of St. Vincent and the Grenadines, 2015: "Intended Nationally Determined Contribution" (Kingstown: Government of St. Vincent and the Grenadines); at: <http://www.sustainablesids.org/wp-content/uploads/2016/11/INDC-2015-St-Vincent-Grenadines.pdf>.
- Government of St. Vincent and the Grenadines, 2019: "National Adaptation Plan for St. Vincent and the Grenadines" (Kingstown: Government of St. Vincent and the Grenadines); at: https://www4.unfccc.int/sites/NAPC/Documents/Parties/FINAL%20NAP_SVG_Approved.pdf.
- Government of St. Vincent and the Grenadines, n.d.: "National Economic and Social Development Plan 2013–2025"; at: <https://sustainabledevelopment.un.org/content/documents/1466vincen-tgrenadines.pdf>.
- Ikeme, Jekwu, 2003: "Equity, Environmental Justice and Sustainability: Incomplete Approaches in Climate Change Politics", in: *Global Environmental Change*, 13,3: 195–206.

- Intergovernmental Panel on Climate Change (IPCC), 2012: *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change (Cambridge, UK - New York, NY: Cambridge University Press); at: <https://www.ipcc.ch/report/managing-the-risks-of-extreme-events-and-disasters-to-advance-climate-change-adaptation/>.
- IPCC, 2014: *Climate Change 2014: Synthesis Report*. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (Geneva: IPCC); at: https://archive.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf.
- IPCC, 2018: *Global Warming of 1.5°C. An IPCC Special Report on the Impacts of Global Warming of 1.5°C above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty* (Geneva: IPCC); at: <https://www.ipcc.ch/sr15/download/>.
- John, Noretta, 2015: "Second National Communication on Climate Change: St Vincent and the Grenadines" (St. Vincent and the Grenadine, Ministry of Health, Wellness and the Environment); at: <https://unfccc.int/resource/docs/natc/vctnc2.pdf>.
- King, Nelson A., 2020: "Svg Begins 'Historic Journey' on UN Security Council" *Caribbean News Online*; at: <https://www.caribbeanlife.com/svg-begins-historic-journey-on-un-security-council/>.
- King, Nelson A., 2019: "Svg Begins Three-Month Observation of UN Security Council" *Caribbean News Online*; at: <https://www.caribbeanlife.com/svg-begins-three-month-observation-of-un-security-council/>.
- Loop News, 2021: "Do Not Steal Bottled Water from Trucks, Police Warns Vincentians" *Caribbean News*; at: <https://caribbean.loopnews.com/content/do-not-steal-bottled-water-trucks-police-warns-vincentians>.
- McDonald, Matt, 2018: "Climate Change and Security: Towards Ecological Security?", in: *International Theory*, 10,2: 153–80.
- Mimura, Nobuo et al., 2007: "Small Island Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change" (Cambridge, UK - New York, NY: Cambridge University Press); at: https://archive.ipcc.ch/publications_and_data/ar4/wg2/en/ch16.html.
- Ministry for Europe and Foreign Affairs, n.d.: "The Climate and Security Initiative"; at: https://www.diplomatie.gouv.fr/en/french-foreign-policy/united-nations/multilateralism-a-principle-of-action-for-france/alliance-for-multilateralism/article/the-climate-and-security-initiative#som_maire_1.
- Ministry of Health Wellness and the Environment, 2013: "National Report St. Vincent and the Grenadines: Third International Conference on Small Island Developing States - National Report"; at: <http://wedocs.unep.org/bitstream/handle/20.500.11822/8530/StVincentandTheGrenadines.pdf?sequence=3&isAllowed=y>.
- Parry, Emyr Jones, n.d.: "The Greatest Threat to Global Security: Climate Change Is Not Merely an Environmental Problem", in: *UN Chronicle*; at: <https://www.un.org/en/chronicle/article/greatest-threat-global-security-climate-change-not-merely-environmental-problem>.
- Pelling, Mark; Uitto, Juha I., 2001: "Small Island Developing States: Natural Disaster Vulnerability and Global Change", in: *Global Environmental Change, Part B: Environmental Hazards*, 3,2: 49–62.
- Scandurra, Giuseppe; Romano, Antonio; Ronghi, Monica; Carfora, Alfonso, 2018: "On the Vulnerability of Small Island Developing States: A Dynamic Analysis", in: *Ecological Indicators*, 84, 382–92.
- Scheffran, Jürgen, 2015: "Climate Change and Security", in: *Bulletin of the Atomic Scientists*, 64,2: 19–26.
- Simpson, Murray C.; et al., 2012: "Caribsav: Climate Change Risk: Profile for Saint Vincent and the Grenadines" (Barbados, West Indies: DFID, AusAID and The CARIBSAVE Partnership); at: https://www.researchgate.net/publication/272791668_Climate_Change_Risk_Profile_for_Saint_Vincent_and_the_Grenadines, accessed 6 December 2019.

- Smith, Rose-Ann J.; Rhiney, Kevon, 2016: "Climate (in)Justice, Vulnerability and Livelihoods in the Caribbean: The Case of the Indigenous Caribs in Northeastern St. Vincent", in: *Geoforum*, 73: 22–31.
- Thomas, Adelle; et al., 2020: "Climate Change and Small Island Developing States", in: *Annual Review of Environment and Resources*, 45,1: 1–27.
- Thorsberg, Christian, 2020: "Volcanic Eruption and Water Insecurity Persist on St. Vincent, Circle of Blue" (Circle of Blue); at: <https://www.circleofblue.org/2021/wef/volcanic-eruptions-and-water-insecurity-persist-on-st-vincent/>.
- United Nations General Assembly (UNGA), 2009: "Statement by H.E. Camillo M. Gonsalves Permanent Representative of Saint Vincent and the Grenadines to the United Nations at the General Debate of the 64th Session of the United Nations General Assembly" (New York: UNGA).
- UNGA, 2011: "Statement by Dr. The Honourable Ralph E. Gonsalves Prime Minister of Saint Vincent and the Grenadines to the United Nations at the General Debate of the 66th Session of the United Nations General Assembly" (New York: UNGA).
- UNGA, 2015: "Statement by Dr. The Honourable Ralph E Gonsalves Prime Minister of Saint Vincent and the Grenadines at the General Debate of the 70th Session of the United Nations General Assembly" (New York: UNGA).
- UNGA, 2016: "Statement by Hon. Dr. Ralph E. Gonsalves Prime Minister of St. Vincent and the Grenadines at the General Debate of the 71st Session of the United Nations General Assembly" (New York: UNGA).
- UNGA, 2017: "Statement by H.E. Sir Louis Straker Deputy Prime Minister and Foreign Minister of Saint Vincent and the Grenadines at the General Debate of the 72nd Session of the United Nations General Assembly" (New York: UNGA).
- UNGA, 2018: "Statement by H.E. Dr. Ralph Gonsalves Prime Minister of Saint Vincent and the Grenadines at the General Debate of the 73 Session of the United Nations General Assembly" (27 September, 2018, New York: UNGA).
- United Nations Environment Programme (UNEP), 2005: "UNEP 2004 Annual Report" (Berkeley); at: <https://wedocs.unep.org/20.500.11822/28998>.
- United Nations News, 2019: "St. Vincent and the Grenadines Breaks a Record, as Smallest Ever Security Council Seat Holder" (New York); at: <https://news.un.org/en/story/2019/06/1040071>.
- United Nations Security Council (UNSC), 2007: "Security Council Holds First-Ever Debate on Impact of Climate Change" (New York: UNSC); at: <https://www.un.org/press/en/2007/sc9000.doc.htm>.
- UNSC, 2021: "Maintenance of International Peace and Security: Climate and Security - Security Council Open Vtc"; at: <https://www.unmultimedia.org/avlibrary/asset/2604/2604118/>.
- UNSC Security Debate, 2020: "Statement by the Permanent Representative of Saint Vincent and the Grenadines" (New York: UNSC); at: <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N20/200/77/PDF/N2020077.pdf?OpenElement>.
- University of the West Indies Center for Environment and Development, 2012: "The Growing Vulnerability of Small Island Developing States, Report Prepared for the United Nations Development Programme Capacity 21 Project.
- von Lucke, Franziskus; Diez, Thomas; Aamodt, Solveig; Ahrens, Bettina, 2021: "The EU and Global Climate Justice: Normative Power Caught in Normative Battles" (London: Routledge).
- Willcox, Susannah, 2012: "A Rising Tide: The Implications of Climate Change Inundation for Human Rights and State Sovereignty", in: *Essex Human Rights Review*, 9,1: 1–19.
- World Travel & Tourism Council, 2014: "Travel & Tourism Economic Impact 2015 St Vincent and the Grenadines"; at: https://caribbeanhotelandtourism.com/wp-content/uploads/data_center/desinations/StVincentAndTheGrenadines-WTTC-EconomicImpact2015.pdf.

Chapter 13

Climate Security Perceptions in Tunisia: Food Security as a Dominant Paradigm



Adrien Estève and Clara Personat

Abstract During its membership of the United Nations Security Council (UNSC) (2020–2021), Tunisia was an active supporter of climate security and contributed to the routinisation of the issue in the discussions that took place during that period. In April 2020, Tunisia even co-organised an Arria Formula debate on climate and security risks, during which its representative advocated for the inclusion of the topic at the UNSC. He particularly insisted on the fact that climate change threatens the livelihoods of already vulnerable populations and that it could exacerbate existing conflicts, especially if the UN does not have the appropriate tools to cope with the situation. In this chapter, thanks to an open-source study of official documents and statements made by officials and ministries, we will study how climate security is perceived and framed by the Tunisian government, and what policies it tries to put in place to address this issue at both domestic and international levels.

Keywords Climate change · Security · United Nations Security Council · Tunisia · Human security

13.1 Introduction

The smallest country in the Maghreb region, and the most northern African state, Tunisia is situated between the Mediterranean Sea and the Sahara Desert and is thus exposed to a variety of climate hazards. In the early 2010s, Tunisia became one of the case studies for the security implications of climate change as the academic interest for climate imbalances in North Africa began to grow (Busby et al. 2010). Scholars also began to explore the potential connections between climate change and the 2011 Arab Spring, especially in an article published on the Syrian uprising (Kelley et al. 2015). Connections were then made in several academic contributions

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between climate-induced environmental stresses (such as droughts) and the uprisings that took place in the Middle East and North Africa (especially Tunisia, Libya, and Syria). Currently, scholars are still attempting to ascertain the potential causal links between climate change, water security, and conflict in the region (Schilling et al. 2020). However, while regional analyses provide important inputs on these linkages, very few studies explore the specific case of Tunisia, which remains largely a blank spot in the literature on climate security (Ouessar et al. 2021). This is the motivation for the analysis of the perceptions of and policies on climate security by the Tunisian government at both the domestic and the international level.

In this chapter, we will attempt to analyse whether the Tunisian government frames climate change as a security issue, and, if so, how it does it and what the policies are which it tries to put in place to address this issue. Our main focus lies in the year 2020, during which Tunisia was a non-permanent member of the UNSC and contributed to the ten UNSC member states which gathered for the first time in a *Joint Initiative to Address Climate-Related Security Risks* (Ten UNSC Member States 2020). However, this analysis also goes beyond this time frame and searches for pre-existing perceptions and policy responses to climate security, starting in 2018. To do so, we conducted an open-source study of official documents and statements made by Tunisian officials and ministries, and more specifically the Ministry of Defence, the Ministry of Foreign Affairs, the Ministry of the Environment, and the Ministry of Agriculture. The research focused on documents and findings that associate the keywords *security* in relation to *climate change*. While the findings were relatively scarce when compared to other country case studies in this book (see, for example, the case of France or Germany), which shows that the linkage has not been made often, we applied the following analytical categories in order to explore how the climate-security nexus is constructed in Tunisia.

By focusing mostly on national security, human security and ecological security framings, we apply the theoretical framework presented in the Introduction of this book. First, if climate change is mainly constructed as a national security issue, the focus is on the preservation (and sometimes expansion) of national territories and appropriate military responses to ensure the survival of the territorial state. The main threats are not the direct physical implications of climate change, but the second-order socio-economic effects such as violent conflict, instability, or migration. Second, if climate change is constructed as a human security issue, the main referent object is the wellbeing of individuals or groups. The main threats here can be resource scarcity, an increase in irregular migration, or the spread of diseases. These effects can impact the full flourishing of human individuals. Finally, our last concept, ecological security, focuses on socio-ecological interconnections and the need for so-called *natural* systems to be maintained and restored. The main threats here are anthropogenic disruptions such as biodiversity loss and climate change. Ecological security therefore highlights ecosystem resilience and the rights and needs of the most vulnerable across space (populations of developing worlds), time (future generations), and species (other living beings) (McDonald 2018).

The chapter is structured as follows: first, we will analyse the national security perceptions of climate change in Tunisia and show how the policy responses provided

remain quite scarce. Second, we will identify the human security perceptions of climate change and show how this framework is becoming dominant in the policy responses to climate security in Tunisia. Third, we will show that ecological security perceptions are rising in Tunisia with the processes of desertification and sea level rise. Finally, we will explore the position of Tunisia at the United Nations Security Council. Indeed, we are also interested in looking at how Tunisia's initiative at the UNSC was reflected and motivated within national policies. At the end of the chapter, we will draw the main conclusions of the study.

13.2 National Security and Climate Change: A Cautious Approach

Analysing the traditional security domain, we found that while no clear and direct references to climate security with respect to national security considerations can be detected among the analyzed Tunisian government documents, and especially within the Tunisian Ministry of Defence, it can nevertheless be highlighted that the Tunisian armed forces have been actively involved in disaster risk management and civil security missions to rescue people from devastated regions. In 2019, the military assisted in the evacuation of people from the flood-affected area of the Ariana Governorate and participated in water pumping efforts (Dejoul 2019). Military forces are also involved in fighting desertification and harvesting crops: for instance, the military secured about 600 thousand quintals of freshly-harvested cereals from the North Western governorate of Siliana (Webdo 2019). Furthermore, the Ministry of National Defence has contributed considerably to agriculture development projects concerning date palm production, for example (Marsad 2017), but also to the depollution of ocean floors (Ministry of National Defense 2020a). However, the research did not find that climate change is currently integrated into military doctrine or defence policies, even though the Tunisian military participated in the French-led discussions on the national security implications of climate change in 2017 within the 5+5 Initiative (a defence cooperation between ten countries from the Northern and the Southern parts of the Mediterranean) (Ministry of National Defense 2017).

Therefore, the military seems to understand its role in climate security through its involvement in environmental restoration and relief programmes rather than through the anticipation and the identification of national security threats triggered by climate change. As a consequence, new training programmes and plans are designed to better involve the Tunisian armed forces in environmental restoration programmes or in rescue missions in case of environmental disasters (Ministry of National Defense 2011). The Ministry of National Defence participates in restoration projects where the environment is *militarised* in military discourse, meaning that a national security vocabulary is used to designate the mission. For example, in order to protect Rjim Maâtoug and its oasis ecosystem, the armed forces got involved and planted around 2500 acres of date palms to *fight* against desertification (Ministry of National Defense

2020b). The trees were presented as a *barrier* or a *border* against the advance of the desert, presented as a new enemy. There were also more humanitarian goals to this mission, such as a contribution to a sustainable livelihood for local farmers, since the planted tree are then offered to them.

When climate change is occasionally mentioned in the analysed defence documents, it is in relation to natural catastrophes that may require the involvement of the armed forces. Official documents show acknowledgement of the climate-security nexus on the domestic level in relation to energy and food security and extreme events, as the state has already experienced several flood disasters, primarily affecting the North (Medjerda River basin), Midwest, and North East in 2007, 2009 and 2018, respectively (Fehri 2014; France 24 2018). In the findings on the Ministry of Foreign Affairs, reference is also made to aims to strengthen dialogue and cooperation in reducing and managing disasters, to the fight against ecological degradation, and to descriptions of the African States as being particularly exposed and vulnerable to climate change. But at the same time, these documents do not always recognise the connection between climate change and extreme environmental events, and do not necessarily view climate change as an aggravating factor. Indeed, while there are plans and procedures to handle such events with the help of the military, the documents do not consider that climate change plays a role in their occurrence or intensity (Ministry of National Defense 2019a).

Aside from the military, we found that connections between national security concerns and climate change have mainly emerged in the political domain of foreign affairs. However, in most of the documents produced by the Ministry of Foreign Affairs, climate change is separated from traditional security issues such as terrorism or armed violence, and associated with international environmental initiatives on energy transition (Ministry of Foreign Affairs 2021) or water management (Ministry of Foreign Affairs 2020). Also, while Othman Jerandi, the Minister of Foreign Affairs, acknowledges the potential security implications of climate change at the UNSC in broad terms, he carefully distinguishes climate change and “humanitarian and security threats” (Ministry of Foreign Affairs 2020a). The same hesitancy emerges from the Ministry of the Environment. While it clearly states that one of its missions is to “ameliorate the environmental situation and living conditions, to prevent, reduce or eliminate the dangers that threaten men, future generations, the environment, and natural resources” it does not clearly identify climate change as one of the driving forces behind the “eventual or foreseeable environmental problems” that the government must “prevent” and “adapt to” (Ministry of the Environment 2020).

Interestingly, the main securitising actor from a national security perspective appears to be the Ministry of the Environment – more specifically, when it connects climate change with natural disasters. Indeed, when risk prevention is mentioned, the documents list the main potential catastrophes that the Tunisian territory may experience in the near future due to desertification and land degradation (Ministry of the Environment 2021). The Ministry of the Environment tends to give more room to climate-induced threats such as migrations or armed violence than the other governmental bodies. It indeed frames the “environmental planification process”, which

is Tunisia's national climate adaptation plan, as a way to reduce "risks", "threats", and "violent conflicts" (Ministry of the Environment 2020). More specifically, the Ministry indicates that the magnitude of migration flows, both internal and external, will depend on the evolution of the climate, and how this evolution will fuel violence and exploitation between groups. It also highlights the fact that climate change will have both direct and indirect impacts on human health, because of its impact on the quality of food and water. These vulnerabilities are presented as priorities both at the international and at the national level (Ministry of the Environment 2020b). One of the tools that the Ministry wants to use to raise awareness of this is education, and the most recent programmes on sustainable development in Tunisian schools insist on "the fact that floods and submersion will impact around two billion people in 2050", some them living in North Africa and the Maghreb region (Ministry of the Environment 2020c).

13.3 Human Security: A Focus on Food and Water Security

While national security perceptions remain quite limited within the Tunisian government, human and environmental security are more prevalent in climate security discourses. First, climate change is connected to the phenomenon of desertification, particularly identifiable in the central and Southern parts of the country, which is in turn linked to water shortages and food scarcity. The Ministry of the Environment particularly emphasises the effect of climate-induced desertification in its National Action Plan Against Desertification (PAN/LCD), where land degradation is considered as a trigger for food insecurity, in an area that may cover "three quarters of the country" (Ministry of the Environment 2018). To face this "urgent situation", another document calls for national programmes and initiatives to tackle the issue, which could be coordinated by the "National Committee on the Fight against Desertification" (Ministry of the Environment 2020b). There is here an overlap with more ecological aspects of security, since the document presents food insecurity and biodiversity loss as two of the main consequences of the current practices that allow and encourage desertification, such as mono-intensive agricultural practices. Indeed, these monocultures contribute to the fragility of the Tunisian agricultural system and tend to legitimise non-ecological practices, such as the use of pesticides or other contributors to the degradation of soils.

Thus, food security appears to be at the core of climate-induced human security concerns in Tunisia. Already present in the Ministry of the Environment, the linkage between climate change and food shortages is further explored by the Ministry of Agriculture, which mentions a series of initiatives and programmes on climate change and resource scarcity (Ministry of Agriculture 2019a). The preoccupation with food security is only with regard to crops, but also fisheries, and both dimensions are present in the section of the National Adaptation Plan dedicated to climate threats to agriculture in Tunisia. The document particularly evokes potential "environmental, material and human damages" caused by climate change, and encourages

the elaboration of new “measures, norms, projects and programs” to prevent them (Ministry of Agriculture 2018). The Ministry of Agriculture also uses the Plan to talk more generally about natural resources and calls for more actions to manage them “in a more sustainable way” (Ministry of Agriculture 2020). The Ministry of Agriculture accompanies the initiative by offering training programmes on sustainable agriculture, water management, and the diversification of cultivation. It also gathers private companies, local associations, and governmental officials in seminars on water management, where the issue of water security is addressed in relation to climate change (Ministry of Agriculture 2019b). Finally, in order to promote more sustainable economic practices, the Ministry encourages “ecotourism”, which is presented as an economic opportunity for local populations in climate-vulnerable areas (Ministry of Agriculture 2019c).

At the intergovernmental level, the National Committee on the Fight against Desertification lists as one of its missions to “achieve self-sufficiency and food security” (Ministry of the Environment 2020b). In the National Climate Adaptation Plan for 2018-2030, food security is mentioned four times and linked to climate threats such as desertification or land degradation (Ministry of the Environment 2018), and it is connected to potential water shortages in the 2015-2020 National Sustainable Development Strategy for 2015-2020. Food security is also considered as one of the most important aspects of education for sustainable development in Tunisia by the Ministry of the Environment (Ministry of the Environment 2017). Climate-induced food insecurities are also connected to health issues in the Tunisian population, and more specifically to infectious diseases caused by scarce and potentially polluted water and food supplies, but also to respiratory diseases and traumas connected to the occurrence of natural catastrophes and extreme weather events, particularly in the most remote areas of the country (Ministry of the Environment 2020d). The Ministry of Agriculture identifies several particularly vulnerable regions in the country from a food security perspective, such as Bizerte, El Kef, Kairouan, Siliana and Sidi Bouzid (Ministry of Agriculture 2018).

Food security also appears as a way to evoke the more global problem of resource supply in the country, and more specifically, energy supplies. Indeed, the government acknowledged that Tunisia relies on regional and international aid for both food and energy in times of crisis, and therefore sustainable uses of both food and energy supplies are needed to improve the autonomy of the country in a changing climate (Ministry of the Environment 2018a). For example, as the acceleration of coastal and land erosion threatens “almost the entirety” of the country, the National Sustainable Development Strategy estimates that around 60% of electric dams could be threatened by silting by 2050, which could lead the government to renovate them or build new energy infrastructures. It also mentions sea level rise as a potential threat for both food and energy security, as both energy infrastructure and farmland could be flooded in the coastal areas of the country. The document also states that both resource and energy conservation work hand-in-hand to protect the “structure, the functions and the diversity of natural systems” (Ministry of the Environment 2020e).

To build more food security, the government partners with international and regional actors. In 2020, Tunisian officials met with African partners during a high-level forum on “Energy Security and the Fulfilment of Sustainable Development Goals in Africa”, which particularly emphasised the importance of cooperation between countries from the Global South to achieve sustainable agricultural practices (Ministry of Foreign Affairs 2020b). The National Climate Change Adaptation Plan also states that Tunisia’s commitment to food security is meant to involve international actors in “the protection of citizens and the support to farmers”, and more specifically to “protect them from the consequences of climate change, which affects agriculture, food security, the coasts, water resources, health and infrastructures” (Ministry of Agriculture 2018a). In the same vein, in 2020, the Ministry of Agriculture organised a special meeting on climate change adaptation for the fifth anniversary of the Paris Agreement, during which it highlighted the need to include “all the potential climate risks that will lead to material losses and serious damages” at all levels of governance, and with the economic assistance of the international community (Ministry of Agriculture 2020a). Also, after 2020, two technical cooperation agreements between the government and the Food Agriculture Organization (FAO) were signed in 2021 to better adapt agricultural practices to a changing climate. As a result, a national project on “Food Security Priorities and Adaptation of the Agricultural Sector in Tunisia” began in 2021 with the help of the Green Climate Fund (Ministry of Agriculture 2021a).

International funding is an important tool for climate adaptation and food security in Tunisia. The Green Climate Fund is associated with other governmental initiatives on climate security in both the coastline in the North and the Sahara desert in the Southern part of the country. At the end of 2019, it was invited to a working session with the Observatory of the Sahara and the Coastline on Climate Change, the Ministry of Agriculture and the Ministry of the Environment, to work on climate adaptation needs in Tunisia (Ministry of Agriculture 2019d). The discussion focused on governance and how to allow for more participation in climate adaptation programmes, in order to meet some of the Fund’s requirements.

13.4 Ecological Security: Protecting Vulnerable Ecosystems

In addition to human security perspectives, climate change is also framed as an ecological security concern in Tunisia. Originally named the “Green Tunisia” by its first Arab settlers, the country is experiencing major ecological changes and potentially more hostile living conditions due to climate change. Since May 2019, and while temperatures tend to reach new heights during Spring and Summer months, Tunisia has experienced more than 500 wildfires, which destroyed many crops and forests. These fires had a significant impact in the centre of Tunisia and the *green* region of Siliana, considered as the breadbasket of the country (and where most of the olive oil, the *green gold* of the country, is produced). One of the main drivers of this appears to be the long-lasting phenomena of drought and desertification, incarnated

in the Sirocco, a hot and dry air mass that comes from the Sahara and contributes to the wildfires by increasing the average temperatures in the country and creating *heat domes*. Desertification is also embodied in the progress of the desert in the Southern part of the country. Roughly 75% of cultivable lands are now threatened because of the accumulation of sand in the soil and the desiccation it provokes. This is further amplified by the massive uprooting of trees that previously contributed to the limitation of the expansion of the desert, and also by the modernisation and the industrialisation of agricultural practices in recent years, which has led to an unsustainable use of groundwater by farmers.

Governmental organisations acknowledge that the two main climate security threats in Tunisia, desertification, and land degradation, also have an important impact on ecosystems, which become more vulnerable. Biodiversity loss is, for example, presented in the studies published by the Ministry of the Environment as a consequence of climate change, among other factors (Ministry of the Environment 2019). Some of these studies offer a comparative analysis of the impacts of climate change on the different ecosystems of the country, for example between ecosystems in the Southern parts, which experience more droughts and become more and more inundated by sand, and the Mediterranean ecosystems of the country's islands in the North, which experience more humidity and coastal erosion. The 2015 National Climate Change Adaptation Plan also adopts this local perspective to embrace the complexity of climate change impacts on the country's different environments. Even military documents do not very often associate climate change with national security concerns, and it is more regularly framed as a sustainable development issue, which should be tackled by paying attention to regional contexts and, more specifically, to local ecosystems (Ministry of National Defense 2020).

Sea level rise also appears as a concern for Tunisia. Around 65% of the population is concentrated in the large and dense urban centres situated on the Mediterranean coast, mainly because of the rural exodus caused by the industrialisation of Northern cities and the development of the tourist industry during the twentieth century. Coastal erosion therefore threatens both the livelihoods of the population and Tunisia's economy, especially in the populated and popular regions of Hammamet, Djerba, the Cape Bon and the islands of Kerkennah. While the country's capital, Tunis, is not considered as particularly vulnerable to submersion in the near future, local and international NGOs fear that climate adaptation may prove difficult for coastal Tunisian cities because of aging marine infrastructures and a lack of adequate early warning mechanisms to prevent such phenomena (World Wide Fund 2022). Sea level rise and coastal erosion also combine with another emerging issue for Maghreb countries: Mediterranean tropical-like cyclones (also called "medicane"). The steady rise in the sea temperature creates a "tropicalisation" of the region, which leads to more frequent and violent weather events, and, more specifically, summer cyclones, previously predominantly present in other areas of the world (such as the Caribbean). In October 2021, a "medicane" provoked significant rainfalls and violent winds in the Northern part of the country, leading to floods in several regions of the country.

The term *ecosystem services* is often used to show how climate change changes the structure of ecosystems and the way they provide resources to both human and non-human beings. In a study for a project that aims at encouraging a more sustainable use of lands in the governorate of Siliana (named Adapt-CC), in the Northern part of the country, the Ministry of Environment states that its objective is to “reduce and minimize land degradation and biodiversity losses in local ecosystems” (Ministry of the Environment 2020f). Listed among the ecosystems targeted by the project, the mountainous region of Djebel Serj, where fires are regularly sparked during the Summer, is for example presented as a sanctuary for animals and plants, which are already severely threatened by the pressures applied to them by both the local population and its herds, in a region that is becoming more and more arid because of climate change. Therefore, the adaptation project aims at improving water management in both agriculture and farming to improve the sustainability of ecosystems. The project’s webpage criticises the current human-centric approach to climate change in the region and calls for a more holistic perspective, as a result of which climate threats can be understood and addressed from a socio-ecological standpoint (Ministry of the Environment 2020f).

13.5 Tunisia, Climate Change and the UNSC

Since its first open debate on the matter in 2007, the United Nations Security Council witnessed strong and regular acknowledgements of the security implications of climate change during the several debates it organised between then and 2021. If European countries such as France, Germany or the United Kingdom appear as driving forces behind most of these debates, Tunisia supported the Niger- and Ireland-led resolution on the security implications of climate change and on the need to develop conflict-prevention strategies, which failed because of one veto (Russia), one vote against (India) and one abstention (China). This support is not a surprise when one looks back at Tunisia’s position on the matter during its membership in the UNSC (2020–2021). Tunisia’s climate security focus is mainly on conflict prevention and settlement, with particular attention paid to both the role of women and the younger generation in this context, and to the importance of enhancing developmental cooperation. Combatting terrorism is another security priority. Following Tunisia’s election to the Council in 2019, climate change was not mentioned as a main priority, but the global challenges “facing human beings and [the] international community” were referenced by the Minister of Foreign Affairs (Ministry of Foreign Affairs 2019).

However, in April 2020, Tunisia co-organised the Arria Formula on climate and security risks, during which the Tunisian representative advocated for the topic’s inclusion in the UNSC. He pointed out that the impacts of climate change on livelihoods (e.g., food security) can “exacerbate existing conflicts,” and that the UN does not have the appropriate tools to deal with the situation. Tunisia therefore sees the need to strengthen the UN’s data- and knowledge base on the topic and integrate

risk assessment of this threat at all levels of security, especially regarding preventative strategies. Tunisia supports periodic reporting from the Secretary-General to the UNSC that includes in-depth analysis of the current and future risks posed by climate change. The Council could then take these aspects into consideration in peacekeeping missions and preventive measures. To improve coordination within the UN, Tunisia also favours the appointment of a Special Envoy for Climate Security. The representative emphasised that a “holistic” security approach that includes all UN entities is needed and, lastly, underlined the key role of the Paris Agreement and the Agenda 2030 in collectively tackling climate change (Ladeb 2020).

From this perspective, peacekeeping operations appear as a first way to connect climate change to both national and human security considerations. At the United Nations Security Council (UNSC), Othman Jerandi, Minister of Foreign Affairs, indeed expressed the “necessity to introduce climate change in peacekeeping operations because of its impact on the stability of the people” (Ministry of Foreign Affairs 2021). During the first meeting of the 76th session of the United Nations General Assembly on September 14th 2021, Mr. Jerandi also said that climate change threatens peace and stability, not only at the national also at the international level. He added that climate change touches all people but has more dangerous and profound consequences on poorer and developing countries. This diplomatic position was already sketched out by the former Minister of Foreign Affairs, Khemaies Jhinaoui, during his speech for the United Nations Day: “we should not underestimate the challenges and difficulties the international community will face. The difficult situation that prevails today and tarnishes the image of the United Nations in the world mostly manifests itself through climate change repercussions on international peace and security, and even on the livelihood of certain populations” (Ministry of Foreign Affairs 2019).

13.6 Conclusion

Although we can identify national and ecological security perspectives in the primary sources we studied, Tunisia’s approach to the security implications of climate change mainly gravitates around the consequences of climate change for the livelihoods of the Tunisian people, and its impact on food production. Climate-induced desertification and land degradation are perceived as the most salient threats to human security, and the Tunisian government applies a wide array of solutions to tackle these (environmental restoration programmes, sustainable agricultural practices, and tree planting in the Southern part of the country). This human security perspective is not only present at the domestic level, but also feeds Tunisia’s foreign policy, and more specifically, its official position in the UNSC debates on climate security. During its 2020-2021 membership, Tunisia proved to be a strong voice on the matter and sided with countries such as Niger, France, and Germany, which championed a greater inclusion of climate security in UN policies and strategies.

References

- Busby, Joshua W.; White, Kaiba; Smith, Todd G., 2010: "Mapping Climate Change and Security in North Africa" (Washington, D.C.: German Marshall Fund of the United States).
- Dejoul, Nadia, 2019: "Inondation Dans La Capitale: C'est L'armée Qui Intervient [Flooding in the Capital: The Army Intervenes]".
- Fehri, Noûmène, 2014: "L'aggravation Du Risque D'inondation En Tunisie: Éléments De Réflexion", in: *Physio-Géo. Géographie Physique et Environnement*, 8: 149–75.
- France 24, 2018: "Record Rains Set Off Deadly Flash Floods in Tunisia"; at: <https://www.france24.com/en/20180924-tunisia-weather-cap-bon-record-rains-set-off-deadly-flash-floods-nabeul>.
- Kelley, Colin P.; et al., 2015: "Climate Change in the Fertile Crescent and Implications of the Recent Syrian Drought", in: *Proceedings of the National Academy of Sciences*, 112,11: 3241–46.
- Ladeb, Tarek, 2020: "Statement During UNSC Arria-Fomrula Meeting on Climate and Security Risks" (New York); at: <https://onu.delegfrance.org/Event-on-Climate-and-Security-risks>.
- Marsad, 2017: "De Kébili À Gabès. Le Danger Guette, L'armée Veille Au Grain" [From Kébili to Gabès. Danger Is Lurking, the Army Is Watching over the Grain]; at: <https://www.observatoire-securite.tn/fr/2017/05/02/reportage-de-kebili-gabes-le-danger-guette-larmee-veille-au-grain/>.
- McDonald, Matt, 2018: "Climate Change and Security: Towards Ecological Security?", in: *International Theory*, 10,2: 153–80.
- Ministry of Agriculture, 2018: "Donner Un Signal Pour Le Lancement Des Activités D'élaboration Du Plan National D'adaptation Et D'adaptation Aux Changements Climatiques Pour Assurer La Sécurité Alimentaire (Pan)"; at: http://www.agriculture.tn/maneshirs/search_maneshirs2.php.
- Ministry of Agriculture, 2018a: "Signature De Deux Conventions De Partenariat Dans Le Cadre De La Coopération Tuniso-Française Pour La Mise En Œuvre D'un Programme D'adaptation Aux Changements Climatiques Dans Les Zones Fragiles"; at: http://www.agriculture.tn/?page_id=714.
- Ministry of Foreign Affairs, 2019: "Allocution De M. Khémaies Jhinaoui, À L'occasion De La Célébration De La Journée Des Nations Unies"; at: https://www.diplomatie.gov.tn/presse/actualites/detail/etranger/ambassade-de-la-tunisie-a-nairobi-kenya/?tx_news_pi1%5Bnews%5D=1561&cHash=59c01d0be3e88f3881ee1184fb6c35e0.
- Ministry of Agriculture, 2019a: "Écotourisme, Planification Stratégique: La Vulnérabilité"; at: http://www.agriculture.tn/?page_id=714.
- Ministry of Agriculture, 2019b: "Élargir La Composition Du Comité National Sectoriel Sur Le Changement Climatique"; at: http://www.agriculture.tn/maneshirs/search_maneshirs2.php.
- Ministry of Agriculture, 2019c: "M. Boubacar El Karai Supervise La Première Édition Des Sessions Aquatiques"; at: <http://www.agriculture.tn/?cat=72>.
- Ministry of Agriculture, 2019d: "Une Séance De Travail Conjointe Entre Le Ministère De L'agriculture Et De L'environnement Et L'observatoire Du Sahara Et Du Littoral Sur Le Changement Climatique"; at: http://www.agriculture.tn/maneshirs/search_maneshirs2.php.
- Ministry of Agriculture, 2020: "Les Ressources Naturelles". <http://www.agriculture.tn/?cat=72>.
- Ministry of Agriculture, 2020a: "Ouverture D'un Atelier À Distance Sur L'adaptation Au Changement Climatique À L'occasion Du Cinquième Anniversaire De L'accord De Paris Sur Le Climat"; at: http://www.agriculture.tn/?page_id=714.
- Ministry of Foreign Affairs, 2021: "Climat Et Énergies Renouvelables"; at: https://www.diplomatie.gov.tn/presse/actualites/detail/etranger/ambassade-de-tunisie-a-riyad-arabie-saoudite/?tx_news_pi1%5Bnews%5D=2284&cHash=ddece7a5996a2ad09f91baf9a8625ae4.
- Ministry of Agriculture, 2021a: "Signature De Deux Accords De Coopération Technique Entre Le Ministère De L'agriculture Et La Fao"; at: http://www.agriculture.tn/maneshirs/search_maneshirs2.php.
- Ministry of Foreign Affairs, 2020: "Débat Au Conseil De Sécurité M. Jerandi Réaffirme L'attachement De La Tunisie Au Renforcement Du Principe De La Sécurité Collective".
- Ministry of Foreign Affairs, 2020a: "M. Jhinaoui Rencontre De Hauts Responsables Des Nations Unies En Marge De La 74ème Session De L'assemblée Générale Des Nations

- Unies"; at: <https://idaraty.tn/fr/news/2019/09/jhinaoui-rencontre-de-hauts-responsables-des-nations-unies-en-marge-de-la-74eme-session-de-l-assemblee-generale-des-nations-unies-lbroct>.
- Ministry of Foreign Affairs, 2020b: "Mémorandum D'accord Entre La Tunisie Et La Hongrie Pour La Gestion De L'eau".
- Ministry of Foreign Affairs, 2021: "Jerandi Plaide Pour L'introduction Du Changement Climatique Dans Les Stratégies De Maintien De La Paix"; at: <https://www.webmanagercenter.com/2021/09/24/472824/jerandi-plaide-pour-lintroduction-du-changement-climatique-dans-les-strategies-de-maintien-de-la-paix/>.
- Ministry of National Defense, 2011: "Missions De La Santé Militaire"; at: <http://www.sante.defense.tn/index.php/fr/missions>.
- Ministry of National Defense, 2017: "Initiative 5+5 Défense, « Le Centre Euromaghrébin De Recherches Et D'études Stratégiques (Cemres)"; at: <https://www.webmanagercenter.com/2017/09/19/410144/tunis-abrite-la-7e-reunion-des-pays-membres-de-linitiative-55-defense/>.
- Ministry of the Environment, 2019: "Les Indicateurs De Développement Durable En Tunisie"; at: <http://www.environnement.gov.tn/developpement-durable/suivi-et-evaluation-des-etapes-de-realisation-du-developpement-durable/indicateurs-de-developpement-durable>.
- Ministry of National Defense, 2019a: "Ministère De La Défense Nationale"; at: <https://www.defense.tn/ministere-de-la-defense-nationale/?lang=fr>.
- Ministry of National Defense, 2020: "Développement De Rjim Maâtoug - Objectifs Atteints Et Perspectives"; at: <http://www.drm.defense.tn/index.php/fr/objectifs-et-perspectives>.
- Ministry of National Defense, 2020a: "Formation À La Sécurité Maritime"; at: <http://www.cfism.defense.tn/>.
- Ministry of the Environment, 2017: "Rapport Final Du Programme De L'éducation Pour Le Développement Durable" <https://www.swim-h2020.eu/wp-content/uploads/2017/10/Session-3-Abaza.pdf>.
- Ministry of the Environment, 2018: "Rapport Sur L'énergie Durable En Tunisie"; at: <http://www.environnement.gov.tn/developpement-durable/concretisation-du-developpement-durable-dans-les-plans-et-les-strategies-de-developpement/strategies-nationales-deconomies-verte-bleue-et-circulaire-en-tunisie>.
- Ministry of the Environment, 2018a: "Stratégies Et Politiques Nationales Liées Plan D'action National De Lutte Contre La Désertification (Pan-Lcd) 2018-2030"; at: https://www.scid.tn/imagess/2020/document/Rapport_Principal_PAN_LCD.pdf.
- Ministry of the Environment, 2020: "Meilleures Pratiques En Matière De Gestion Durable Des Terres Dans Le Gouvernorat De Siliana"; at: <https://onagri.home.blog/2022/02/02/vers-une-gestion-durable-des-terres-gdt-une-collection-des-bonnes-pratiques-en-tunisie/>.
- Ministry of the Environment, 2020a: "Mission Et Attributions"; at: <http://www.environnement.gov.tn/ministere/cadre-juridique-et-institutionnel>.
- Ministry of the Environment, 2020b: "Organisation Du Comité National De Lutte Contre La Désertification"; at: http://www.environnement.gov.tn/index.php/fr/?option=com_content&view=article&id=101:organisation&catid=83:contenu-fr&lang=fr-FR&Itemid=678.
- Ministry of the Environment, 2020c: "Présentation Du Projet: Gestion Durable Des Ecosystèmes Oasiens En Tunisie (Gdeo)"; at: <https://www.raddo.org/web/index.php/Actualites/Focus-sur-le-projet-de-gestion-durable-des-ecosystemes-oasiens-en-Tunisie>.
- Ministry of the Environment, 2020d: "Processus De Planification Et Des Gestions Participatives À L'échelle Locale Du Développement Durable"; at: <http://www.environnement.gov.tn/developpement-durable/processus-de-planification-et-de-gestion-participative-du-developpement-durable-a-lechelle-locale/approche-de-gestion-participative-dans-le-domaine-de-lenvironnement-et-du-developpement-durable>.
- Ministry of the Environment, 2020e: "Rapport Sur La Stratégie Nationale De Développement Durable 2015–2020e" <http://www.environnement.gov.tn/developpement-durable/concretisation-du-developpement-durable-dans-les-plans-et-les-strategies-de-developpement/strategie-nationale-de-developpement-durable-sndd-2015-2020>.

- Ministry of the Environment, 2020f: “Synthèse Des Vulnérabilités Et Des Mesures Prioritaires Pour L’adaptation Aux Changements Climatiques En Tunisie”; at: <http://www.environnement.gov.tn/tunisie-environnement/les-changements-climatiques/synthese-des-vulnerabilites-et-des-mesures-prioritaires-pour-ladaptation-aux-changements-climatiques-en-tunisie/agriculture-et-ecosystemes>.
- Ministry of the Environment, 2021: “Stratégie Nationale De Réduction Des Risques De Catastrophe À L’horizon 2030 Et Plan D’Action”; at: <http://www.environnement.gov.tn/index.php?id=129>.
- Ouessar, Mohamed; et al., 2021: “Impacts of Climate Change on Agriculture and Food Security in Tunisia: Challenges, Existing Policies, and Way Forward”, in: Behnassi, Mohamed; Barjees Baig, Mirza; El Haiba, Mahjoub; Reed, Michael R. (Eds.): *Emerging Challenges to Food Production and Security in Asia, Middle East, and Africa: Climate Risks and Resource Scarcity* (Cham: Springer International Publishing): 65–99.
- Schilling, Janpeter; Hertig, Elke; Trambly, Yves; Scheffran, Jürgen, 2020: “Climate Change Vulnerability, Water Resources and Social Implications in North Africa” in: *Regional Environmental Change*, 20,1: 15.
- Ten UNSC Member States, 2020: “Joint Statement by 10 Members of the Un Security Council on Their Joint Initiative to Address Climate-Related Security Risks”; at: <https://new-york-un.diplo.de/un-en/news-corner/200622-climate/2355076>.
- World Wide Fund, 2022: “Maroc et Tunisie: Vers L’adaptation Au Changement Climatique Avec Les Ong Locales”; at: <https://www.wwf.fr/projets/maroc-tunisie-adaptation-changement-climatique>.

Chapter 14

Climate Change as a “Threat Multiplier”: The Construction of Climate Security by the United Kingdom—2007–2020



Cameron Harrington

Abstract This chapter examines how the United Kingdom (UK) has framed the issue of climate security and the policies and practices designed in response. Beginning with its 2007 chairing of the inaugural debate on climate security in the United Nations Security Council, the UK has taken an active role in positioning climate change as a global security threat requiring urgent attention. It has been instrumental in shaping the now-dominant framing of climate change as a “threat multiplier.” This has contributed to a construction of climate security that is malleable and combines various logics of security, including both human security and more traditional national security. The dominant result of these framings is the pursuit of policy interventions that emphasise adaptation and resilience, particularly for countries and regions deemed acutely vulnerable to climatic and political upheaval. This chapter concludes by suggesting that the UK may be escalating climate security to a new level of prominence, which offers some potential for new articulations of security discourse, such as ecological security, to emerge.

Keywords United Kingdom · Climate · Security · Threat multiplier

14.1 Introduction

The United Kingdom (UK) has played a prominent role in positioning climate change as an issue of security and an urgent matter requiring international diplomatic efforts. As far back as 2005, the government identified climate change as “the greatest threat” (DEFRA 2005). Its 2007 chairing of the inaugural debate on climate security in the United Nations Security Council (UNSC) was a watershed moment for the UK and the wider world’s acknowledgement of the impact that climate change has on security. At that time, and over the past decade and a half, influential UK actors have tended to blend various logics of human and traditional national security to make sense of, and respond to, climate change impacts around the world. This is most clearly

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manifested in the UK's shaping of a now-dominant framing of climate change as a "threat multiplier". Such a view promotes climate change not as a direct source of conflict, but as something that can interact with and compound other factors likely to cause disruption. This framing positions climate security as largely risk-based, which requires state-led policy interventions that focus on promoting adaptation and resilience across all sectors of society, both domestically and internationally. This is particularly true for countries and regions deemed acutely vulnerable to climatic and political upheaval. Via its permanent seat on the UNSC, and from the deep involvement of a variety of its government departments, the UK has played an important role in *riskifying* climate security.¹ Here, the UK, along with other permanent Western UNSC members like the United States (US) and France, advocates climate security practices that are meant to manage complex future-oriented scenarios and probabilities, rather than deterrence and defence against identifiable threats (Corry 2012: 236).

In this chapter I explore the various actors, processes, and outcomes which have contributed to the UK's position as a global "climate security vanguard" (Sikorsky 2021). I employ a broad securitisation analytical framework to better understand how climate change has been constructed in UK security discourse and practice. It draws from this book's guiding theoretical framework, which categorises security approaches in a three-fold typology: as either national, human, or ecological. As is elaborated in this book's introduction, each of these discourses employs a unique referent object that is to be secured. National security emphasises the securing of the nation-state and its position in the international order. Human security emphasises the protection of individual humans or specific groups of humans. Finally, ecological security seeks to secure specific ecosystems or something akin to "global nature" as its referent object.

A broad understanding of securitisation provides a flexible and nuanced understanding of the interweaving of normal politics and securitisation (Buzan et al. 1998; Diez et al. 2016). Rather than a strict separation between normal, everyday (democratic) politics and the extraordinary emergency effects which emanate from speaking security, this broad approach acknowledges that cultural, political, and bureaucratic frames, routines and practices can contribute to securitisation absent any explicit emergency measures. As Andrew W. Neal suggests, "the relationship of security to politics can no longer be understood as pathological or exceptional". Instead, security "is politics" (Neal 2019: 2). As this chapter shows, climate security has evolved into a key strategic interest for the UK, occupying diverse positions within and outside a variety of security discourses.

Methodologically, I rely upon an extensive desk review and content analysis of influential UK debates, reports, reviews, policies, strategic planning documents, and broader security speech acts both domestically and internationally. I identify and

¹ Corry defines *riskification* as the "social process of constructing something politically in terms of risk" (2012: 238). See also Angela Oels, "Rendering climate change governable by risk: From probability to contingency", in: *Geoforum*, 45(2013).

analyse the climate security discourses in the government, grey, and academic literature that address UK approaches to climate security. The assumption is that these discourses both reflect particular security logics (i.e., national, human, ecological) as well as help pave the way for specific climate security practices. I also assess the possibilities for future transformations that are immanent within the dominant climate security frameworks. I focus my study on the time 2007 – when the UK organised the first UNSC debate on climate security – and 2020 – as the UK government prepared to host the COP26 climate conference in Glasgow and released its *Integrated Review of Security, Defence, Development and Foreign Policy* (Integrated Review), laying out the government’s strategic vision for the next decade (Cabinet Office 2021). Given the publication timeline of this chapter, a partial analysis of developments which occurred in 2021 (e.g., COP26; Integrated Review) is also provided.

The central argument advanced is that the UK has been instrumental in the framing of climate change as a threat multiplier between the years 2007 and 2020. It has aligned itself with other large Western democracies such as France and the US in “riskifying” climate security through its blending of human and national security. This has not led to a full-scale securitisation of climate change, at least in the traditional sense. Instead, UK interventions have focused on addressing the wide possibilities of harm rather than employing exceptional practices that combat imminent threats and dangers or are meant to deter identified foes. This has led UK climate security advocates to promote the values and practices of adaptation and resilience, primarily in vulnerable regions and via diplomatic and aid-based interventions. While this has been the dominant trend, there are some signs that suggest important shifts in climate security discourse and practice may be occurring. More recently, attachment to climate security discourse and policy has accelerated across different actors, including the UK military, and the concept now plays a central role in UK foreign policy planning. This suggests that a new era of climate security in the UK may be emerging which is broader, more dispersed, and adaptable to different institutional contexts. The chapter concludes with a brief comment on the potential implications of this emerging trend.

14.2 The Early Historical Context: 1989–2008

This section briefly outlines the historical context that helped shape the UK’s approach to climate security in the lead-up to the 2007 inaugural UNSC debate and its immediate aftermath. The context helps explain how, over a short time, climate security has become integrated into UK security discourse and practice.

The UK has long been at the forefront of linking climate and security. In 1989, Prime Minister Margaret Thatcher framed climate change as a global existential risk, using a speech in the UN General Assembly to proclaim, “it is life itself that we must battle to preserve” (Thatcher 1989). Despite this high-profile acknowledgment, the 1990s were relatively empty of concrete linkages between climate and security in official policy and discourse. The 1998 Strategic Defence Review failed to make

any mention of climate change, let alone climate security, though it did make brief mention of the potential for environmental degradation to cause “immediate suffering but also dangerous instabilities” (Ministry of Defense 1998: 9).² However, much of the academic and popular literature on environmental security produced during that decade, principally works that advanced causal and deterministic links between environmental degradation or scarcity with violence and migration, has influenced governments, policymakers, and funding bodies through to today (Parsons 2021).

In the early part of the 21st century, the UK’s security environment was principally defined by its military interventions in Iraq and Afghanistan and the wider global war on terror. As such, climate security was largely absent from public and political discourse. That said, some important, if subtle, shifts were occurring. In 2007 think tanks such as the UK-based International Institute for Strategic Studies (2007) and the US-based Center for Naval Analyses (2007) both published reports linking climate change and national security.

It was, however, the UK’s chairing of the inaugural debate on climate security in the United Nations Security Council in 2007 which represented a watershed moment in climate security politics. The country’s chairing of the debate is now frequently mentioned in official documents that lay out the country’s record on international climate policy (Cabinet Office 2021). There appear to be two primary drivers behind the decision to bring climate security to the UNSC in 2007. The first is linked to UNSC Resolution 1625, which was adopted at a Council Heads of State-level meeting during the 2005 World Summit. That resolution focused on the effectiveness of the Security Council’s role in conflict prevention. It reaffirmed the need to adopt a broad strategy of conflict prevention that addresses the root causes of armed conflict in a comprehensive manner, including crucially by promoting sustainable development (UNSC 2005). The idea underpinning the resolution is that environmentally-stressed societies tend to be more vulnerable and violent. As such, good environmental stewardship can contribute to a broad culture of conflict prevention. The second aspect contributing to the UK’s push for the 2007 debate was the publication of the *Stern Review on the Economics of Climate Change*, released in late 2006. This was a 700-page report commissioned by the UK government and delivered by Sir Nicholas Stern, an academic at the London School of Economics, which concluded that early and robust climate change action was economically rational. The report gained significant amounts of press and attention and directed public consciousness to the massive effects of climate change to the global economy. The report’s conclusion was that without action the costs of global warming would amount to losing the equivalent of between 5 and 20% of global GDP every year (Stern 2007). The Stern Report, together with the release of the Fourth Intergovernmental Panel on Climate Change (IPCC)

² Strategic Defence Reviews assess Britain’s strategic environment and capabilities. The first UK strategic defence review was published in 1958 and subsequent reports were published sporadically. However, since 2010 they have been published every five years. These influential documents assess the global security landscape, identify current and emerging threats and offer recommendations on how best to organise and equip the UK Armed Forces (UK House of Commons Library 2020).

report galvanised public and government opinion towards stronger climate action.³ Crucially, the Stern Report opened up new policy frames for climate change. Previously, global warming was largely attached to the environmental policy community. With its solid academic credentials and a clear cost-benefit analysis, the Stern Report offered policymakers a new discourse to advance climate action. This allowed for a further diffusion of climate change into national and international security discourse.

The final major milestone in this early historical context occurred in 2008, in the wake of growing public pressure. Despite the constraints of a global recession, the UK government, led by Labour Prime Minister Gordon Brown, passed one of the most comprehensive pieces of climate change legislation in the world, the Climate Change Act (CCA). This was the world’s first legally-binding commitment to reduce greenhouse gas emissions with targets of at least 34% below 1990 levels by 2020 and at least 80% by 2050. The CCA spread climate policy and ambition into a vast array of domestic contexts, including the security and defence sectors, which were now obligated to address climate impacts. All this reflected a growing consensus that climate change would require a whole-of-society approach.

As with the rest of the world, the early development of climate security by the UK government was relatively slow and tentative. However, by the end of the first decade of the 21st Century it became clear that climate security was an emerging issue and required further attention. As the following sections show, climate change, and specifically the “climate emergency” would over the next decade quickly and firmly become elevated into everyday public discourse. This evolution has opened up space for traditional security actors (e.g. the Ministry of Defence [MoD], Foreign, Commonwealth and Development Office [FCDO]), and non-traditional actors (e.g. Department of Environment, Food and Rural Affairs [DEFRA]), to develop and frame UK approaches to climate security.

14.3 Climate Security Discourses in the UK, 2007–2020: Risk and Resilience

In this section I identify and analyse two prevalent climate security discourses that have emerged in the UK since 2007 and which reflect in various ways the logics underpinning national, human, and ecological security. The first discourse, which arises from influential UK government ministries, offices, and departments such as (but not limited to) the MoD and FCDO, emphasises climate change as a threat or risk multiplier to global peace and stability. This discourse derives much of its analytical purchase from the climate security research of the 1990s and early 2000s, which identified the knock-on effects of resource scarcity or resource abundance (Homer-Dixon 1994; Fearon 2005; Colgan 2013; Koubi et al. 2013; Ross 2015). These theories either

³ Carter/Jacobs (2014) argue that party politics and the emergence of new policy constituencies following the Stern Report’s emphasis on climate economics also played a key role in building stronger climate action between 2006 and 2010.

foretold a coming age of “resource wars” over dwindling resources or focused on how resource abundance “curses” lead to low economic growth, corruption, and poor governance, all of which threaten the stability of states and regions (Daoudy 2021). The second influential climate security discourse arises from a diverse set of UK actors such as (but not limited to) the former Department for International Development (DFID) and the Met Office, as well as more traditional security actors like the MoD and FCDO, and prioritises resilience and adaptive practices to stabilise countries at risk from combined ecological and societal shifts.

Across both discourses, climate change has been positioned as a novel challenge that does not present an existential threat to the UK directly, but one which has the potential to significantly disrupt its interests, alter the strategic global landscape, and undermine the health and wellbeing of designated vulnerable populations and ecosystems. In this regard, the UK’s approach to climate security has been to emphasise risk-based analyses that encourage strengthening resilience across vulnerable places and populations.

The emphasis on risk and resilience in climate security mirrors a larger “turn” towards those subjects across international and domestic policy-making (Chandler 2014; Zebrowski 2015). Some have argued that risk, “riskification” and resilience might challenge or replace traditional security concepts like “defence” and “protection” (Corry 2014). Others have pointed out that different resilience discourses can emerge in different settings and do not all represent similar understandings and practices related to the concept (Bourbeau 2013; Dunn Cavelty et al. 2015; Ferguson 2019). In the context of UK climate security discourse, risk and resilience have proven malleable enough concepts to be used across a variety of institutions, time periods, and for the protection of different referent security objects (i.e., states, individuals, ecosystems). The two discourses are therefore interlinked, and have been expressed via a number of UK government departments that have important roles in developing and enforcing international policies related to conflict, development and international cooperation. This includes the Foreign, Commonwealth and Development Office, which was created in 2020 through the merger of the Foreign and Commonwealth Office (FCO) and the Department for International Development. Other important government agencies in this regard include the MoD, and the Home Office, which is responsible for immigration and domestic security, including counter-terrorism and law enforcement. Their relationship to climate security will be examined later in Sect. 4, but I will now turn to examining the two chief narratives of UK climate security, locating them within the three different logics of national, human, and ecological security.

14.3.1 Climate Change as a “Threat Multiplier”

One dominant UK climate security discourse emphasises climate change as a threat multiplier. This frame, first originating in the US, has circulated globally since at least 2007, the year climate security emerged as an influential concept, and it continues

to maintain a prominent place in international and UK-specific contexts (Campbell et al. 2007; Center for Naval Analyses 2007; McDonald 2013; UN News 2019). Much like resilience’s malleability, viewing climate change as a threat multiplier allows for a variety of different interventions that cut across different security perceptions and scales. At once it can incorporate national security via a focus on the threat of a potential loss of territory, human security via a focus on increased displacement and disasters, and ecological security via a focus on resource scarcity and ecosystem degradation.

The idea that climate change will intensify or compound existing insecurities has been emphasised in a number of UK ministry reports, public statements, and strategic outlooks, particularly from DFID/FCO and the MoD (Ministry of Defense 2008, 2010; Cabinet Office 2015). It is also displayed via the UK’s historical involvement with multilateral organisations and its belief in their appropriateness for dealing with new risks posed by climate change, particularly for vulnerable states and communities. This latter point is perhaps best evidenced through the UK’s role in championing the need to connect climate change and security in the UN, which has consistently framed climate change as a threat multiplier (UNSC 2007, 2015; UNSG 2009). As mentioned already, the UK’s FCO chaired the first UNSC debate on climate change, energy and security in 2007. This was notable, because at the time it was not yet clear whether the UNSC should be responsible for addressing issues of climate change. The stated rationale put forth in the UK’s letter to the UNSC in 2007 was that climate change posed a potential threat to peace because it would trigger border disputes, migration, and humanitarian crises (UNSC 2007a). UK officials believed that because a global collective effort was needed to transition to a low-carbon world, it made sense to position the UNSC – the preeminent collective security institution – as a key player. Margaret Beckett, representing the UK delegation in the debate said that “the United Kingdom proposed this debate during our presidency, because we felt that by facing up to the implications of climate change for that collective security, the world will take wiser decisions as we begin to build a low-carbon global economy” (UNSC 2007a).

During this period, a variety of other government documents and statements positioned climate change as an inter-connected driver of insecurity and a potential source of conflict. In 2008, David Miliband, the UK Foreign Secretary, produced a joint statement with his German counterpart, the Foreign Minister Frank-Walter Steinmeier, which characterised climate change as a “stress multiplier” that “will reshape the geopolitics of the world...with important consequences for peace and security.” What is needed, they continued, is a “clear foreign and security policy response” (Miliband/Steinmeier 2008). The 2008 National Security Strategy, published under the Labour government of Gordon Brown, referred to climate change as “potentially the greatest challenge to global stability and security, and therefore to national security” (Cabinet Office 2009: 19). The 2009 Update (also under a Labour government) claimed that “from a security perspective, it is important to act now to reduce the scale of climate change by mitigation, such as emissions reduction, and by being able to adapt to climate change that is now already unavoidable” (Cabinet Office 2009: 9). The first National Security Strategy published under a Conservative-led

government, in 2010, was less focused on climate change, mentioning it only eight times (compared to thirty-four in the 2008 National Security Strategy). It framed the issue by saying, “the physical effects of climate change are likely to become increasingly significant as a ‘risk multiplier’, exacerbating existing tensions around the world” (Cabinet Office 2010: 17). The consistent characterisation of climate change as a threat, stress, or risk multiplier across different governments and over time indicates the term’s salience within UK security circles. In so doing, climate security is positioned primarily as an important part of the national security agenda, one which requires active responses to build up resilience and adaptive capacities in regions characterised by instability and vulnerability.

14.3.2 Climate Security and the Building of Resilience

The second prominent approach – that climate change requires the building of resilience and adaptive practices to stabilise countries at risk from combined ecological and societal shifts – is intimately tied to the discourse on threat multipliers. Across the 2007–2021 period, climate security as resilience-building was highlighted by a range of UK government departments and ministries. Until recently, the discourse was largely attached to states in the Global South deemed vulnerable, though recent shifts have seen resilience pointed inwards at the UK’s domestic security apparatus and in the defence forces’ operational capabilities (Ministry of Defense 2021). Overall, the discourse of building security through resilience was promoted by DFID (now folded into the FCDO), which was responsible for the release of aid and development funds. The country’s International Development Act (2015) required that government expenditure in overseas aid be at least 0.7% of UK Gross National Income. In 2021 the UK government announced it would reduce this contribution to 0.5% “temporarily” as it recovers from the COVID-19 pandemic (UK House of Commons Library 2021). The primary mechanism by which climate security is linked to development and aid is via the country’s International Climate Finance fund. This committed £3.87bn over the 2011–2016 period and £5.8bn between 2016 and 2021. The fund was managed by the Department for International Development (now FCDO), the Department for Business, Energy, and Industrial Strategy (DBEIS), and the Department for Environment, Food & Rural Affairs (DEFRA), and aims to “deliver the national interest” by delivering all four aims of the UK aid strategy:

- strengthening global peace, security and governance
- strengthening resilience and response to crises
- promoting global prosperity
- tackling extreme poverty and helping the world’s most vulnerable (HM Government 2018).

The financial aid programmes have provided vulnerable countries with funds to increase their development, resilience, and adaptation in the face of climate risks. For example, in October 2019, at the UNSG Climate Summit, the UK pledged to

double its funding to tackle climate change through overseas development aid to £11.6 billion over the next five years (Department for Business 2019). However, in a Parliamentary report that same year, the International Development Committee released a critical cross-party report that called on the government to accept the fact that climate change is an urgent and existential threat and to understand that “climate change cuts across everything. The effectiveness of all UK aid spending is dependent on whether the international community rapidly and effectively combats the causes and impacts of climate change” (UK House of Commons International Development Committee 2019). It called for UK aid to be made “climate compatible” in a variety of ways:

- maintaining a floor budget of £1.76 billion per year for climate financing;
- organising aid around poverty reduction and “climate justice” initiatives;
- long-term funding cycles;
- aid should be consistent with reaching net zero emissions and climate resilience;
- no aid should be provided for fossil fuels unless it is part of a transition away from fossil fuels and in support of a strategy to pursue net zero emissions by 2050; and
- climate change should be integrated as a priority in all strategies and adopted as a key consideration in all spending decisions (UK House of Commons International Development Committee 2019).

It is notable that DFID largely avoided directly linking climate security with conflict due to a perceived lack of empirical evidence. Instead, they chose to focus their climate security work on issues of human rights and political economy (Boas/Rothe 2016). That said, resilience thinking, particularly building the adaptive capacities of developing and vulnerable states, has been used to frame climate security internationally. Indeed, the UK’s hosting of an open debate in the UNSC on 23 February 2021 titled, “Addressing climate-related security risks to international peace and security through mitigation and resilience building” confirms this trend. Resilience and the “risk/stress/threat multiplier” frames are interlinked in many ways, and they offer both traditional and non-traditional security actors an opportunity to position climate change within their remit.

The next section details the different security perceptions used in the UK around climate change and their impacts. It points to the various actors, institutions, and security perceptions which have been employed and suggests that national and human security perceptions have been dominant.

14.4 The Political Impact of Climate Security: Perceptions and Institutions

The UK’s perception of climate security connects roughly to logics of international and human security rather than national or ecological security. This has most readily been seen through its framing of climate change as a threat multiplier that requires

the building of greater resilience in places deemed particularly vulnerable, most notably in the Global South. In this regard the UK, while one of the most vociferous supporters of climate security discourse, accords broadly with other large, developed Western states. This section will examine how certain sectors of the UK policy establishment, across both domestic and international portfolios, have advanced these approaches. In particular, it focuses on the UK's actions within the UN system, as well as its diplomatic, defence, and developmental sectors, all of which have constructed climate security policy and discourse as a matter of building resilience in the face of widespread risk.

14.4.1 UNSC

Following the inaugural climate security meeting in the UNSC in 2007, the UNSC chose not to adopt a resolution – but the topic would be debated again in 2011 at the behest of Germany. That year, as in 2007, the UK, along with countries like the US and Small Island Developing States, argued that the UNSC had the responsibility to act because climate change was a “threat multiplier” and part of a wave of new cross-cutting security challenges (UNSC 2011). The UK argued during the debate that there were three key areas that needed urgent attention: the need for a comprehensive and binding climate change treaty; a better understanding of the connections between climate change and conflict; and a better sharing of data and analysis across UN departments already considering issues related to climate change. In his speech to the Council, then UK Permanent Representative Mark Lyall Grant argued, “as food, water, energy and climate security are interlinked, they demand a coordinated response” (UNSC 2011).

Since then, the UK has been a key actor, together with European allies like Germany, France, Sweden, and the European Council, in continuing the discussion on climate change and security in the UNSC (Harris 2012). Indeed, since 2018 alone, the Council has had five meetings that focused on climate and security. Because climate change is not a formal agenda item for the UNSC, which would require a periodic reporting cycle, it can only be discussed when the rotating Council president deems it important enough to include it in their discretionary event agendas (Security Council Report 2021). Across these meetings, the UK has continued to advocate in favour of a strong and unified UNSC response (Planetary Security Initiative 2018). In 2018 it joined 26 other nations to form the Group of Friends on Climate and Security with the aim of enhancing actions on climate-related security risks within the United Nations system. Across 2019–2020 the UK supported German efforts to highlight climate security in the Council and establish a more robust and consistent response via a climate security resolution, which would include the appointment of Special Representative on Climate and Security, include Climate and Security advisors on UN missions, and establish a reporting cycle that would update the Council on the security implications of climate change. That resolution could not overcome the intransigence of China, Russia, and the US and thus was shelved (Security Council

Report 2021). Following this, as previously mentioned, in February 2021 the UK hosted an open debate in the UNSC. Prime Minister Johnson addressed the delegates and proclaimed climate change as a threat to collective security and the security of nations. He declared, “...climate change is a geopolitical issue every bit as much as it is an environmental one” (UNSC 2021).

In addition to debates and discussions in the UNSC, the UK supported (the votes were unanimous in the UNSC) the adoption of two significant regionally-focused UNSC resolutions that reaffirmed climate change as a driver of social instability. Resolution 2349 was adopted in 2017 and noted the alarming shrinking of Lake Chad and its consequences for instability in the Sahel Region (UNSC 2017). UNSC Resolution 2408 was adopted in 2018 and recognised the negative effects of climate change (amongst other things) on the stability of Somalia and the need for adequate risk assessments and risk management strategies (UNSC 2018). Both resolutions tied climate security to a specific geographical context, moving away from the subject’s traditional framing as hypothetical or future-oriented. This is a development worth noting, and the UK’s support of it indicates movement to tie climate change more concretely with national security effects.

In the 2019 UNSC Open Debate on Climate Security, Lord Ahmad of Wimbledon (Minister for the Commonwealth, UN and South Asia), outlined the current UK position on climate security. He claimed that climate change is a contemporary risk that threatens the world and therefore requires shared solutions. Hence, the UK reaffirmed its commitment to the Paris Agreement, a “vital-pillar of the rules-based international system”. Lord Ahmad outlined 3 important ways the UN could strengthen its approach to climate security:

1. Make better use of climate-risk data.
2. Consider all risks (including climate-related risk) in a holistic way and when planning and implementing solutions to peace and security issues. All development, peacebuilding, and humanitarian work requires acknowledgement and integration of climate-related security risks on the ground.
3. Invest in resilience (Foreign and Commonwealth Office 2019).

Compared to similar statements made in 2011, we can see a slight progression in the UK’s outlook. In particular, it seems to align closely with other UK departmental emphases on risk, resilience, and adaptation (Boas/Rothe 2016). Indeed, the UK made a number of commitments related to the concepts during the 2019 UNSG Climate Summit. Together with Egypt, the UK launched the “Resilience and Adaptation Call for Action”, which responds to immediate climate impacts to support the most vulnerable members of society and builds resilient futures by putting climate risk at the centre of decision making (UNSG 2019). It also co-convenes the financial sector-led Coalition for Climate Resilient Investment, which seeks to integrate climate risks into infrastructural investment decisions (Coalition for Climate Resilient Investment 2022). By developing a standardised approach to assessing, integrating, and pricing climate risks, the goal is to incentivise resilient infrastructure investments and support climate-vulnerable geographies in attracting investment and preventing capital flight.

The emphasis on resilience underscores an approach to climate security that is primarily risk-based and focused on managing long-term developments that could develop into tangible threats. It underscores a more complex understanding of security, away from standard friend-enemy binaries and towards preparedness and precaution across UK government departments and partnered institutions (Ferguson 2019: 110–11). The next section outlines the most significant UK government portfolios that are involved in constructing this dominant approach to UK climate security: diplomacy, development, and defence.

14.4.2 Climate Security Actors in the UK Government: Diplomacy, Development, and Defence

14.4.2.1 Climate Security in the Diplomatic and Development Wings

Between 2007 and 2020 the Foreign and Commonwealth Office (FCO) was the preeminent government department linking climate change with national and international security. In September 2020 the FCO merged with the Department for International Development (DFID) to form the Foreign, Commonwealth and Development Office (FCDO). In particular, the diplomatic wing of the UK government has played an important role in constructing climate security as a matter that fits comfortably within national and international security frameworks but which requires a whole-of-government response. It was the FCO that “thought of the idea to hold a debate on the topic of climate change (including climate migration) in the UN Security Council in 2007 and pushed for it to happen, both domestically and internationally” (Warner/Boas 2017, 208).

The FCO’s pursuit of diplomatic influence in the climate security space has meant that it has utilised its embassies, diplomatic envoys and special representatives to advance its work. These latter positions are generally public-facing and are staffed by FCO officials. Indeed, in 2009 the UK became one of the first countries to create the position of Climate and Energy Security Envoy, which was held by Rear Admiral Neil Morisetti until 2012. The objectives of the Envoy role were:

- To broaden and deepen debate on the security implications of climate change in priority countries in order to provide key political leaders with additional sets of arguments to factor into national security thinking.
- To persuade security and defence communities of the need to understand the risks and address the consequences of climate and resource insecurity on regional and global stability.
- To embed understanding of climate security across the MOD and Whitehall to inform decisions on adaptation and mitigation (Institute for Environmental Security n.d.).

The appointment was cross-funded by the MoD, FCO and the then Department of Energy & Climate Change (which dissolved into DBEIS in 2016). The appointment of Morisetti reflected the belief that a senior military officer was likely to achieve a higher level of access and influence within security communities than a diplomat, particularly in priority countries such as the US (Institute for Environmental Security Nd).⁴ As von Lucke (2018: 425–426) shows, during this period, the UK diplomatic corps used various events and partnerships with local actors, as well as UK think tanks like RUSI and E3G, to establish climate security as a global issue, including by linking local development concerns to it. No successor was appointed to Admiral Morisetti in 2012, but Morisetti did go on to assume the role of Foreign Secretary’s Special Representative for Climate Change in 2013, which operated out of the FCO and helped lead international climate negotiations. Currently, Nick Bridge occupies the Foreign and Development Secretary’s Special Representative position.

The UK Foreign Office has repeatedly stressed that climate security requires urgent attention at all levels of government in order to build resilience, strengthen adaptive practices, and reduce risk. For instance, in 2019, Mark Field, Foreign and Commonwealth Minister of State for Asia and the Pacific, highlighted the importance of factoring the risks of climate change into all governmental decision-making at the Berlin Climate and Security Conference. Speaking before the conference, Minister Field said, “...Climate security must be at the heart of foreign policy work at a global level” (Foreign and Commonwealth Office 2019a). Despite the securitising rhetoric, in 2018 the FCO reduced the size of its climate diplomacy corps from 72 to 55 employees. In oral evidence to the House of Commons in 2018, the FCO was criticised by former official Nick Mabey (now CEO of think tank E3G) for cutting climate diplomacy resources:

The cuts in the Foreign Office and in the network that I helped to set up 15 years ago are more worrying. Everybody else is cut too—the Germans, the French, the Americans, obviously, and the Chinese have not increased. Given the depth of this problem, we are lacking diplomatic capacity overall. The UK is still the leader, but it is declining. It is not enough (UK House of Commons International Development Committee 2019).

He continued:

rebooting our climate diplomatic service and working with others to do that and to increase capacity is necessary to deliver the development agenda. So much of this is about decisions at the top level, which are linked to trade, investment and other relationships. They can’t just be dealt with through money or bottom-up technical expertise. That is why we need a good diplomatic service (UK House of Commons International Development Committee 2019).

⁴ Similar reasoning has been employed by US-based think tanks active in the climate security space, including the CNA, which convenes a Military Advisory Board (MAB), and the Center for Climate and Security, whose Advisory Board is largely comprised of retired US military personnel. Close connections between the US and UK on this strategy are evident. For an example, see Center for Climate and Security, “Climate Security Q&A with Admiral Titley and Admiral Morisetti,” Center for Climate and Security; at: <https://climateandsecurity.org/2014/11/climate-security-qa-with-admiral-titley-and-admiral-morisetti/>.

As mentioned above, in 2020 the FCO merged with DFID to form FCDO. DFID had, until then, been the government department most responsible for advancing the human security dimensions of climate security. DFID consistently focused on vulnerability, the rights of individuals whose lives and livelihoods would be affected by climate change, and even the potential benefits that might accrue for some communities (Harris 2012: 15). This line of reasoning was employed instead of focusing on the potential for triggering violent conflict and destabilising migration patterns. Perhaps the most significant way they translated this into action was through leading the International Climate Fund, which was allocated £2.9bn from the UK's Official Development Assistance between 2011 and 2015 for adaptation, low carbon development, and forestry projects in the developing world. The ICF was replaced with a new International Climate Finance programme in 2015, which was administered by three government departments (DFID, BEIS and DEFRA) and saw its allocation increase to £5.8bn between 2016 and 2021 (HM Government 2018). The emphasis on human security is unsurprising, given DFID's responsibility for formulating international development priorities and dispensing overseas development.

With the former foreign and development offices now merged into one FCDO, it remains to be seen how this will affect UK climate security discourse in the short and long terms. On the one hand, climate change will almost certainly be retained as one of the department's top priorities. On the other hand, what shape it takes through discourse and how it translates into specific security actions can only be speculated on at this point. There are some hints that the UK views climate security as a potential leverage point for global influence across multiple issues. The country's hosting of COP26 in 2021 entailed a full-scale diplomatic push by the UK FCDO to position itself as an important player in the global climate space. However, the middling outcomes of COP26, including the unambitious Glasgow Climate Pact, have been viewed as barely acceptable by many influential climate change observers (UK House of Commons Library 2022). This, together with an avowed commitment to global health priorities in response to the COVID-19 pandemic, means that while the FCDO merger will lead to significant spending cuts in overall development spending, climate security will increase in salience and traditional and human security narratives will continue to proliferate.

14.4.2.2 Climate Security in the Defence Wing

This section details how the UK defence sector has approached and framed climate security since 2007. Compared to the diplomatic and development sectors, the UK defence sector has historically been less involved in the climate security space. This trend seems to align with other European democracies, whose militaries have only belatedly begun to centre climate change as a strategic priority. This again demonstrates the dominance of international and human security discourses over traditional national security when it comes to climate change. When the defence sector has acknowledged climate security, it has done so largely in ways that complement the work of UK diplomatic and development circles, emphasising resilience and the building of adaptive capacities in the Global South. Some shifts have occurred during

this period, notably between 2007 and 2010, when a new Conservative-led government took power, and in 2021 when the MoD released its long-awaited *Integrated Review*, which sets the national security and foreign policy priorities to 2025.

The 2008 National Security Strategy, published under a Labour-led government, did refer to climate change as “potentially the greatest challenge to global stability and security, and therefore to national security” (Cabinet Office 2009: 18). The 2009 Update (also under a Labour government) claimed that “from a security perspective, it is important to act now to reduce the scale of climate change by mitigation, such as emissions reduction, and by being able to adapt to climate change that is now already unavoidable” (Cabinet Office 2009: 8). However, the first National Security Strategy published under a Conservative-led government, in 2010, mentioned climate change only eight times (compared to thirty-four in the 2008 National Security Strategy). It framed the issue in more muted terms saying, “the physical effects of climate change are likely to become increasingly significant as a ‘risk multiplier’, exacerbating existing tensions around the world (Cabinet Office 2010: 17). The UK 2015 National Security Strategy still did not frame climate change as one of the military’s top priorities (Cabinet Office 2015). Instead, it dedicated a section to “tackling conflict and building stability overseas”, with climate change as one component. The 2018 NSCR added a new priority that exists peripherally to climate change: diseases and natural hazards affecting the UK.

In 2010 and 2012 the MoD did release climate change strategies, which argued that climate change would affect the UK’s interests, “both at home through increased migration, and abroad as climate change acts as a threat multiplier, destabilising areas of the world that are of strategic importance to the UK” (Ministry of Defense 2010: 12). However, climate change more recently has been framed primarily as a challenge for the MoD as an institution within the government, rather than a preeminent national security threat or priority. The MoD’s current website (tellingly it has not been updated since 2017) details its views on climate change: “for the MOD, the effects of climate change pose real threats to defence’s ability to meet its strategic objectives. Priorities for consideration include:

- the type, frequency and location of operations that the MOD might be involved in as a result of climate change
- availability and cost of energy, products and services the MOD requires in order to operate in the future
- the role of the MOD in cooperating with other government departments to identify and understand the global impact of climate change and its impact on the UK (Ministry of Defense 2017).

The MoD’s approach to climate security has moved in two directions. The first is to acknowledge the need for the military to “green” its estate. This is meant to ensure it abides by government pledges to reduce greenhouse gas (GHG) emissions. This aligns with its inward institutional focus. The second direction comes from its publishing of strategic outlooks that project future scenarios. Indeed, since at least 2007, its Global Strategic Trends report, written by the MoD’s in-house think tank, the Development, Concepts and Doctrine Centre, forecasts the effects of climate change

using alarmist language. Its 2018 report identifies climate and related risks which are listed among the highest-impact and most certain threats to defence (Ministry of Defense 2018).

In February 2020, Lt. Gen. Richard Nugee was appointed to lead the MoD's new climate change strategy, titled *Climate Change and Sustainability Strategic Approach*. The document's purpose is to offer a clear vision of what the sector should do, rather than what it will or can do. It is nonetheless highly instructive and demonstrates a potentially important shift in the defence establishment's view of climate security. The announcement of Lt. Gen Nugee appointment in 2020 seemed to outline the MoD's strategic outlook: "the need to be prepared to operate more often in the Arctic region as ice sheets recede and Russian submarine activity increases; our forces are increasingly called upon to assist with natural disasters across the globe; and they need to be able to operate in environments that will and are experiencing more extreme weather patterns" (Ministry of Defense 2020). The document itself, released in March 2021, offered a broader perspective on the defence sector's approach to climate change (Ministry of Defense 2021). It of course acknowledged that the MoD would take the lead "in response to the emerging

geopolitical and conflict-related threats exacerbated by climate change" (Ministry of Defense 2021: 8). However, it supplemented this traditional security analysis with a commitment for the military to lead the government in reaching its net zero 2050 target by investing heavily in new technologies, particularly in power generation, and adopting net zero targets for future estate investments. As others have suggested, this whole-of-government approach may serve to legitimate strategic resilience – a way to preserve influence and shape discourse on non-traditional security matters (Ferguson 2019: 112). The MoD even appropriated the discourse on the Anthropocene in its *Climate Change and Sustainability Strategic Approach* by labelling its route to achieving its ambitions as "an epoch by epoch approach", splitting up the stages of its implementation into five to ten year "epochs." Further evidence of the widening of its approach to climate security was its explicit acknowledgment of the defence sector's impact on the environment through its built and rural estate holdings. It outlined a commitment to setting net-zero standards for its new buildings, and it claimed it will pursue new land management strategies that focus on enhancing biodiversity across the Defence estate. All of these initiatives and commitments contrasted with previous MoD sustainability reports which offered vague assurances of sustainability without explicitly acknowledging or engaging with the complexity of the climate crisis (Ministry of Defense 2015). The 2021 report explicitly acknowledged that its broad interpretation of climate security will help the military better achieve its future objectives, rather than being something which might compromise them: "Done right, this will improve how we meet the defence and security challenges of the future" (Ministry of Defense 2021: 6).

The MoD's 2021 *Climate Change and Sustainability Strategic Approach* should be read in tandem with the UK Government's primary strategic outlook document, the *Integrated Review*, also released in early 2021. The document, *Global Britain in a Competitive Age, the Integrated Review of Security, Defence, Development and Foreign Policy*, sets out the government's broad vision for the country's global policy

outlook for the next decade and lays out its strategic action plans up to 2025. In terms of climate security, it represents an unprecedented escalation and a shift in tone. Indeed, it positioned addressing climate change and biodiversity loss as its top global priority (Cabinet Office 2021). This escalation is partly due to a larger modification of the UK’s global outlook, as it pulls back from preserving a Cold War era, rules-based international system. According to the *Integrated Review*, the world is now “more fragmented, characterised by intensifying competition between states over interests, norms and values. A defence of the status quo is no longer sufficient for the decade ahead” (Cabinet Office 2021: 11).

The document foregrounds this geopolitical shift by labelling climate change and biodiversity loss not as “threat multipliers” (that term is absent from the document) but as long-term, transnational challenges that, “if left unchecked threaten the future of humanity” (Cabinet Office 2021: 19). The discourse shift in the *Integrated Review* moves the UK closer to a form of ecological security, particularly in its focus on existential threats from environmental change and labelling biodiversity loss as a top strategic priority. It explicitly recognises that the world’s land surface and oceans have been significantly altered and degraded by human activity and holds species extinction as a threat. It also acknowledges the complexity of ecological security, noting that “it is not possible to predict or prevent every risk” (Cabinet Office 2021: 18). In so doing, it counters the traditional securitised frame for climate change and biodiversity loss, but it also allows for the defence sector to avoid being tasked with solving the causes of insecurity using resources and expertise which it lacks.

The 2021 *Integrated Review* signals the first time that ecological security perceptions have been advanced in prominent UK security outlooks. That said, there also remains a deep attachment to previously accentuated international and human security logics. In the section “transnational challenges” the *Integrated Review* explains that extreme weather patterns from climate change “can amplify displacement and migration – increasing food and water insecurity” (Cabinet Office 2021: 31). Further, it claims that natural habitat loss will contribute to poverty, instability, and migration (Cabinet Office 2021: 31). It says that all overseas aid will align to the Paris Agreement because it reflects a commitment to “tackling climate change and its effects as a driver of future instability and poverty” (Cabinet Office 2021: 46). This only lightly deviates from the threat multiplier frame so readily highlighted in past documents. The review also lacks mention of forms of global climate justice and the rights of non-humans, two key components of an ecological security narrative (McDonald 2018).

Overall, the UK’s defence sector has historically played a less prominent role than its diplomatic and development sectors in constructing climate security frames in the country. This might possibly explain the relative lack of national security frames and the dominance of international and human security frames. With the publication of the 2021 *Integrated Review* and its identification of addressing climate change and biodiversity loss as the country’s most pressing priority, the defence sector will likely grow into a much more prominent player, the effects of which will not be known for some time.

14.5 Conclusion

Boris Johnson, the UK Prime Minister, framed the issue of climate security in decorative terms when he opened the UNSC debate in 2021: “I know there are people around the world who will say this is all kind of ‘green stuff’ from a bunch of tree-hugging tofu munchers and not suited to international diplomacy and international politics. I could not disagree more profoundly” (UNSC 2021). Since at least 2007 – when the country initiated the first debate on the subject in the UNSC – the UK has consistently highlighted climate change as a risk to peace and security. It has done so in a variety of multilateral governance forums, most notably the UNSC, but also through its international aid programs such as the UK International Climate Change Fund, which was rebranded in 2016 as the International Climate Finance program (HM Government 2018). Historically, the UK government departments most responsible for advancing climate security have been the FCO and DFID (now combined into one department, the FCDO). Additionally, a number of prominent NGOs and think tanks such as E3G, RUSI, and International Alert also helped influence the rise of climate security discourse over the past decade and a half (Boas/Rothe 2016: 620). Despite policy action lagging behind the high-minded rhetoric (e.g. recent cuts to the international development budget and the reduction of its climate diplomacy team), climate security has been accepted by the UK as an important and pressing global policy issue.

This chapter has offered one of the first extended case studies of UK climate security discourse (Boas/Rothe 2016; Peters et al. 2019; Peters 2018). It has argued that the UK climate security discourse can be characterised by two interrelated approaches: the first is the view that climate change is a “threat multiplier” which exacerbates and accelerates existing societal tensions, especially in vulnerable places. This coheres with other large, Western democracies that have advanced the threat or risk multiplier concept, such as the United States (Center for Naval Analyses 2007; Abrahams 2019). The second characteristic of UK climate security discourse is its continued insistence on the need for interventions that build “resilience” both at home and abroad. Part of the explanation for these two approaches may be the uncertainties around climate change impacts across the short, medium and long term, and a shift towards broader risk management as a dominant form of governance (Corry 2012). More concretely, it might also be explained by the relative absence of the UK defence sector in framing climate security.

The period between 2007 and 2020 saw UK climate security discourse solidify rather than experience extensive periods of upheaval or rearticulation. However, there are important signs that suggest UK climate security practices and discourse may be shifting. In many ways, 2021 may represent a watershed year for climate security in the country. The UK began the year by organising a high-level meeting on climate security at the UN, with Prime Minister Boris Johnson chairing the proceedings. The UK also co-hosted the COP26 meeting in Glasgow in November 2021, which elevated UK global leadership on climate policy, despite its mixed success. Finally, with its 2021 *Integrated Review*, and with the MoD’s *Climate Change and Sustainability*

Strategic Approach, the country has centred climate change and biodiversity loss as the preeminent global issue going forward. All told, there are signs that an ecological security discourse is emerging that challenges the historic focus on climate change as an accelerator of traditional security threats, or as a threat to individual well-being in vulnerable states of the Global South. While the ecological security discourse remains marginal in terms of its policy purchase, climate security more broadly has been elevated into the top echelons of government power and diffused across new discourse coalitions that include influential NGOs, think tanks, and protest groups like Extinction Rebellion. This may create the conditions for new articulations of climate security that are better prepared for Anthropocene conditions and that confound and challenge status-quo security thinking.

References

- Abrahams, Daniel, 2019: “From Discourse to Policy: Us Policy Communities’ Perceptions of and Approaches to Climate Change and Security”, in: *Conflict, Security & Development*, 19,4: 323–45.
- Boas, Ingrid; Rothe, Delf, 2016: “From Conflict to Resilience? Explaining Recent Changes in Climate Security Discourse and Practice”, in: *Environmental Politics*, 25,4: 613–32.
- Bourbeau, Philippe, 2013: “Resiliencism: Premises and Promises in Securitisation Research”, in: *Resilience*, 1,1: 3–17.
- Buzan, Barry; Wæver, Ole; de Wilde, Jaap, 1998: *Security: A New Framework for Analysis* (Boulder, CO: Lynne Rienner).
- Cabinet Office, 2009: *The National Security Strategy of the United Kingdom: Update 2009: Security for the Next Generation* (London: The Stationery Office, Office of Public Sector Information); at: <https://www.gov.uk/government/publications/the-national-security-strategy-of-the-uk-update-2009>.
- Cabinet Office, 2010: *A Strong Britain in an Age of Uncertainty: The National Security Strategy* (London: The Stationery Office, Office of Public Sector Information); at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/61936/national-security-strategy.pdf.
- Cabinet Office, 2015: *The National Security Strategy and Strategic Defence and Security Review 2015* (London: The Stationery Office, Office of Public Sector Information); at: <https://www.gov.uk/government/publications/national-security-strategy-and-strategic-defence-and-security-review-2015>.
- Cabinet Office, 2021: *Global Britain in a Competitive Age, the Integrated Review of Security, Defence, Development and Foreign Policy* (London: The Stationery Office); at: <https://www.gov.uk/government/collections/the-integrated-review-2021>.
- Campbell, Kurt M; et al., 2007: “The Age of Consequences: The Foreign Policy and National Security Implications of Global Climate Change” (Washington, D.C.: Center for Strategic and International Studies); at: <https://apps.dtic.mil/sti/pdfs/ADA473826.pdf>.
- Carter, Neil; Jacobs, Michael, 2014: “Explaining Radical Policy Change: The Case of Climate Change and Energy Policy under the British Labour Government 2006–10”, in: *Public Administration*, 92,1: 125–41.
- Center for Climate and Security, 2014: “Climate Security Q&A with Admiral Tittley and Admiral Morisetti” (Washington: Center for Climate and Security); at: <https://climateandsecurity.org/2014/11/climate-security-qa-with-admiral-tittley-and-admiral-morisetti/>.

- Center for Naval Analyses, 2007: *National Security and the Threat of Climate Change* (Washington, D.C.; Center for Naval Analyses§); at: <https://www.cna.org/reports/2007/national-security-and-the-threat-of-climate-change>.
- Chandler, David, 2014: *Resilience: The Governance of Complexity* (London: Routledge).
- Colgan, Jeff D., 2013: *Petro-Aggression: When Oil Causes War* (New York: Cambridge University Press).
- Corry, Olaf, 2012: “Securitisation and ‘Riskification’: Second-Order Security and the Politics of Climate Change”, in: *Millennium—Journal of International Studies*, 40,2: 235–58.
- Corry, Olaf, 2014: “From Defense to Resilience: Environmental Security Beyond Neo-Liberalism”, in: *International Political Sociology*, 8,3: 256–74.
- Daoudy, Marwa, 2021: “Rethinking the Climate–Conflict Nexus: A Human–Environmental–Climate Security Approach”, in: *Global Environmental Politics*, 21,3: 4–25.
- DEFRA, 2005: “Securing the Future-UK Government Sustainable Development Strategy” (London: DEFRA); at: https://www.sd-commission.org.uk/data/files/publications/SecFut_complete.pdf.
- Department for Business, Energy & Industrial Strategy, 2019: “Press Release Uk Aid to Double Efforts to Tackle Climate Change”; at: <https://www.gov.uk/government/news/uk-aid-to-double-efforts-to-tackle-climate-change>.
- Diez, Thomas; von Lucke, Franziskus; Wellmann, Zehra, 2016: *The Securitisation of Climate Change: Actors, Processes and Consequences* (London: Routledge).
- Dunn Cavelty, Myriam; Kaufmann, Mareile; Sjøby Kristensen, Kristian, 2015: “Resilience and (in)Security: Practices, Subjects, Temporalities”, in: *Security Dialogue*, 46,1: 3–14.
- Fearon, James D., 2005: “Primary Commodity Exports and Civil War”, in: *Journal of Conflict Resolution*, 49,4: 483–507.
- Ferguson, Peter, 2019: “Discourses of Resilience in the Climate Security Debate”, in: *Global Environmental Politics*, 19,2: 104–26.
- Foreign and Commonwealth Office, 2019: “Climate Change as a Security Risk: Lord Ahmad’s Statement to the UN Security Council” (New York: UN Security Council); at: <https://www.gov.uk/government/speeches/climate-change-as-a-security-risk>.
- Foreign and Commonwealth Office, 2019a: “Press Release: Global Peace and Stability Depend on Climate Security” (Berlin Climate and Security Conference); at: <https://www.gov.uk/government/news/global-peace-and-stability-depend-on-climate-security>.
- Harris, Katie, 2012: “Climate Change in UK Security Policy: Implications for Development Assistance? ODI Working Paper 342” (London: Overseas Development Institute); at: <https://odi.org/en/publications/climate-change-in-uk-security-policy-implications-for-development-assistance/>.
- HM Government, 2018: “International Climate Finance”; at: <https://www.gov.uk/guidance/international-climate-finance>.
- Homer-Dixon, Thomas F., 1994: “Environmental Scarcities and Violent Conflict: Evidence from Cases”, in: *International Security*, 19,1: 5–40.
- Institute for Environmental Security, Nd: “Climate & Energy Security Envoy (CESE) – the UK Experience”; at: https://static.s123-cdn-static-d.com/uploads/2385729/normal_5e4fdd04d69d1.pdf.
- International Institute for Strategic Studies, 2007: *Strategic Survey* (London: Routledge).
- Koubi, Vally; Spilker, Gabriele; Böhmelt, Tobias; Bernauer, Thomas, 2013: “Do Natural Resources Matter for Interstate and Intrastate Armed Conflict?”, in: *Journal of Peace Research*, 51,2: 227–43.
- McDonald, Matt, 2013: “Discourses of Climate Security”, in: *Political Geography*, 33 (March): 42–51.
- McDonald, Matt, 2018: “Climate Change and Security: Towards Ecological Security?”, in: *International Theory*, 10,2: 153–80.
- Miliband, D.; Steinmeier, F.W., 2008: “Europe Has to Rise to the Security Challenges of Climate Change”, in: *Climate Diplomacy*; at: <https://library.ecc-platform.org/news/europe-has-rise-security-challenges-climate-change>.
- Ministry of Defense, 2008: “Sustainable Development Action Plan 2008” (London: MOD).
- Ministry of Defense, 2010: *Climate Change Strategy 2010* (London: MoD).

- Ministry of Defense, 2015: “Sustainable Mod Strategy Act & Evolve 2015–2025”; at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/498482/Sustainable_MOD_Strategy_2015-2025.pdf.
- Ministry of Defense, 2017: “Defence Infrastructure Organisation Estate and Sustainable Development”; at: <https://www.gov.uk/guidance/defence-infrastructure-organisation-estate-and-sustainable-development#mod-climate-change-strategy>.
- Ministry of Defense, 2018: “Global Strategic Trends: The Future Starts Today” (Shrivenham, UK: Defence Doctrine and Concepts Centre); at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1065623/20181008-dcdc_futures_GST_future_starts_today.pdf.
- Ministry of Defense, 2020: “Lt Gen Richard Nugee to Lead Mod’s Climate Change Policy”; at: <https://www.gov.uk/government/news/lt-gen-richard-nugee-to-lead-mods-climate-change-policy>.
- Ministry of Defense, 2021: “Climate Change and Sustainability Strategic Approach”; at: <https://www.gov.uk/government/publications/ministry-of-defence-climate-change-and-sustainability-strategic-approach>.
- Neal, A.W., 2019: *Security as Politics: Beyond the State of Exception* (Edinburgh: Edinburgh University Press).
- Oels, Angela, 2013: “Rendering Climate Change Governable by Risk: From Probability to Contingency”, in: *Geoforum*, 45: 17–29.
- Parsons, Laurie, 2021: “Climate Migration and the UK”, in: *Journal of the British Academy*, 9: 3–26.
- Peters, Katie, 2018: “Disasters, Climate Change, and Securitisation: The United Nations Security Council and the United Kingdom’s Security Policy”, in: *Disasters*, 42,S2: S196–S214.
- Peters, K.; et al., 2019: “Climate Change, Conflict and Security Scan: April – July 2018” (London: Overseas Development Institute); in: <https://cdn.odi.org/media/documents/12659.pdf>.
- Planetary Security Initiative, 2018: “Where the World Stands on Climate Security? A Summary of the UNSC Debate”; at: <https://www.planetarysecurityinitiative.org/news/where-world-stands-climate-security-summary-uns-c-debate>.
- Ross, Michael L., 2015: “What Have We Learned About the Resource Curse?”, in: *Annual Review of Political Science*, 18: 239–59.
- Security Council Report, 2021: “The UN Security Council and Climate Change” (New York: UN Security Council); at: https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/climate_security_2021.pdf.
- Sikorsky, E., 2021: “Security Highlights from the Leaders Summit on Climate” (Washington: The Center for Climate and Security); at: <https://climateandsecurity.org/2021/05/security-highlights-from-the-leaders-summit-on-climate/>.
- Stern, Nicholas 2007: *The Economics of Climate Change: The Stern Review* (Cambridge University Press).
- Thatcher, M., 1989: “Speech to United Nations General Assembly” (New York: United Nations); at: <http://www.margaretthatcher.org/document/107817>.
- UK House of Commons International Development Committee, 2019: “UK Aid for Combating Climate Change Eleventh Report of Session 2017–19”; at: <https://publications.parliament.uk/pa/cm201719/cmselect/cmintdev/1432/1432.pdf>.
- UK House of Commons Library, 2020: “Brief Guide to Previous British Defence Reviews” (London: House of Commons); at: <https://commonslibrary.parliament.uk/research-briefings/cbp-7313/>.
- UK House of Commons Library, 2021: “Reducing the UK’s Aid Spending in 2021” (London: House of Commons); at: <https://commonslibrary.parliament.uk/research-briefings/cbp-9224/>.
- UK House of Commons Library, 2022: “What Were the Outcomes of Cop26?”; at: <https://commonslibrary.parliament.uk/what-were-the-outcomes-of-cop26/>.
- UN News, 2019: “Climate Change Recognised as ‘Threat Multiplier’. UN Security Council Debates Its Impact on Peace” (Geneva: United Nations); at: <https://news.un.org/en/story/2019/01/1031322>.

- UNSC, 2005: Resolution 1625: Threats to International Peace and Security (Security Council Summit 2005)" (Geneva: UN); at: <http://unscr.com/en/resolutions/2408>.
- UNSC, 2007: "Resolution 1625: Threats to International Peace and Security (Security Summit 2005)" (Geneva: United Nations) <http://unscr.com/en/resolutions/1625>.
- UNSC, 2007a: "Letter Dated 5 April 2007b from the Permanent Representative of the United Kingdom of Great Britain and Northern Ireland to the United Nations Addressed to the President of the Security Council" (New York: UNSC); at: https://www.Securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_pv_5663.pdf.
- UNSC, 2011: "Report of the 6587th Meeting of the Unsc: Impact of Climate Change" (New York: UNSC); at: <https://undocs.org/S/PV.6587>.
- UNSC, 2015: "Open Arria-Formula Meeting on the Role of Climate Change as a Threat Multiplier for Global Security" (New York: UNSC); at: https://www.spainun.org/wp-content/uploads/2015/06/Concept-Note_ClimateChange_20150630.pdf.
- UNSC, 2017: "Resolution 2349: Peace and Security in Africa – Lake Chad Basin. S/Res/2347 (2017)" (Geneva: UN); at: <http://unscr.com/en/resolutions/doc/2347>.
- UNSC, 2018: "Resolution 2408: The Situation in Somalia" (Geneva: UN); at: <http://unscr.com/en/resolutions/2408>.
- UNSC, 2021: "Maintenance of International Peace and Security: Climate and Security" (Geneva: UN); at: <https://media.un.org/en/asset/k1v/k1v6qs3ym6>.
- UNSG, 2009: "Climate Change and Its Possible Security Implications: Report of the Secretary-General" (Geneva: UN); at: <https://digitallibrary.un.org/record/667264>.
- UNSG, 2019: "Report of the Secretary General on the 2019 Climate Action Summit and the Way Forward in 2020." (Geneva: UN); at: https://www.un.org/sites/un2.un.org/files/cas_report_11_dec_0.pdf.
- von Lucke, Franziskus, 2018: "Linking Climate Change and Security in Mexico: Explorations into an Attempted Securitisation in the Global South", in: *Journal of International Relations and Development*, 21,2: 415–41.
- Zebrowski, Chris, 2015: *The Value of Resilience: Securing Life in the Twenty-First Century* (Oxford, UK: Routledge).

Chapter 15

Climate Security at the UN and in the United States, 2007–2020: The Contradictory Leadership and Silence of the US



Chad M. Briggs

Abstract This chapter discusses the different perceptions of climate security that existed and influenced United States policy from 2007 to 2020. While in many ways a leader in the development of concepts linking climate change to security, the US view was highly complex and contradictory on multiple levels. The most visible political views on climate security largely hid the discussion in the federal government during critical years, even while federal agencies continued to take the associated risks into account in planning, and state, local and non-profit institutions grew increasingly concerned over the pace and scale of climate change impacts. The chapter outlines how differing concepts of national, ecological, and human security influenced US policy toward the United Nations – especially in the context of the United Nations Security Council – and other international relations, and how by 2020 they intersected with disinformation, the Covid-19 pandemic, and overwhelming climate-related events. The analysis is based on primary climate strategy documents from the US government and different institutions, as well as secondary sources and analysis on topics of climate security. Examination of the US policy discussions and networks concludes that the US can, at times, be a leader in concepts of climate security, but lacks the domestic political ability to link such warnings to climate mitigation and adaptation policies.

Keywords USA · Obama · Biden · Trump · Congress · Climate security

15.1 Introduction

As the world's leading greenhouse gas emitter for many years, the United States has been at the centre of discussions over climate change mitigation and the United Nations frameworks for action. At some times this centrality has been positive, highlighting emerging risks of global warming in the 1980s and providing extensive scientific and technical expertise (Weart 2008). At other times, the US has contributed

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significantly to climate denial and slow-walking of possible policy responses, a reflection of how complicated and contradictory the US political environment has become (Collomb 2014). The meshing of climate change with security has a particular story in the US, as its development was also heavily influenced by the practical interest from its military and intelligence community. Like the broader discussions over climate change mitigation and adaptation policies, the United States contains a complex array of perspectives on what climate security means, and the translation of those views into policy has likewise been fragmented, overlapping, and yet at the same time influential globally.

This chapter examines three of the dominant lenses for understanding climate security policy (human, ecological and national security – see the introductory chapter of this book for a detailed discussion of the concepts), and how they have been interpreted and used in various ways by the US government and policy circles over several presidential administrations. While a full meta-analysis of policy networks and advocacy coalitions in the US may require multiple chapters, this approach attempts to capture a sense of the complexity of the US discussion on climate security, and emphasise that there has never been any one definition of the concept. Many American research articles and reports on climate security since 2007 have put forward different understandings of how climate change impacts national security, and so themselves may be considered part of attempts at advocacy. Political scientists may use a hard or traditional security frame to show the connection between resource depletion and violent conflict, while those more interested in advocating for humanitarian and refugee policies may use human security frames. However, all environmental policies in the US also have an important legal framework, which can force the government to act, irrespective of prevailing policy preferences. While these approaches may appear at first glance to be obvious, the frames are sometimes used in counter-intuitive ways, though ones that make sense from an organisational mission point of view.

This chapter relies upon analysis of both primary climate strategy documents from the US government, as well as secondary sources and analysis on topics of climate security and public opinion, and is partly shaped by personal observations, the author having been part of these discussions inside the US military and intelligence communities (Briggs/Matejova 2019). The use of lenses to identify common threads of understanding and argument is partly necessary due to the largely inconsistent nature of US policies toward climate change, climate security, and the United Nations. As Selby (2019) argues, this back-and-forth approach to US climate policies creates innumerable policy challenges, but also hampers our ability to typify how, why and even when the US government and public identify climate change as a security risk. Referring to typologies of human, ecological and national security can help provide some illumination to common threads of understanding. Using Majone (1989) framework for policy analysis, sources are examined for their use of attempts to persuade and use evidence to foster specific goals. For example, beginning around 2012, the US Department of Defense leaned towards a human security view of climate change, yet without actually mentioning the concept. Thus, at least in part for planning and budgetary reasons, it argued that increased incidences of

disasters would harm the military's warfighting capabilities if they were constantly tasked for disaster relief operations.

In addition, use of the three security lenses can assist in understanding how the US security dialogue either supported, drew from, or was in conflict with efforts at the United Nations Security Council (UNSC) level. Each presidential administration was interested in climate security, but for different reasons, and pushed competing narratives of how climate change impacts security, while at the same time the US security community remained relatively stable in the evolution of its views. This chapter therefore also enquires why the US is often viewed as a leader in concepts of climate security while at the same time as a laggard in climate mitigation policies. And why was climate security important for domestic politics in the US, more so than its contributions to the UNSC?

Part 2 of this chapter describes different theoretical approaches to security lenses and by examining different ways in which climate security can be framed, as the ways in which climate change presents security risks vary widely even inside governments. Part 3 analyses how these sometimes contradictory approaches have affected US responses to climate security through successive presidential administrations, while Part 4 looks at efforts of the Biden administration and into the future. Part 5 ties these threads together with a discussion of US approaches to climate security at the UN Security Council. The chapter then concludes with discussion of the changes under the Biden administration since 2021, and future directions for US climate security and its possible impacts on the United Nations.

15.2 Security Lenses and Shifting Security Conceptions

While the foreign policy and security communities in Washington, DC have long been influenced by realist and neorealist concepts of security, climate change provided an important shift in policy concepts. While critical security theorists at least as far back as Buzan, et al. (1998) understood the broader concepts of human and ecological security, and while geographers such as Dalby (2002) warned of the reflexive nature of environmental security, the US policy establishment was based on Cold War thinking and policies between states and blocs. In many ways, the US helped to create the United Nations (UN) in 1945 and used it as a forum for discussion between the West (North Atlantic Treaty Organization, NATO) and East (Warsaw Pact), and during conflicts from the Korean War (1950) to the First Gulf War (1991) saw the UN as a legitimating factor for its military actions (Roberts/Zaum 2013). This American view differed significantly from that of other countries, even close allies like Canada, whose militaries focused on peacekeeping rather than warfighting (Segal et al. 1992: 121–136). While by far the world's largest military in terms of budget, the US has contributed very little of that budget to the UN peacekeeping efforts (though the US provides 28% of the Department of Peace Operations budget as of 2021), and has always resisted putting US troops under UN command.

Yet, in the ten years between the end of the Cold War and the September 11, 2001 terrorist attacks, there were openings in thinking about US security, including that regarding the environment. Environmental security forced a broader conceptualisation of security, from the spread of disease to operational concerns over shifting weather patterns—ironically, security concerns that existed before the Cold War, but were replaced with elite and rational-actor models during the nuclear arms race of the 1950s–1980s (Mathews 1989; Deudney 1990). However, even when these environmental concerns were raised, the popular portrayal differed from many academic approaches. Environmental degradation was linked to refugees, civil wars, and a continued “inside/outside” framing of security with the US as the centre of stability (Dalby 1996; von Lucke 2020). While the post 9/11 focus on terrorism forced environmental security into the background, by 2005 concerns over climate change began to emerge in earnest, not least due to Hurricane Katrina which once again underlined the linkages between natural disasters and security concerns in the US. A key question was how emerging data from climate scientists would be interpreted. What would the potential impacts be? Would climate change be seen as a collective, global risk, or as a continued threat to the United States alone?

This chapter approaches these changes through the work of international relations theory at the global level, drawing in particular on the frameworks of environmental security theorists like Dalby et al. (2008) and Barnett (2003), as well as the alternative epistemic communities approach of Litfin (1999). In this view, climate change does not represent a single set of objective, physical changes to which policymakers respond, but depends upon politically charged interpretations of what environmental security represents, who is responsible, and what actions are most appropriate. These approaches provide a conceptual framework for understanding how climate change is viewed as a security risk, in terms of human, ecological, or national security (see also the general framework of the book in the introductory chapter).

Yet, how US policymakers respond to such frameworks, and how they intersect with domestic politics, requires a different level of understanding. This chapter therefore analyses shifts in American public opinion concerning climate change and the United Nations, as well as shifts in presidential administrations. As I will show more specifically along the following sections, particularly when referring to differing policies between, for example, the Obama and Trump administrations, it is not sufficient to say that they differed in their views on human versus national security in climate change. Whether climate change could even be mentioned in policy became a major issue, and there was no linear progression of policies that developed over time. The US could quickly shift from leading the world in understanding of climate security risks, to being one of the more powerful opponents of such discussions at the UN or elsewhere. Such shifts were not limited to the president, but have come to represent larger symbolic fractures in American politics. While one book chapter can hardly do justice to a subject as complex as US domestic politics, ignoring that influence would make any discussion of US/UN relations overly simplistic. The domestic angle is less theoretical, and relies upon government documents (e.g., national security strategies), public opinion polls, and work on disinformation from scholars such as Oreskes and Conway (2011).

It also has to be pointed out that North Americans (crucially, US thinking was influenced by work in Canada in the 1990s, see Homer-Dixon 1994; Dalby 1996; DeBardeleben/Hannigan 1995) tended to think of environmental and subsequently climate security through a mixture of three perspectives (environmental, human and national security) that intertwined in the academic, government policy, military planning, and media/popular perception realms. At times certain issue entrepreneurs (or to use Litfin's terminology, "knowledge brokers") would push certain interpretations, particularly when they resonated with underlying themes and gained more traction in the political or media worlds (Litfin 1994, 1999). Other perspectives would conflict with popular perceptions, but were accepted because of organisational priorities. As this chapter will describe, the US approach to climate security has been both visionary and regressive, with contradictory approaches that are often confusing, even to experts in the field. The categories described are based on qualitative research of US government documents and speeches, and related research articles from academic and non-profit institutions, which describe the different environments in which climate security is discussed. "Security" can refer to protection of different things by different groups by different means, and no one concept has dominated security approaches to climate change in the US.

15.2.1 *Human Security*

Human security exists as a framework for policy toward climate change throughout the US government, even when not described as such or when developed prior to Buzan (1991) conceptualisation. The lens is used most commonly when referring to public health risks, and is employed not only in disaster response agencies (Federal Emergency Management Agency [FEMA]), environmental protection (Environmental protection Agency [EPA]), or disease control (Centers for Disease Control [CDC]), but also guides industries such as insurance. It therefore often exists in the background of many climate security discussions, including at local and state levels, where pressure to respond to growing risks can be expressed in terms of potential lives and money lost (Bell et al. 2018).

American antecedents to concepts of human and ecological security were developed or adopted in the US beginning in the 1960s, and centred on the growing environmental movement and ecologists developing concepts of ecological resilience. Some groups concerned with human health and the environment were important for early concepts of environmental security, initially in response to atmospheric testing of nuclear weapons. Work by scientific groups such as Physicians for Social Responsibility pointed out the contradictions between national security policies and the well-being of humans and the natural environment (Lyon et al. 1979). Similar work existed in other countries, including that of dissidents in the USSR.

Within human security, the US had several overlapping foci that included disaster risk, public health, and sustainable development. Disaster risks related to climate change have often dominated both media coverage and climate policy discussions,

both for their visibility and for the economic costs and casualties involved (Sylvès 2019). Public health dimensions of climate change have a weaker obvious causality, especially in light of global pandemics, but have remained in the background as important ways to measure well-being (Schramm et al. 2020). Sustainable development goals, linked more to climate mitigation than adaptation, have not featured as prominently domestically in the US as in its foreign policy, while the latter has suffered from inconsistencies from one presidential administration to the next (Barresi 2020).

The warnings for human security inside the US largely focused on disasters, particularly after the tropical storm experiences of 2005 (Hurricanes Katrina, Wilma, and Rita) and 2011–2012 (Irene and Sandy). While the US typically experienced a wide array of environment-related disasters each year during the last century, from earthquakes to tornadoes, the concern raised by scientists and politicians alike was the risk of such events increasing in frequency and/or intensity due to climate change. The US insurance industry was already reporting increased damages from disasters, and the US government count rose significantly over time. Counted as events that incurred more than \$1 billion in loss (in adjusted dollars), the US went from 29 such events in 1908–1989 to 123 in 2010–2019. 2020 alone had 22 such events, not including the Covid-19 pandemic (NOAA National Centers for Environmental Information [NCEI] 2022). This affected not just businesses and insurance companies, but federal and state governments, which often underwrote flood insurance or provided disaster relief.

Since the 1990s, the US has also defined climate impacts on human security in terms of public health. The U.S. Centers for Disease Control (CDC), along with universities and other agencies, began research into human health risks from increased respiratory and cardiovascular illness, direct injuries from extreme weather events, premature deaths from shifts in environmental conditions (e.g. extreme heat), and changes to the incidence and existence of both infectious and water-borne diseases (Rohr et al. 2011). Being a geographically diverse country, the US had to divide such risks into regional themes, from a priority on air pollution in large cities to impacts on mental health in areas of prolonged drought (Centers for Disease Control 2020). As a vivid example of emerging climate security risks to public health, in 2016 the United States experienced its first domestic cases of the Zika virus, a mosquito-borne disease that was particularly dangerous to pregnant women (Asad/Carpenter 2018). Due a combination of globalisation and changes to climate, the US began facing the risk of previously eradicated diseases reappearing, such as dengue fever or malaria (Butterworth et al. 2017). While these risks had long been identified in US research communities, the actual appearances of tropical diseases such as Zika produced visible shocks to public perception of climate security risks (Shope 1991).

The public health aspect of climate change in the United States helped contribute to a rising concern over climate security as a justice issue (von Lucke et al. 2021). Environmental justice was already an official concern of government offices like the Environmental Protection Agency (EPA) prior to 2005, but increasingly the EPA and its state counterparts saw that climate risks would disproportionately impact

certain socioeconomic, racial, and gender categories, which were often tied to the most vulnerable geographic areas. This understanding expanded in the 2010s to very granular data on how risks of flooding and extreme heat events, for example, would impact vulnerable groups, and a realisation that both climate mitigation and adaptation policies could worsen these disparities (Kaswan 2008). While the federal government had official regulations regarding justice concerns and inclusion of these into planning, beginning in 2017 these approaches came under concerted pressure from the White House to curtail considerations of vulnerability and justice in impact assessments (Sherwin 2019).

Despite shifting considerations of disaster risk, concepts of sustainability were not common in domestic US politics in a systematic fashion, except in economic/business terms such as “sustainable yield” (Hey 2012). In this sense the dominant US characterisation of climate security was inseparable from economic security, as dollar figures for damages tended to lead discussion of how climate could adversely impact the states or American businesses. Psychological frames for understanding climate risk persisted in the belief that climate impacts tended to happen far away and to other people (Leiserowitz 2006). Climate damages were abstract, and US media were long cautious in drawing connections between events such as Caribbean hurricanes, and increasing risks from greenhouse gas emissions (Boykoff/Boykoff 2007). By 2020 such narratives had changed dramatically, with both political leaders and news media drawing explicit links between disasters such as heat waves and wildfires, and how such risks were intricately tied to climate change dynamics (Fountain 2021).

The US view of climate-related policy toward the rest of the world was predictably different, and ensured from 2015 onward that UN concepts such as sustainable development and sustainable development goals (SDGs) were codified in official policy. The US State Department, the US Agency for International Development (USAID) and related agencies offered development assistance that increasingly took climate changes into account in determining project goals. Shifting away from traditional economic indicators, for example, a USAID project might instead focus on increasing sustainability or resilience of an agricultural area, trends that started under Obama but continued through later administrations (US Agency for International Development 2022).

The US government worked to identify areas overseas where climate impacts and vulnerability overlapped, perhaps hoping to forestall simply reacting to drought-related famines, for example (Kim et al. 2017). Under the new Biden administration, in September 2021 the State Department issued a directive that all US foreign aid programmes and strategies would be viewed through a lens of climate security and resilience, further codifying this view in US policy (US State Department 2021). While the capacity of US embassies and missions to adapt their planning may be in question, it did signal a significant shift from previous administrations, particularly that of the Trump presidency. The directive was also meant to bring the US more in line with UN efforts and discussions, and to set up policy in line with US legal concepts. These legal conceptions of the environment are critical to understanding US approaches to climate, and are in some ways unique to the United States, where protection of ecological systems has an approach of its own.

15.2.2 *Ecological Security*

Ecological security differs from human security in that its focus is on the natural environment rather than the well-being of human communities. While the two are inextricably linked, the US legal system provides pathways for environmental protection that treats environmental systems as distinct legal entities, in a sense, and this has shaped American environmental politics as a result. This means that ecological security exists throughout US policy formulation on climate change, often as a bottom-up pressure from state and local governments to act on climate change internationally. While the federal government has recently codified several practices for integrating climate change into, for example, US Agency for International Development (2015) overseas projects, more general requirements for environmental impacts have existed since 1970, at least domestically.

The US legal framework for environmental protection, growing out of the environmental movement in the 1960s–70s, created surprisingly strong tools for later development of an ecological framework for climate politics. Federal laws and regulations protect air, water, and large areas of land in the US, with procedural laws such as the National Environmental Policy Act (US Congress 1969) and Endangered Species Act (US Congress 1973) shaping how decisions are made and where actions cannot be taken. Crucially, these laws are backed by broad legal standing, meaning that people and organisations can commonly sue the government for failure to enforce such laws, even if damages do not directly affect them (Austin 2007).

With similar legislation existing in most states, this has allowed a focus on potential environmental damages from climate change to exist even separately from human impacts. Several states, for example, sued Exxon-Mobil, beginning in 2018, alleging fraud in their communications to shareholders, and knowingly damaging the environment through their long-term strategies (Baxendale 2018). Another court case (Juliana v. US 2017) sued the US government for failing to act on climate change, and while the case was ultimately dismissed, it follows patterns of earlier challenges on the basis of public trust and adherence to federal laws such as NEPA and ESA (Blumm/Wood 2017).

The environmental community in the US therefore has a long history of not just political activism, but substantive legal action in defining environmental protection as a common good, even when negative impacts on human populations or economic system cannot be established. The Endangered Species Act of 1973, for example, prohibits actions that threaten the viability of those species deemed endangered or threatened, regardless of how expensive or inconvenient such prohibitions may be for humans. While climate change actions are diffuse, and one cannot link specific impacts to discrete actions, it is increasingly possible to argue against contributing to public trust risks (*accelerating cause*) in terms of government action (Schneider 2017). NEPA requires consideration of environmental impacts from any major federal actions, though what this means in practice can be shaped by presidents and their executive and cabinet officials.

Again, ecological impact considerations were downplayed by the White House under Trump from 2017–2021, with attempts to replace or silence scientific evidence in the EPA when making impact determinations for regulations such as fuel efficiency in vehicles (Cornwall 2021; Tollefson 2018). References to climate change were often removed from government websites and reports, and past government research on the topic was deleted from the internet (Herrmann 2017). Such actions reflect long-standing opposition to US environmental laws and regulations on the part of certain segments of the American political spectrum, as well as a powerful coalition of business and interest groups (Asadnabizadeh 2019). These actions came in sharp contrast to the Obama administration (2009–2017), which frequently highlighted the importance of climate change discussions and science, and kept the topic on the policy agenda. The US under President Obama was a key negotiator for the 2015 Paris Agreement, which then became a lightning rod during the 2016 presidential elections (Daugirdas/Mortenson 2017).

Often in US political dialogue, it is difficult to distinguish discussions of climate security and climate mitigation/adaptation policies. Often, the emphasis is on potential impacts defined in terms of harm to populations and ecosystems, and this is seldom linked to forcing reductions in greenhouse gas emissions. Such warnings may, in the US court system, ultimately lead to changes in behaviour, but are more subtle than the more visible discussions of climate as a national security concern. The legalistic nature of the US system also restricts US action abroad at times, and the 2022 Supreme Court ruling in *EPA vs. West Virginia* hampers the ability of the Environmental Protection Agency to enforce greenhouse gas mitigation policies under legal structures such as the Clean Air Act (Hill/Madeline 2022).

15.2.3 National Security and Climate Change

Use of national security as a climate change lens was first coined by the Australian professor Jon Barnett in 2003, but the US quickly became a centre for such discussions, starting around 2007, even though the Bush/Cheney White House was not exactly enamoured of the traction it gained. In Washington, D.C., the national security framing is often the most visible way to discuss climate security, perhaps in part because it has helped to simplify narratives for the media, which has had long experience in war reporting and analysis. While the Department of Defense's own assessments often shied away from discussing violent conflict as an end-point for climate change, the Pentagon's interest in shifting logistical, operational and strategic aspects was often interpreted without nuance as to *why* they were interested in the topic.

The first official mention of climate change in the context of security in the US appeared in the 1991 National Security Strategy, though its inclusion was rather cursory (Kaufman/Goodman 2021). US military planners had long been sensitive to the impacts of environmental conditions on operations and logistics, and in many ways this served as the basis for later framing of the concept. However, insofar

as climate change was also a highly political issue, the US military and intelligence communities were reluctant to highlight the issue, particularly if doing so was accompanied by (or even strongly implied) significant policy changes (Burnett/Mach 2021). In some cases, the changes were obvious, and the military reacted whether or not climate was invoked as a cause, the opening of the Arctic Sea being a prime example. While largely off-limits to naval vessels during the Cold War, save for Soviet and US nuclear submarines, the loss of Arctic sea ice has reshaped geopolitical calculations between the US, Russia, other Arctic nations such as Canada, and newly emerging naval powers like China (Weingartner/Orttung 2019).

The link between national security and environmental change emerged in the immediate post-Cold War 1990s, where academics were attempting to reframe security studies in general, and began to recognise conflict dynamics that did not just revolve around the NATO/Warsaw Pact bipolar world. The most highly visible research centred on the work of Thomas Homer-Dixon (1994) in Canada, whose research posited that increasing scarcity of resources would lead to increased violence between and within states. Notably, climate change was not discussed as a factor in the 1990s, as the key dynamics generally focused on population growth/movement (Gleditsch/Urdal 2002; Græger 1996). Others cautioned that empirical research did not support such claims, that environmental crises can lead to cooperation more often than conflict, and that securitising the environment could lead to even worse environmental conditions (Conca/Dabelko 2002; Rogers 1997). More critical security theorists went farther, explaining that there existed fundamental contradictions between national security and environmental security, citing global warming as an example of such reflexive security, where attempts to bolster one form of security result in harming one's own citizens (Dalby 1998; Hogenboom et al. 2000).

For its part, while the US Department of Defense (DOD) did create a high-level position to deal with environmental security in 1993 (Deputy Undersecretary of Defense), their approach was initially more in line with the ecological security definition above. Specifically, the emphasis under President Clinton was that DOD needed to adhere to environmental regulations and be more sensitive to degradation caused by its operations, at least domestically (US Department of Defense 2000). Occasionally, military strategists such as Butts (1996) did warn of future challenges to national security writ large, and would mention the key role to be played by peacekeeping operations. But the larger environmental security debate was largely exhausted by 2000, and after September 2001 was immediately overshadowed by anti-terrorism policies, and invasions of Afghanistan and then Iraq (Sovacool/Halfon 2007).

A confluence of factors led to climate security appearing in Washington high politics by 2006–2007. The US military involvement in Afghanistan and Iraq shifted some professional perceptions of warning intelligence in line with “full spectrum” intelligence needed for counter-insurgency (COIN) and irregular warfare (IW) operations, opening space for broader security concepts like human and ecological security (Wolfberg 2006). The US Army in Iraq, for example, was already linking support for the insurgency with basic environmental conditions (water, electricity, sewerage) in urban areas like Sadr City, and realised the importance of both irrigation infrastructure and structures like the Mosul Dam (Mosher et al. 2008). Notably, the military and

intelligence communities tended to lead over the US academic community, where environmental security was still often derided by American political scientists as a niche field. The urgency of climate change was rarely mentioned in major security journals, with rare exceptions such as (Busby 2008).

Following 2005, when Hurricanes Katrina, Rita and Wilma hit the Southern Gulf Coast, impacts on US energy security, community resilience, and increasing warnings over the links between climate change and extreme events were elevated on the government agenda. Growing concern inside the military and intelligence communities intersected with greater public concern and media attention. High-visibility reports were produced by the Center for Naval Analysis (CNA) in 2007, and at the same time new offices and teams were established inside the US Navy, Department of Energy, and Central Intelligence Agency, and civilian experts were engaged through programmes like Minerva (Titley and St. John 2010). Climate change became a topic of serious discussion among DC and European think tanks, with not only CNA but the Center for Strategic and International Security (CSIS), Center for New American Security (CNAS), the American Security Project (ASP), the International Institute for Strategic Studies (IISS) and E3G in London, Adelphi and Ecologic in Berlin, the Swedish Defence Research Agency (FOI), the Bangladesh Institute of Peace & Security Studies (BIPSS), and others jumping into discussions. The motivations, at least in the US, were not to try to influence UN activities so much as those of the White House and the US Department of Defense, which was actively including climate security in its 2010 Quadrennial Defense Review (QDR) (Jayaram/Brisbois 2021).

Other parts of the US government also took note, with large cabinet agencies such as the Department of Homeland Security, which included offices and services like the Federal Emergency Management Agency (FEMA) and Coast Guard, starting to incorporate concepts of climate security into their planning (O'Sullivan/Ramsay 2015). These moves were largely pragmatic rather than politically-motivated, as the White House did not openly encourage discussions of climate security until after Barack Obama took office in early 2009. The US government adoption of climate security differed in two significant ways from earlier academic discussions, in that that the focus shifted from overseas and “less developed” countries to impacts on the domestic US, and the focus shifted more to logistics and operations rather than conflict. The work from 2006 on provided more concrete frameworks for understanding the potential security impacts of climate change, and rather than consider it as a far-off and ephemeral risk, began using concepts of vulnerability and foresight, and linked all three security lenses rather than treating them as distinct camps.

By 2017, the US government had developed a concept of climate security that defined its impacts on national security in terms of risks to human and ecological systems. While media portrayals of many academic discussions remain focused on the idea that resource depletion could lead to violent conflict, this framework tended to be discounted within the Pentagon in favour of human and ecological risks. Although this might have appeared to be counterintuitive, for the Department of Defense there was a clear, internal rationality. The US military defined its primary missions in terms of “warfighting,” not peacekeeping, humanitarian assistance, or disaster response

(HADR) (Briggs 2012). While the military service branches would undertake such missions if ordered to do so, sending (for example) the 3rd Marine Expeditionary Unit to respond to a typhoon in the Philippines, took resources away from the Marines' primary missions both in terms of time (training) and money (equipment, operations).

At the same time, in the 2010s, the Pentagon increasingly saw environmental changes as risks to the military's ability to carry out or support its operations. Whether this was related to sea level rise degrading ports and airports, the ability or cost of transporting fuel, increasing risks of infectious zoonotic diseases, extreme weather events destroying equipment and infrastructure, or any number of combinations of these, climate changes were affecting the way the military planners assumed underlying environmental conditions. Such concepts were introduced in the 2010 Quadrennial Defense Review (QDR), and grew in importance even as political winds in DC shifted (Parthemore/Rogers 2010). Importantly, this was a focus on adaptation. Ideas of mitigation, or the reduction of greenhouse gas emissions by the military (the US Department of Defense remains the single largest user of fuel in the world) tended not to be addressed unless fuel efficiencies were directly linked to costs or operational risks. Mitigation was generally seen as a political question, and therefore a potentially dangerous one to address in the US political climate.

The US political environment did still allow discussion of climate change as a security risk, but the frame encouraged by more conservative planners tended to emphasise certain key features of the link between climate and security. First, there was a reemphasis on how shifting environmental conditions could lead to violence or terrorism, particularly in areas where terrorist groups were known to operate. The Lake Chad region of central Africa was one such area that received attention both from the US and European governments, but in large part this was because it coincided with concern over groups such as Boko Haram (Beng Amboh 2019). US military and intelligence warnings concerning rising terrorism in these areas did mention environmental conditions, and linked them to concerns over migration and human trafficking of people from Africa to Europe. It should be noted that this framing had existed in the United States since the 1960s, with concerns regarding human "over-population" leading to mass migration across borders as a key national security risk (Methmann/Rothe 2014). Long promoted both in conservative and academic circles by the so-called Tanton Network, the climate migration framing saw migrants *per se* as a threat to national security, as opposed to being concerned over the nature of conditions from which people were fleeing (Normandin and Valles 2015). Climate security risks in this sense were not to be addressed by climate policies, but by the literal building of walls along borders and calls for lowering the human populations of other countries, a popular frame in the US that has existed for decades (Connelly/Kennedy 1994).

In 2020–2021 the US Air Force and Navy released separate Arctic strategies, and while it was well known inside the US defence community that climate changes in the Arctic were the primary motivator for the need for new strategies, neither paper made any mention of the term climate change. The Air Force strategy document released in July 2020 struggled to talk around the issue of climate security, referring to extreme weather and the need for increased domain awareness on long-term

climate, but carefully avoided the term “climate change” (US Department of the Air Force 2020). The Navy blueprint, released on January 5, 2021, evaded the terminological issue by referring to “melting ice” and creatively titling the report the “Blue Arctic,” but the word “climate” appeared not once in the strategy document. Contrast this with the US Army 2021 strategy for the Arctic which was released after the Biden inauguration in early 2021, and which placed the environmental changes from climate change as central to its explanation for strategies, force readiness, training, and operational/equipment needs. This was especially notable considering the deep expertise of the Air Force and Navy in the areas of meteorology and oceanography, and their at times quite outspoken discussion of climate change and security in the past (US Navy 2010, 2014).

National security frames were also promoted by think tanks in the US, who continued briefings and reports on climate security even as the White House and Congress moved away from acknowledgment of climate risks after 2017. The Center for New American Security, the Center for Strategic and International Studies, the Center for Climate and Security, the Council on Strategic Risks, the Woodrow Wilson Center, the American Security Project, the Arctic Institute, the CNA Corporation, the RAND Corporation and others continued to flag the national security risks of climate change, often working in close cooperation with researchers outside the US. Notably, the Center for Climate and Security briefed the UN Security Council in 2017, and has made action at the UNSC an area of emphasis, cooperating with European think tanks and governments. At the same time, experts from across the NGO spectrum continued to brief Congress on operational and geopolitical risks arising from climatic changes (Orlove 2017).

15.3 Depoliticising Climate Politics in the US and in the UNSC

The desire of the US military and intelligence communities to avoid political discussions is another important consideration, because it has constrained linking climate security to greenhouse gas mitigation or other climate policies, even while the public and media attempt to connect these ways of understanding. Some issue entrepreneurs in Washington, DC would link climate security impacts to the need for serious climate mitigation policies by Congress (e.g. cap-and-trade), but military and intelligence officers are explicitly prohibited from policy discussions, and climate change has been a political minefield in US politics. While the Democrats and Republicans were not always far apart on climate solutions in the 1990s, such politics have become increasingly polarised and have overridden climate security definitions and approaches. Climate security discussions in the US, therefore, tend to be limited in order to avoid certain political tripwires: for example, the military rarely discusses greenhouse gas mitigation policies.

In the 2000s, for example, while the military and intelligence communities were undertaking their first assessments of how climate change would affect national security, the Bush administration's approach to climate security at the UNSC was to emphasise "carbon intensity", a trade-related concept, arguing that the US produced more GDP per ton of carbon than countries such as China. This was the line used at the first UNSC discussion of climate security in 2007, and at similar NATO meetings, where the US government claimed it had no real responsibility for historical emissions because it was increasing its efficiency over time (Greene 2009).

In 2009 when the climate security discussions turned to the fate of small island states, the US had a substantive (if sometimes contradictory) interest in US territories and protectorates in the Pacific and Caribbean, such as potential loss of territory from sea level rise, and resulting changes to Exclusive Economic Zones (EEZs) (Cannon 2021). Even while the US has never formally ratified the UN Convention on the Law of the Sea (UNCLOS), the US government has in practice honoured the treaty as customary law. So, too, has the US supported the UN's Framework Convention on Climate Change (UNFCCC) process and scientific research behind the Intergovernmental Panel on Climate Change (IPCC) – even during "climate unfriendly" administrations, programmes such as the US Global Change Research Program (USGCRP) and National Science Foundation grants still continued. However, the US remained relatively neutral in UNSC debates on climate security until 2011, when Ambassador Rice fully agreed with the German-led proposal to involve the UNSC more fully. The subsequent UNSC debates experienced perhaps more lukewarm support from the US through 2015, with the US often abstaining from discussions in support of climate change linkages to security.

In contrast, the Obama administration emphasised the importance of collective action to prevent local impacts, using the UN process as a framework even for bilateral negotiations – most notably with China (Obama 2014). In terms of framing, it is notable that President Obama's speeches to the UN consistently focused on human impacts, from flooding to climate refugees, and never referred to potential national security impacts (Obama 2009). The national security frame did appear in language later in his administration (2015), but generally to military audiences. A presidential memorandum on climate security, directing both domestic and international agencies to consider national security impacts, was not signed until September 2016, and then was quickly rescinded by Trump upon taking office a few months later – and then reinstated in January 2021 (White House 2021). What is notable is that the White House used differing perspectives to talk to different audiences, with the US holding back on introducing a national security frame to the UN. Following the 2016 elections, the US was markedly hostile to UN proposals and threatened to withdraw from the Paris Agreements (Zhou 2017).

15.3.1 American Unpredictability and Misinformation

The political period of 2017–2020 under the Trump administration was marked by political instability in the US, not merely referring to the 2020 election and its aftermath, but to a political environment notable for frequent crises, scandals, investigations, policy reversals, and shifts in governance (e.g. GOP loss of control over the House of Representatives in 2018). It also included a near-constant fog of mis- and disinformation, and some long-standing conspiracies involving the UN itself. Agenda 21, while a non-binding action plan grown out of the Rio Earth Summit of 1992, is in many sectors of the American public considered a cover for a “globalist takeover” of the US (Cagle 2019).

Many of these developments were accelerations of previous trends; some were attributable to the political style and actions of the White House under Trump, some were influenced by outside actors, and the Covid-19 pandemic heightened the sense of instability. By 2020, the UN conspiracies had interlinked with the pandemic in the US, with some 20% of Americans believing that UN plans to decrease global population had resulted in a planned release of Covid-19 (Schaeffer 2020). It was therefore difficult to generalise about Americans and their views on climate security, nor was it possible to pin down a unified view within government. In general, however, the UNSC discussions of climate change did not make headlines inside the US, nor did the US government highlight them. While the UN Security Council was an important forum for foreign policy professionals in the US, they were far outnumbered by those with highly or at least potentially negative views against the body, even at the local level (Dernbach 2015).

These conspiracies existed at the same time that the American public grew increasingly concerned over the potential impacts of climate change. By 2020, most Americans believed that the government was not doing enough to protect the environment and to reduce the risks of climate change, and 63% believed that stricter environmental regulations were worth the cost (although there were significant differences between Democrats and Republicans) (Funk/Brian 2020). A majority of Americans reported witnessing local impacts from climate change, and felt that addressing climate risks should be a top priority for the US president (Funk/Brian 2020).

The US public remained deeply divided in opinions toward climate change, both along partisan lines and between different age groups. At least in the US, younger generations tended to be more worried about climate change impacts, and had more investment in the environmental justice framing for climate security. While there were no American analogues to Greta Thunberg, activism and concern over climate risks have been more evident among younger populations both in and outside of government, and Congress in particular has been criticised (in both parties) for older leaders not grasping the long-term and intergenerational aspects of climate security risks (Hamilton et al. 2019). This helped translate to explicit emphases by the US government under President Biden on climate change and security, including the 2021 UNSC discussion and the US support for the concept.

15.3.2 The Trump Administration and Silence Around Climate Change

Partisan lines in the US have sharpened since 2017, however, with climate denial being particularly evident among leaders in the Republican Party, including and perhaps most notably President Trump. With infrastructure and government aid bills being decried as “socialism”, approaching climate as a security issue is far safer than tackling more substantive policies that address mitigation, and has a better chance of overcoming climate denialism. While this denial or dismissal was in the past (e.g. during the administration of Bush Jr.) linked to the influence of powerful lobbyists, such as energy companies, increasingly climate change has become a partisan or ideological identifier, and has become much more politicised than under previous administrations. Dismissal of potential climate change became viewed in some circles as a form of loyalty, just as there was intense pressure on conservative Democrats to accept concerns and growing evidence (Morin-Chassé/Lachapelle 2020). Such characterisations were not intractable, and a significant number of traditional Republicans began to accept climate security framings and potential risks, a development that was possibly linked with the US military’s long-standing concern and its ability to communicate to more conservative groups (Motta et al. 2021).

Climate security has always been a contentious issue in the United States, not merely for differing perspectives and academic debates, but because the connection between climate and security implied joining the looming risks of climate change with the incredibly powerful US national security state. While in the past authors such as Hartmann (1998) had warned that the US government would use climate change to expand its political powers or for the Department of Defense to increase its budget, what was notable following Donald Trump’s 2016 election were the obvious and severe attempts to erase climate change from any security discussion (De Pryck/Gemenne 2017). The exceptions to this rule, as discussed below, primarily deal with terrorism and border issues, but all references to climate change or broader environmental change were erased from Department of Defense strategy papers in the period of 2017 to 2020 (Chemnick 2017).

15.4 Post-2017 Reframing & Policy Response

The same contradictions occurred with US policies toward Latin America. While experts within the US government, in particular agencies such as the US Department of Defense and the State Department, were concerned over climate impacts on livelihood and links to migration in areas such as Central America, White House policies officially refused to acknowledge climate change risks and emphasised hard-line US border protection as the policy solution. This was contradictory in that agencies such as USAID and the Drug Enforcement Agency (DEA) had long had policies in place to facilitate high-value, non-narcotic farming, policies that were increasingly at risk from shifting environmental conditions. With narcotics dealers often land owners in areas of concern, traditional farmers were increasingly marginalised and forced off the land (McSweeney et al. 2017).

The US retreat from the Paris Agreement was the most visible climate action by the US government, although it was not formalised until after the November 2020 election, and then reversed in January 2021. Yet the lack of US leadership on climate security, including non-cooperation with allies and partners on identifying and assessing climate risks, was highly significant for the international community. Many countries took a “wait and see” attitude toward climate security and the US, hoping that it would return to its earlier stance and work, and lend assistance to smaller entities in assessment, monitoring, adaptation, and developing strategy. European Union countries such as Germany and the Netherlands continued valuable work on climate security, but for countries at risk, such as Bangladesh, cooperation with the US government was essential for its domain awareness of the potential issues involved (Personal communication with MGen (ret) Muniruzzaman 2021).

15.4.1 *Denial and Disinformation in the US*

If climate change is to be considered a crucial aspect of national security, then attempts to undermine a country’s response to climate mitigation, adaptation, or even planning would also be potential security threats. Such climate paralysis efforts, or resilience targeting, have been evident since at least 2009, and in some ways are rather unique to the American experience of climate security. That is to say, climate denial is more prominent in the US than most other industrialised nations (perhaps only Australia is comparable- see Wright et al. 2021), and this makes its policies particularly vulnerable to outside influence from economic, political, and military actors (Briggs 2020).

While climate denialism persisted among some parts of the US population, another trend since 2017 has been a jump from denial of climate change to a form of climate hopelessness. In other words, as physical evidence of climate change impacts accumulated and more Americans accepted the existence of climate change, some political discussions shifted directly from denial to discussions of how it was too late to take

meaningful mitigation action (Schiffman 2021). The American political polarisation of climate politics had shifted with the introduction of proposals around a Green New Deal, the idea promoted by Democratic members of Congress such as Alexandria Ocasio-Cortez and Bernie Sanders. The Green New Deal, first discussed in the UK in response to the 2008 financial crash, was introduced to American politics in early 2019, premised on the idea that massive government programmes could both help avert the climate crisis and be justified on economic grounds (Galvin/Healy 2020). Opposition to these ideas of large-scale shifts to renewable energy focused largely on costs, shifting away from earlier opposition strategies that attempted to deny the existence of climate change in the first place (Morano 2021). In many ways this was a significant policy shift in the lead-up to the 2020 presidential election, as it moved the climate security discussion into competing frameworks of how best to respond to impacts, rather than denying their existence.

The reframing, however, constrained policy choices into those linked with energy security, reaffirming some of the earlier definitions used by the intelligence and military agencies. Climate security became even more polarised as a concept in the US vis-a-vis definitions of energy security, many of which dated back to US foreign policy since the 1970s. The OPEC oil crisis in that decade was interpreted by many in the US as defining energy security in terms of abundance and short-term prices, whether that meant ensuring continuous exports from the Middle East, or continuous opening of fossil fuel reserves in the domestic US. This view of energy security was entirely decoupled from climate mitigation, and even contradicted many of the earlier concerns the Department of Energy had in terms of impacts on oil and gas processing and transport. This view was reflected in the nearly 100 environmental policies and regulations that were changed under the Trump administration, including expansion of oil and gas drilling to offshore areas and previously protected areas such as the Alaska National Wildlife Reserve (Eilperin/Josh 2019; Friedman 2020).

The US was also dealing with disinformation campaigns concerning climate science, campaigns that could be traced back decades and fit within larger anti-science attitudes among many in the country. Domestic purveyors of dis- and misinformation could often be traced to specific economic or ideological camps in the United States, but increasingly security analysts became aware that undermining US climate response and resilience also had a national security aspect to it. Outside actors, whether foreign countries, corporations, or criminal/terror networks, were using climate issues as political wedges in American politics, often via social media. Such incendiary topics could be used to foster dissent and distrust of the government and other key institutions, by claiming that the government was lying in identifying climate risks, and that the science was manufactured, and then providing links to popular conspiracy theories related to chemtrails, HAARP, George Soros, the United Nations (Agenda 21), or even the emerging QAnon community (Briggs 2020; Lin 2019). Such campaigns and this anti-science reception only intensified in the US with the onset of the pandemic in 2020.

15.5 UN Security Council

The contentious nature of climate politics in the US helped lead to perhaps contradictory policies and communications from the federal government to the United Nations. The most visible distinctions came between speeches given by Presidents Obama and Trump at the UN General Assembly, and it was likewise difficult for diplomats to know what tack the administration would take when dealing with climate security, development goals, or related issues like refugees. As the refugee link with climate security suggests, the US had a strong tendency to see security through its own perspectives of security, not a “global” definition.

Concerns over migrants were a top priority for the Trump administration from 2017, and many of those areas most vulnerable to climate change or climate security risks were targeted by US policies that restricted the number of refugees who could apply for asylum, or who were outright banned from travelling to the US. In the case of Boko Haram, countries such as Chad disengaged from US antiterrorism policies in reaction to being targeted with a 2017 travel ban. Discussion of climate change was already off the diplomatic table by this time, but it seemed that even second or third order effects from climate change were not to be considered on a concrete policy level if they happened to conflict with higher-level political priorities. So, while the US was a permanent member of the UN Security Council, and therefore a participant in discussions concerning Lake Chad and Somalia in 2018–2020, its policies were to downplay non-traditional areas of security and to acknowledge them only when they existed in areas of historical conflict. The earlier work of the US in identifying emerging climate security risks was shelved, with climate experts pressured to leave agencies such as the State Department (Eilperin et al. 2019).

UN Security Council debates on the subject of climate security have tended to follow this military security framing as well, focusing largely on the Global South and lesser-developed countries, with concerns over the potential for violent conflict (Lucile 2021). Here the mismatch between UNSC discussions and US military planning is curious. While the UN emphasises the role of peacekeeping and humanitarian operations, in the UNSC discussions climate security was raised in terms of potential conflict in areas such as Africa. The US military, conversely, while always emphasising “warfighting” as a primary mission, was more concerned with human security and operational impacts of climate changes, precisely because they wanted to avoid long-term stability missions where peacekeeping would be a primary objective. But as with previous lenses, the emphasis for the US was on avoiding security crises, but not through greenhouse gas mitigation. Those climate policies were not discussed seriously at the Pentagon, and linking security risks to the Paris Agreement or UNFCCC framework, for example, was seen as too highly political by the military.

While many of these Trump administration changes to climate policies, including restrictions on scientific input to decision-making, were overturned by US court decisions, they were representative of a view that the US government bore no legal or political responsibility to reduce greenhouse gas emissions or mitigate climate

change impacts. The rhetoric from the White House was quite explicit, particularly in reference to the People's Republic of China. Beyond the claim made by the US president that climate change was a "hoax" perpetrated by the Chinese government, the administration cancelled the earlier work of the Obama White House in engaging with China on climate change agreements and policies (Stern 2020). Such bilateral negotiations were meant to supplement broader frameworks such as the Paris Agreement, but the Trump White House frequently referred to Chinese trade as "unfair," and US conservatives stated that US efforts to mitigate greenhouse gas emissions by switching to renewable energy would simply put the US economy at further disadvantage. Not only were negotiations stopped, but specific tariffs were placed upon imports of Chinese wind and solar technologies, which had the effect of increasing renewable energy installation costs in the United States (Pempel 2019).

The Biden administration's emphasis on climate security is partly continuity from the earlier Obama administration (of which President Biden had been vice-president) and partly a response to the climate silence of the Trump administration, but also fits with the larger vision of Build Back Better legislation, infrastructure investments, and federal government response to the COVID pandemic. If the government is to invest in economic recovery, the logic goes, it should be done in a way that favours a lower-carbon future and the new realities seen in the US of intense drought and heat, dangerous flooding and storms (e.g. winter tornado outbreaks), all amid pandemic economic dislocation. When Russia blocked passage of the UNSC resolution on climate security in December 2021, the US ambassador responded clearly that the action had "stopped the world's most important body for maintaining international peace and security from taking a small, practical and necessary step to combat the impacts of climate change." (as quoted in: Hopkins/Stohl 2022). This underlines the impression that the US could take a more active stance in the climate security debates at the international level in the future.

15.6 Conclusion

The US approach to climate security has shifted over time, and while relatively stable in the military and intelligence communities, the government reaction to and support of UNSC discussions has been highly erratic, depending on the political winds in Washington, DC. The US has been a leader in climate security concepts and assessments, but has largely divorced such activity from climate change mitigation and greenhouse gas reduction discussions, hampering UN efforts for collective action. It can be said therefore that the United States has warned, but not led any substantive response, even when the White House supported UNSC discussions and resolutions in 2021. Instead, domestic polarisation has resulted in climate change being completely removed from security discussions during the Trump administration, while the Biden administration has emphasised climate security but may lack the resources or support of Congress to back up its warnings with shifts in policy behaviour.

Even while concerns over the coronavirus dominated news and policy agendas, climate impacts on the United States did not slow. The US wildfire season was the third most expensive on record, following 2017 and 2018, with extensive fires throughout the Western US. Nearly 1.8 million hectares of land was burned in California alone. Arctic sea ice off the coast of Alaska reached its second lowest extent ever (only 2012 was worse), continuing a shift in Northern ecosystems and also changing the geopolitics of the region. The 2020 Atlantic hurricane season produced 30 named storms, the highest on record. The storms were not only more frequent, but intensified quickly, hurricanes made landfall in the US six times, and overall, \$37 billion of damage resulted from the storms. The entire US Caribbean-Atlantic coast, from Texas to Maine, was under alert for a hurricane or tropical storm at some point in the year (NOAA National Centers for Environmental Information [NCEI] [2022](#)).

The Biden administration has placed climate security as a key priority, restaffing the National Security Council, reintroducing climate change in military and diplomacy training, and conducting a National Intelligence Estimate (NIE) on potential impacts. Many companies have also signalled a “new normal” of climate mitigation, such as US car companies pledging to phase out most gasoline-powered cars by 2035, moves that did not require federal regulation. These moves come as the US grapples with record-breaking heat waves and droughts in 2021 and 2022, and with an official military withdrawal from Afghanistan, a refocus on national security priorities. Obvious climate impacts inside the US will force action on the part of the government, but the American political environment remains volatile, and US government policy formulation for climate security will continue to shift as well. What remains to be seen is whether the US is capable of tackling the large-scale energy and infrastructure policies needed for adequate mitigation, or whether piecemeal approaches to adaptation remain the focus instead.

As Special Presidential Envoy for Climate Change (SPEC), former Secretary of State John Kerry has opted to take an “all of the above” approach to climate change at the international level, emphasising corporate responsibility (First Movers Coalition), implementation of the Paris Agreement and national-level energy transition plans (NDCs), and highlighting the security implications of climate change. Some have criticised this approach as too diluted and lacking a central strategy, perhaps because incorporating multiple American concepts of climate security can be both confusing and contradictory. Yet it should also be remembered that US foreign policy, especially related to climate change policies, cannot make strong commitments without action from a very fractious Congress. Many initiatives have been left to individual states and commercial actors to lead (Basseches et al. [2022](#)).

One positive lesson that may emerge from the US experience has been that an emphasis on a human security lens, and one that does not focus exclusively on non-industrialised states, may benefit long-term planning in identifying potential vulnerabilities well in advance. Yet due to the broad nature of human security definitions, it can be difficult for an organisation to identify where such risks pose threats, particularly if (as with the UN) it takes responsibility for such human and ecological well-being, rather than attempting to avoid such actions. It may be that the US has

the resources and perspective to warn institutions such as the UN, but cannot realistically be a leader in how to respond or craft appropriate policies outside its own security community. The United States needs stronger targets for its energy transition to net zero in order to lead more in the international community, and provide more consistent messaging regarding its dedication to climate security. As the world's largest economy and historic contributor to most greenhouse gases, allowing others to take the lead on climate change mitigation policies hampers collective efforts, but in the near future the US may not be able to overcome its domestic obstacles to clear leadership.

References

- Asad, Hina; Carpenter, David O., 2018: "Effects of Climate Change on the Spread of Zika Virus: A Public Health Threat", in: *Reviews on Environmental Health*, 33,1: 31–42.
- Asadnabizadeh, Majid, 2019: "Climate Change in the Foreign Policy of the Trump Administration", in: *Environmental Policy and Law*, 49,2,3: 195–202.
- Austin, Jay, 2007: "Massachusetts v. Environmental Protection Agency: Global Warming, Standing and the Us Supreme Court Case Note", in: *Review of European, Comparative & International Environmental Law*, 16,3: 368–71.
- Barnett, Jon, 2003: "Security and Climate Change", in: *Global Environmental Change*, 13,1: 7–17.
- Barresi, Paul, 2020: "Us Climate Change Law and Policy in the Time of Trump and Beyond", in: *OIDA International Journal of Sustainable Development*, 13,02: 11–35.
- Basseches, Joshua A.; et al., 2022: "Climate Policy Conflict in the U.S. States: A Critical Review and Way Forward", in: *Climatic Change*, 170, 3:32.
- Baxendale, Anna, 2018: "Fraud, Free Speech and Fossil Fuel: Lessons from Big Tobacco for Big Oil", in: *Environmental Claims Journal*, 30,2: 107–30.
- Bell, Jesse E.; et al., 2018: "Changes in Extreme Events and the Potential Impacts on Human Health", in: *Journal of the Air & Waste Management Association*, 68,4: 265–87.
- Beng Amboh, E., 2019: "The Nature of the Boko Haram Security Crisis in the Lake Chad Basin" (Master of Military Art and Science; Fort Leavenworth: U.S. Army Command and General Staff College).
- Blumm, Michael C.; Wood, Mary Christina, 2017: "No Ordinary Lawsuit: Climate Change, Due Process, and the Public Trust Doctrine", in: *American University Law Review*, 67,1: 1–88.
- Boykoff, Maxwell T.; Boykoff, Jules M., 2007: "Climate Change and Journalistic Norms: A Case-Study of Us Mass-Media Coverage", in: *Geoforum*, 38,6: 1190–204.
- Briggs, Chad M., 2012: "Climate Security, Risk Assessment and Military Planning", in: *International Affairs*, 88,5: 1049–64.
- Briggs, Chad M., 2020: "Climate Change and Hybrid Warfare Strategies", in: *Journal of Strategic Security*, 13,4: 45–57.
- Briggs, Chad M.; Matejova, Miriam, 2019: *Disaster Security: Using Intelligence and Military Planning for Energy and Environmental Risks* (Cambridge: Cambridge University Press).
- Burnett, Mackenzie; Mach, Katharine J., 2021: "A 'Precariously Unprepared' Pentagon? Climate Security Beliefs and Decision-Making in the U.S. Military", in: *Global Environmental Change*, 70, 102345.
- Busby, Joshua W., 2008: "Who Cares About the Weather?: Climate Change and U.S. National Security", in: *Security Studies*, 17,3: 468–504.
- Butterworth, Melinda K.; Morin, Cory W.; Comrie, Andrew C., 2017: "An Analysis of the Potential Impact of Climate Change on Dengue Transmission in the Southeastern United States", in: *Environmental Health Perspectives*, 125,4: 579–85.

- Butts, Kent, 1996: "National Security, the Environment". Environmental Change and Security Project Report 2 (Washington, DC: Woodrow Wilson Center): 22.
- Buzan, Barry, 1991: "New Patterns of Global Security in the Twenty-First Century", in: *International Affairs*, 67,3: 431–51.
- Buzan, Barry; Wæver, Ole; de Wilde, Jaap, 1998: *Security: A New Framework for Analysis*. (Boulder, CO: Lynne Rienner).
- Cagle, Lauren E, 2019: "The New World Order Behind the Green Mask": White Nationalism, Anti-Semitism, and the Agenda 21 Climate Change Conspiracy Theory", in: *Communication and Environment* (Vancouver, Canada, 17–21 June).
- Cannon, Sara E., 2021: "Climate Change Denial and the Jeopardised Interest of the United States in the Freely Associated States of Micronesia", in: *Asia Pacific Viewpoint*, 62,2: 242–58.
- Centers for Disease Control, 2020: "Preparing for the Regional Health Impacts of Climate Change in the United States" (Atlanta: Centers for Disease Control and Prevention); at: https://www.cdc.gov/climateandhealth/docs/Health_Impacts_Climate_Change-508_final.pdf.
- Chemnick, Jean, 2017: "Trump Drops Climate Threats from National Security Strategy", in: *Scientific American*; at: <https://www.scientificamerican.com/article/trump-drops-climate-threats-from-national-security-strategy/>.
- Collomb, Jean-Daniel, 2014: "The Ideology of Climate Change Denial in the United States", in: *European Journal of American Studies*, 9, 9–1.
- Conca, Ken; Dabelko, Geoffrey D., 2002: *Environmental Peacemaking* (Washington, DC: Woodrow Wilson Center Press).
- Connelly, Matthew; Kennedy, Paul, 1994: "Must It Be the Rest against the West?", in: *Atlantic Monthly*, 274,6: 61–84.
- Cornwall, Warren, 2021: "Trump's New Rule Restricting Epa's Use of Certain Science Could Have Short Life", in: Science Insider. 6 January. <https://www.science.org/content/article/trump-s-new-rule-restricting-epa-s-use-certain-science-could-have-short-life>.
- Dalby, Simon, 1996: "The Environment as Geopolitical Threat: Reading Robert Kaplan's 'Coming Anarchy'", in: *Ecumene*, 3,4: 472–96.
- Dalby, Simon, 1998: "Geopolitics and Global Security", in: Tuathail, Gearóid Ó; Dalby, Simon (Eds.): *Rethinking Geopolitics*. (London: Routledge): 295–313.
- Dalby, Simon, 2002: *Environmental Security* (Minneapolis: University of Minnesota Press).
- Dalby, Simon; et al., 2008: "Security and Environment Linkages Revisited", in: Brauch, Hans Günter; Oswald Spring, Úrsula; Mesjasz, Czeslaw; Grin, John; Dunay, Pál; Chadha Behera, Navnita; Chourou, Béchir; Kameri-Mbote, Patricia; Liotta, P. H. (Eds.): *Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century* (Berlin Heidelberg: Springer): 165–72.
- Daugirdas, Kristina; Davis Mortenson, Julian, 2017: "United States Announces Plans to Withdraw from Paris Agreement on Climate Change", in: *The American Journal of International Law*, 111,4: 1036–44.
- De Pryck, Kari; Gemenne, François, 2017: "The Denier-in-Chief: Climate Change, Science and the Election of Donald J. Trump", in: *Law and Critique*, 28,2: 119–26.
- DeBardeleben, Joan; Hannigan, John, 1995: *Environmental Security and Quality after Communism: Eastern Europe and the Soviet Successor States* (Boulder: Westview Press).
- Dernbach, John C., 2015: "Facing Down the So-Called Agenda 21 'Conspiracy' Lessons for Planners", in: *Planning Magazine* (February): 14–26.
- Deudney, Daniel, 1990: "The Case against Linking Environmental Degradation and National Security", in: *Millennium*, 19,3: 461–76.
- Eilperin, Juliet; Dawsey, Josh, 2019: "Trump Pushes to Allow New Logging in Alaska's Tongass National Forest", in: *The Washington Post*; at: https://www.washingtonpost.com/climate-environment/trump-pushes-to-allow-new-logging-in-alaskas-tongass-national-forest/2019/08/27/b4ca78d6-c832-11e9-be05-f76ac4ec618c_story.html.
- Eilperin, Juliet; Dawsey, Josh; Brady, Dennis, 2019: "White House Blocked Intelligence Agency's Written Testimony Calling Climate Change 'Possibly Catastrophic'", in: *Washington Post*; at:

- <https://www.washingtonpost.com/climate-environment/2019/06/08/white-house-blocked-intelligence-aides-written-testimony-saying-human-caused-climate-change-could-be-possibly-catastrophic/>.
- Fountain, Henry, 2021: "Climate Change Drove Western Heat Wave's Extreme Records, Analysis Finds", in: *New York Times*; at: <https://www.nytimes.com/2021/07/07/climate/climate-change-heat-wave.html>.
- Friedman, Lisa, 2020: "Trump Rule Would Exclude Climate Change in Infrastructure Planning"; in: *The New York Times*; at: <https://www.nytimes.com/2020/01/03/climate/trump-nepa-climate-change.html>.
- Funk, Cary; Brian, Kennedy, 2020: "How Americans See Climate Change and the Environment in 7 Charts" (Washington DC: Pew Research Center); at: <https://www.pewresearch.org/fact-tank/2020/04/21/how-americans-see-climate-change-and-the-environment-in-7-charts/>.
- Galvin, Ray; Healy, Noel, 2020: "The Green New Deal in the United States: What It Is and How to Pay for It", in: *Energy Research & Social Science*, 67, 101529.
- Gleditsch, Nils Petter; Urdal, Henrik: 2002: "Ecoviolence? Links between Population Growth, Environmental Scarcity and Violent Conflict in Thomas Homer-Dixon's Work", in: *Journal of International Affairs*, 56,1: 283–302.
- Grager, Nina, 1996: "Environmental Security?", in: *Journal of Peace Research*, 33,1: 109–16.
- Greene, Andrew, 2009: "Carbon Intensity Standards: A Distraction and a Danger to Real Action on Climate Change" in: *Hastings West-Northwest Journal of Environmental Law and Policy*, 15,1: 91–130.
- Hamilton, Lawrence C.; Hartter, Joel; Bell, Erin, 2019: "Generation Gaps in Us Public Opinion on Renewable Energy and Climate Change", in: *PLOS ONE*, 14,7: e0217608.
- Hartmann, Betsy, 1998: "Population, Environment and Security: A New Trinity", in: *Environment and Urbanization*, 10,2: 113–28.
- Herrmann, Victoria, 2017: "I am an Arctic Researcher. Donald Trump Is Deleting My Citations", in: *The Guardian*; at: <https://www.theguardian.com/commentisfree/2017/mar/28/arctic-researcher-donald-trump-deleting-my-citations>.
- Hey, Ellen, 2012: "The Persistence of a Concept: Maximum Sustainable Yield", in: *The International Journal of Marine and Coastal Law*, 27,4: 763–71.
- Hill, Alice; Madeline, Babin, 2022: "The Supreme Court's Epa Ruling Will Delay U.S. Climate Action", in: *Council on Foreign Relations Brief*; at: <https://www.cfr.org/in-brief/supreme-court-epa-west-virginia-ruling-delay-us-climate-change-action>.
- Hogenboom, Joris; Mol, Arthur P. J.; Spaargaren, Gert, 2000: "Dealing with Environmental Risks in Reflexive Modernity", in: Cohen, Maurie J. (Ed.): *Risk in the Modern Age: Social Theory, Science and Environmental Decision-Making* (London: Palgrave Macmillan UK): 83–106.
- Homer-Dixon, Thomas F., 1994: "Environmental Scarcities and Violent Conflict: Evidence from Cases", in: *International Security*, 19,1: 5–40.
- Hopkins, Alex; Stohl, Rachel, 2022: "The United States and the UN Security Council: Examining U.S. Perspectives and Approaches to Key Issues" (Washington, D.C., Stimson Center Report); at: <https://www.stimson.org/2022/the-us-and-the-un-security-council/>.
- Jayaram, Dhanasree; Boisbois, Marie Claire, 2021: "Aiding or Undermining? The Military as an Emergent Actor in Global Climate Governance", in: *Earth System Governance*, 9, 100107.
- Kaswan, Alice, 2008: "Environmental Justice and Domestic Climate Change Policy", in: *Environmental Law Reporter News & Analysis*, 38,5: 10287–315.
- Kaufman, Holly; Goodman, Sherri, 2021: "Climate Change in the U.S. National Security Strategy: History and Recommendations" (Washington, DC: The Center for Climate and Security); at: https://climateandsecurity.org/wp-content/uploads/2021/06/Climate-Change-in-the-U.S.-National-Security-Strategy_BRIEFER-21_2021_6_29.pdf.
- Kim, Yoon; et al., 2017: "A Perspective on Climate-Resilient Development and National Adaptation Planning Based on USAID's Experience", in: *Climate and Development*, 9,2: 141–51.
- Leiserowitz, Anthony, 2006: "Climate Change Risk Perception and Policy Preferences: The Role of Affect, Imagery, and Values", in: *Climatic Change*, 77,1: 45–72.

- Lin, Herbert, 2019: "The Existential Threat from Cyber-Enabled Information Warfare", in: *Bulletin of the Atomic Scientists*, 75,4: 187–96.
- Litfin, Karen, 1994: *Ozone Discourses: Science and Politics in Global Environmental Cooperation* (New York: Columbia University Press).
- Litfin, Karen T., 1999: "Constructing Environmental Security and Ecological Interdependence", in: *Global Governance*, 5,3: 359–78.
- Lucile, Maertens, 2021: "Climate Change and Security within the United Nations: Insights from the Un Security Council and the Un Environment Programme", in: Möbjörk, Malin; Lövbrand, Eva: *Anthropocene (in)Securities: Reflections on Collective Survival 50 Years after the Stockholm Conference* (Stockholm: SIPRI): 34–50.
- Lyon, Joseph L.; Klauber, Melville R.; Gardner, John W.; Udall, King S., 1979: "Childhood Leukemias Associated with Fallout from Nuclear Testing", in: *New England Journal of Medicine*, 300,8: 397–402.
- Majone, Giandomenico, 1989: *Evidence, Argument, and Persuasion in the Policy Process* (New Haven: Yale University Press).
- Mathews, Jessica Tuchman, 1989: "Redefining Security", in: *Foreign Affairs*, 68,2: 162–77.
- McSweeney, Kendra; et al., 2017: "Why Do Narcos Invest in Rural Land?", in: *Journal of Latin American Geography*, 16,2: 3–29.
- Methmann, Chris; Rothe, Delf, 2014: "Tracing the Spectre That Haunts Europe: The Visual Construction of Climate-Induced Migration in the Mena Region", in: *Critical Studies on Security*, 2,2: 162–79.
- Morano, Marc, 2021: *Green Fraud: Why the Green New Deal Is Even Worse Than You Think* (Washington, DC: Regnery Publishing).
- Morin-Chassé, Alexandre; Lachapelle, Erick, 2020: "Partisan Strength and the Politicization of Global Climate Change: A Re-Examination of Schuldt, Roh, and Schwarz 2015", in: *Journal of Environmental Studies and Sciences*, 10,1: 31–40.
- Mosher, David E.; et al., 2008: *Green Warriors: Army Environmental Considerations for Contingency Operations from Planning through Post-Conflict* (Santa Monica: Rand Corporation).
- Motta, Matthew; Ralston, Robert; Spindel, Jennifer, 2021: "A Call to Arms for Climate Change? How Military Service Member Concern About Climate Change Can Inform Effective Climate Communication", in: *Environmental Communication*, 15,1: 85–98.
- NOAA National Centers for Environmental Information (NCEI), 2022: "U.S. Billion-Dollar Weather and Climate Disasters"; at: <https://www.ncdc.noaa.gov/billions/>.
- Normandin, Sebastian; Valles, Sean A., 2015: "How a Network of Conservationists and Population Control Activists Created the Contemporary Us Anti-Immigration Movement", in: *Endeavour*, 39,2: 95–105.
- O'Sullivan, Terrence M.; Ramsay, Jim, 2015: "Defining and Distinguishing Homeland from National Security and Climate-Related Environmental Security", in *Theory and Practice*, 12,1: 43–66.
- Obama, Barack, 2009: "Remarks by the President to the United Nations General Assembly" (Washington, D.C.: White House); at: <https://obamawhitehouse.archives.gov/the-press-office/remarks-president-united-nations-general-assembly>.
- Obama, Barack, 2014: "Remarks by the President at U.N. Climate Change Summit" (Washington, D.C.: White House); at: <https://obamawhitehouse.archives.gov/the-press-office/2014/09/23/remarks-president-un-climate-change-summit>.
- Oreskes, Naomi; Conway, Erik M., 2011: *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming* (New York: Bloomsbury Publishing USA).
- Orlove, Ben, 2017: "Meeting at Un Security Council Discusses Climate Change and Conflict"; at: <https://news.climate.columbia.edu/2017/12/22/meeting-un-security-council-discusses-climate-change-conflict/>.
- Parthemore, Christine; Rogers, Will, 2010: "Promoting the Dialogue: Climate Change and the Quadrennial Defense Review" (Washington, DC: Center for a New American Security).

- Pempel, T.J., 2019: "Right Target; Wrong Tactics: The Trump Administration Upends East Asian Order", in: *The Pacific Review*, 32,6: 996–1018.
- Personal communication with MGen (ret) Muniruzzaman, 2021: "Bangladesh Institute for Peace and Security Studies".
- Roberts, Adam; Zaum, Dominik, 2013: *Selective Security: War and the United Nations Security Council since 1945* (London: Routledge).
- Rogers, Katrina S., 1997: "Pre-Emptying Violent Conflict: Learning from Environmental Cooperation", in: Gleditsch, Nils Petter (Ed.): *Conflict and the Environment* (Dordrecht: Springer Netherlands): 503–18.
- Rohr, Jason R.; et al., 2011: "Frontiers in Climate Change–Disease Research", in: *Trends in Ecology & Evolution*, 26,6: 270–77.
- Schaeffer, Katherine, 2020: "A Look at the Americans Who Believe There Is Some Truth to the Conspiracy Theory That Covid-19 Was Planned"; at: <https://www.pewresearch.org/fact-tank/2020/07/24/a-look-at-the-americans-who-believe-there-is-some-truth-to-the-conspiracy-theory-that-covid-19-was-planned/>.
- Schiffman, Richard, 2021: "Climate Deniers Shift Tactics to 'Inactivism'"; at: <https://www.scientificamerican.com/article/climate-deniers-shift-tactics-to-inactivism/>.
- Schneider, Matthew, 2017: "Where Juliana Went Wrong: Applying the Public Trust Doctrine to Climate Change Adaptation at the State Level", in: *Environs: Environmental Law and Policy Journal*, 41,1: 47–68.
- Schramm, Paul J.; et al., 2020: "Climate Change and Health: Local Solutions to Local Challenges", in: *Current Environmental Health Reports*, 7,4: 363–70.
- Segal, David R.; Wechsler Segal, Mady; Eyre, Dana P., 1992: "The Social Construction of Peacekeeping in America", in: *Sociological Forum*, 7,1: 121–36.
- Selby, Jan, 2019: "The Trump Presidency, Climate Change, and the Prospect of a Disorderly Energy Transition". in: *Review of International Studies*, 45,3: 471–90.
- Sherwin, Brie D., 2019: "The Upside Down: A New Reality for Science at the Epa and Its Impact on Environmental Justice", in: *New York University Environmental Law Journal*, 27,1: [1]–106.
- Shope, Robert, 1991: "Global Climate Change and Infectious Diseases", in: *Environmental Health Perspectives*, 96: 171–74.
- Sovacool, Benjamin; Halfon, Saul, 2007: "Reconstructing Iraq: Merging Discourses of Security and Development", in: *Review of International Studies*, 33,2: 223–43.
- Stern, Todd, 2020: "Can the United States and China Reboot Their Climate Cooperation?"; at: <https://www.brookings.edu/articles/can-the-united-states-and-china-reboot-their-climate-cooperation/>.
- Sylves, Richard T., 2019: *Disaster Policy and Politics: Emergency Management and Homeland Security* (Thousand Oaks, California: SAGE).
- Titley, David W.; John, C. St., 2010: "Arctic Security Considerations and the U.S. Navy Roadmap for the Arctic", in: *Naval War College Review*, 63,2: 35–48.
- Tollefson, Jeff, 2018: "Science under Siege: Behind the Scenes at Trump's Troubled Environment Agency", in: *Nature*, 559, 316.
- US Agency for International Development, 2015: "Integrating Climate Change into USAID Activities: An Analysis of Integration at the Solicitation Level" (Washington, D.C.: USAID); at: https://pdf.usaid.gov/pdf_docs/PA00KN7C.pdf.
- US Agency for International Development, 2022: "USAID Climate Strategy 2022-2030" (Washington, D.C.: USAID); at: <https://www.usaid.gov/policy/climate-strategy>.
- US Congress, 1969: "National Environmental Policy Act. 43 U.S. Code § 1638"; at <https://www.energy.gov/nepa/articles/national-environmental-policy-act-1969>.
- US Congress, 1973: "Endangered Species Act. 16 US Code § 1531".
- US Department of Defense, 2000: "Climate Change, Energy Efficiency, and Ozone Protection" (Washington, D.C.: Office of the Deputy Under Secretary of Defense); at: <https://p2infohouse.org/ref/22/21453.pdf>.

- US Department of the Air Force, 2020: “Arctic Strategy: Ensuring a Stable Arctic through Vigilance, Power Projection, Cooperation, and Preparation” (Washington, D.C.: US Department of Defense); at: <https://www.af.mil/Portals/1/documents/2020SAF/July/ArcticStrategy.pdf>.
- US Navy, 2010: “Climate Change Roadmap”; at: <https://digital.library.unt.edu/ark:/67531/metadc949801/>.
- US Navy, 2014: “The United States Navy Arctic Roadmap for 2014 to 2030”; at: https://climateandsecurity.org/wp-content/uploads/2021/07/US-NAVY-ARCTIC-ROADMAP_2014-2030.pdf.
- US State Department, 2021: “Senior State Department Official on Security Implications of the Climate Crisis in Advance of Secretary Blinken’s Participation in the UN Security Council Open Debate on Climate and Security”; at: <https://www.state.gov/senior-state-department-official-on-security-implications-of-the-climate-crisis-in-advance-of-secretary-blinkens-participation-in-the-un-security-council-open-debate-on-climate-and-security/>.
- von Lucke, Franziskus, 2020: *The Securitisation of Climate Change and the Governmentalisation of Security* (Cham - Houndmills Basingstoke: Palgrave Macmillan).
- von Lucke, Franziskus; Diez, Thomas; Aamodt, Solveig; Ahrens, Bettina, 2021: *The EU and Global Climate Justice: Normative Power Caught in Normative Battles* (London: Routledge).
- Weart, Spencer R., 2008: *The Discovery of Global Warming* (Cambridge, MA: Harvard University Press).
- Weingartner, Katherine A.; Orttung Robert W., 2019: “US Arctic Policymaking under Trump and Obama”, in: *Polar Record*, 55,6: 402–10.
- White House, 2021: “Executive Order on Tackling the Climate Crisis at Home and Abroad” (Washington, D.C.: The White House); at: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>.
- Wolfberg, Adrian, 2006: “Full-Spectrum Analysis: A New Way of Thinking for a New World”, in: *Military Review*, 86,4: 35.
- Wright, Christopher; Nyberg, Daniel; Bowden, Vanessa, 2021: “Beyond the Discourse of Denial: The Reproduction of Fossil Fuel Hegemony in Australia”, in: *Energy Research & Social Science*, 77, 102094.
- Zhou, Jiayi, 2017: “National Climate-Related Security Policies of the Permanent Member States of the United Nations Security Council” (Stockholm: SIPRI); at: https://www.sipri.org/sites/default/files/2018-02/p5_climate_security_wp.pdf.

Chapter 16

The Climate-Security Nexus in Vietnam: Effect on the Pathway to Sustainable Development



Vo Dao Chi

Abstract This chapter provides an overview of Vietnam’s international and domestic security approaches, focusing on climate-related concerns through an examination of the country’s policies and plans. These identified concerns are deemed a “matter of life” to the nation, posing an existential risk. Securing climate change solutions is therefore primarily a matter of national development, with an emphasis on water, food, and human security. Vietnam’s recognition of the climate-security nexus is primarily associated with the country’s execution of the UN’s Sustainable Development Goals and a poverty reduction plan, notably in riverine and coastal areas. The call for involvement and collaboration across all of Vietnam’s governing entities is important to Vietnam’s response to climate change, which stresses mitigation and adaptation to establish and strengthen adaptive mechanisms at both the national and local levels.

Keywords Climate change · Climate security · Vietnam · Sustainable development

16.1 Introduction

Climate change alerts issued by international agencies in the early 1990s might be regarded as the starting point for discussions in Vietnam over climate and environmental risks. These warnings underlined the considerable social and economic risks and vulnerabilities associated with environmental and climatic change (Asian Development Bank 2013; Adger 2000). Climate change discussions gained prominence in the late 2000s, owing to Vietnam’s involvement in global climate accords and the mid-2000s passage of the Strategy for Sustainable Development (Strauch et al. 2018). While the early debates focused mostly on environmental deterioration, such as water and waste pollution, Vietnam has recently placed a higher premium on the multifaceted threats posed by climate change to national security. It has responded by connecting these threats to achieving the Sustainable Development Goals and focusing on specific security sectors such as water, food, and human

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security (Ministry of Natural Resources and Environment 2007). This is intimately associated with non-climate themes, such as poverty, gender equality, social security, public health, the enhancement of livelihoods, and the protection of natural resources, particularly climate hotspots such as the Mekong Delta, the Red River Delta, and the central coast (Government of Vietnam 2015). Therefore, climate security in Vietnam is most clearly expressed in development and foreign policy discourses. This is partly explained by Vietnam's global emergence since the late 1990s, which has increased the prevalence of climate security framings at the human, national and international level. This global emergence has compelled Vietnam to pursue comprehensive legislation on climate change issues including forestry (National Assembly of the Socialist Republic of Vietnam 2004), dykes (National Assembly of the Socialist Republic of Vietnam 2006), biodiversity (National Assembly of the Socialist Republic of Vietnam 2012), energy (National Assembly of the Socialist Republic of Vietnam 2010), water resources (National Assembly of the Socialist Republic of Vietnam 2012), disasters (National Assembly of the Socialist Republic of Vietnam 2013), environment protection (National Assembly of the Socialist Republic of Vietnam 2014), and meteorology and hydrology (National Assembly of the Socialist Republic of Vietnam 2015). In this way, climate change has been officially positioned as a non-traditional security issue since at least the early 2000s, including a greater range of non-military dimensions, (namely political, social, and economic stability) as part of the national development process (Ministry of National Defence 2019, 2009). Specifically, climate change has been legally determined not only as an internal threat – a “matter of life” (The Prime Minister of Vietnam 2008) – but also as a global issue, as underscored in the National Congress agendas over the past two decades (Đảng cộng sản Việt Nam 2011). Indeed, climate threats are not exclusive to the Vietnamese national security domain but have been expressed concurrently with the need for poverty reduction and meeting SDG targets (The Prime Minister of Vietnam 2011).

This chapter examines Vietnamese climate security within a broad securitisation paradigm (Diez et al. 2016). The theoretical framework is mostly based on Hardt et al. (the Introduction of this book) and analyses climate security by distinguishing climate change as a threat to certain referent objects in order to distinguish different security discourses, namely human, national, and international security. The study is based on primary and secondary sources, including legal documents, government policies, action plans, and statements by prominent politicians. It is supplemented by additional academic literature. The prominence of specific climate security themes associated with these different referent objects provides insight into Vietnam's domestic and international approaches to climate security. The different discourses in climate security emphasise different geographies, development themes, and specific sectors. These are taken into consideration in order to explore the richness of climate security perceptions in Vietnam. Furthermore, the chapter also examines how conventional and non-conventional actors address climate change as a security issue in Vietnam, to better understand the prevalent climate security discourses and relevant policies, plans, and institutions. This enables a better understanding of how Vietnam addresses and manages broader international and domestic security problems through global and regional governing bodies such as the United Nations (UN),

United Nations Security Council (UNSC), and the Association of Southeast Asian Nations (ASEAN).

The chapter is divided into two sections: the first examines how climate change is regarded as a security threat in Vietnam, focusing on several discourses including national security, international security, human security, and development. The next section explores the political and institutional approaches within Vietnam, with a special emphasis on the country's position as a non-permanent member of the UNSC. The chapter ends with a summary of key findings of the normative implications of Vietnam's climate security debate.

16.2 Climate Discourse in Vietnam

This chapter draws from this book's security framework, which emphasises three fixed security concepts: national, international, and human. National security draws from a "hard security" logic, collective security stresses "cooperation, peace, and stability," and human security highlights affected individuals, vulnerable groups, and society in interrelated dimensions (Mesjasz 2008: 50; Hardt 2021; Brauch 2008). Ecological security is not currently a dominant discourse in Vietnam. It is clear that a coherent conceptualisation of ecological security is critical for leaders who face conflicting security logics. The following section investigates how Vietnam frames the implications of climate change in foreign policy and the national security component.

16.2.1 *Climate Change as a Threat to Peace and International Security*

Vietnam's international security discourse derives from a classic military strategy, with the stability of the international cooperative order as a key reference point. As such, it might be viewed as an extension of the Detraz and Betsill (2009) model of environmental conflict, in which climate change is viewed as an existential danger to the entire world order (Diez et al. 2016). In this way, the dominant framings of climate security in Vietnam are focused on confronting and resolving geopolitical and geoeconomic conflicts, maritime disputes, and natural resource competition among South East Asian countries (Fetzek et al. 2021). The Vietnamese Ministry of National Defence has framed a range of concerns such as climate change, natural disasters, and epidemics as contributing factors to conflicts globally, but particularly in South East Asia (Ministry of National Defence 2009: 15). The strongly embedded view is that these developments pose potential and unpredicted risks to "peace, security and stability and cooperation for development in the region" (Ministry of National Defence 2019: 11). Climate change exacerbates food, water, and energy insecurity,

maritime piracy, illegal migration, and transnational crime through sea-level rises, storms, floods, and salt intrusion (Ministry of National Defence 2019: 11; The Prime Minister of Vietnam 2008).

Vietnam has identified climate change as a danger to regional and international peace and security since at least 2009. This is reflected in Vietnamese foreign policy, which broadly connects resource allocation with sovereignty conflicts (Ministry of National Defence 2019). Framing food and water disputes as threats to international peace and security is fundamental to Vietnamese foreign policy considerations. In particular, it highlights the likelihood of resource-based conflicts across Asia's megadeltas, something also warned about by the United Nations Development Programme (UNDP) in the Asia-Pacific Human Development Report Background Papers Series 2012/12 (Blondel 2012). However, Vietnam also stresses how climate threats impact existing collaborations within ASEAN and broader international community participation. Accordingly, the development of hydroelectric dams by China and its neighbours (Laos, Cambodia, and Thailand) is considered as a "hot spot", with underlying climatic vulnerabilities such as poverty, malnutrition, and hunger fuelling tensions in the midst of broader regional cooperation (Fetzek et al. 2021; News of Resources and Environment 2018). This is seen, notably, in the hydro-politics of the Mekong Delta (Barbu et al. 2007).

Furthermore, both the UN and UNSC have warned that the securitisation of the South China Sea for oil and fish stocks may lead to violations of sovereignty and escalating geopolitical tensions between China and other South East Asian countries (Fetzek et al. 2021; Barbu et al. 2007). The unprecedented challenges associated with sea-level rises have compounded these existing security risks, resulting in uncertainty over legal maritime boundaries, adversely affecting exclusive economic zones (Brock et al. 2021). Take, for instance, how China's "Nine-dashed line" prevents Vietnam, Malaysia, and the Philippines from exploring resources in disputed waters, given China's demonstrated intention to use force to resolve disputes. This represents the likelihood of unanticipated conflicts arising as a result of each country's future energy growth being accelerated (Fetzek et al. 2021) and ecological responses to climate change, such as changes in fish distribution, pose an explicit danger to Vietnam's energy and fisheries sectors – for example, fish stock migration out of Vietnam's Exclusive Economic Zone (EEZ) (Brock et al. 2021; Nguyen 2020).

Consistent with the UN's original warnings about the Coronavirus threat, Vietnam quickly positioned the virus as a threat to national security in January 2020, with the forceful statement of the Prime Minister explaining, "chống dịch như chống giặc" (fighting the epidemic is fighting the enemy) (The Prime Minister of Vietnam 2020). It is congruent with the UN's call for a "generational fight" and with UNSC Resolution 2532, enacted in July 2021, on COVID-19's impacts as a new danger to international peace and stability (United Nations Secretary-General 2020; Negri 2021). Vietnam places a premium on coordinated action, notably between the UNSC and the UN, to ensure the safety, security, and health of individuals affected by the COVID-19 pandemic (To 2020; Pham 2021). At the regional level, during the 14th Network of ASEAN Defence and Security Institutions (NADI) meeting, which focused on ASEAN's centrality in geopolitical dynamics and emerging security threats, Vietnam

also identified the COVID-19 pandemic as an emerging threat to people's livelihoods in the ASEAN nations, and requested new regional security architecture norms (Kasumawati 2021).

Generally, climate-based threats have been felt most acutely in the country in terms of the disruption to societal infrastructure, food, water, health, and economic wellbeing rather than directly affecting military assets. It makes sense then for climate threats to be seen as threats to society rather than solely to the defence sector (Brock et al. 2021).

16.2.2 Climate Change as Threat to Development and Human Security

Vietnam is a single-party state. The Communist Party of Vietnam (CPV) rules major aspects, including both the national and domestic security concerns (National Assembly of the Socialist Republic of Vietnam 2013). Since the Doi Moi policy reform of 1986, Vietnam has also adopted a socialist-oriented market governance system targeting conventional and non-conventional securities. Drawing since the mid-2000s on the concept of sustainable development, its national security strategies have consistently prioritised non-traditional securities, including risk factors threatening the stability of political, social, economic, and other aspects during the development process (The National Assembly of the Socialist Republic of Vietnam 2004a). Thus, it has positioned finance, water, energy, food, climate change, hazards, and epidemics as defined threats (Ministry of National Defence 2009, 2019). Although the national security strategies have still emphasised military and political security, the reconceptualisation of security has extended towards a more human-oriented approach to addressing threats. Specifically, the Congress Agenda XIII in 2021 highlighted the governance of human security as a legislative development to address the national security of Vietnam (TTXVN 2021). In this sense, the new conceptualisation of national security in the 21st Century mainly covers political security, social security, and human security (The Central Organ of The Communist Party of Vietnam 2021; Nguyen/Nguyen 2021).

Since the National Congress Agenda XIII (2011), Vietnam has recognised climate change as one of the biggest challenges threatening non-military security, notably lives and livelihoods (Doan 2017). Accordingly, climate change is most often connected to concepts of human security, which holds the human as the referent security object and prioritises vulnerable individuals/communities exposed to climate stressors (Diez et al. 2016). However, the human security of Vietnamese policies has been integrated into and embedded alongside national security and social security (Nguyen/Nguyen 2021).

Vietnam highlights the detrimental effects of climate stressors on livelihoods, migration, and mobility. As a result, Vietnam's climate discourse targets risky regions (coastal and delta), which are regularly hit by tropical storms, flooding, drought, and

salt intrusion (The World Bank Group and The Asia Development Bank 2020). This is because much of the population has settled in such areas and developed their livelihoods, notably in the agricultural and fishing industries, which is prompting internal migration within in South East Asia, including Vietnam (Miller 2019; Koubi et al. 2016). Although such movement can be observed as “slow-induced migration”, the language of climate security and migration literature often presents it as being out of control and highly threatening (McAdam 2010). In this regard, climate change is then perceived as a threat multiplier to human security through natural resource competition for livelihoods, which in turn compounds with other ‘soft’ conflict drivers like inequality and marginalization to fuel conflicts (Daria et al. 2015). Therefore, climate change is determined by Vietnam to be a “matter of life” and the National Assembly labels it as a threat to “national strength”, “national competitive capacities” and “social living” (The Prime Minister of Vietnam 2008). Along with the debate by the UN on the insufficiency of environmental security in South East Asia in 2002 (Goh 2002), the Ministry of National Defence has acknowledged how environmental degradation, natural resource security and climate change pose threats to peace and contribute to instability, insecurity and other challenges, particularly for cooperation and development, both within Vietnam and in the region more broadly (Ministry of National Defence 2009, 2019).

Vietnamese climate security is also found in development policy associated with sustainability. Here, climate change is viewed as a risk to the sustainable development goals’ (SDGs) gains on poverty and economy development, food and water security, health, and multi-level inequalities (United Nations Environment Programme 2021). As a predominantly agrarian country, climate change in Vietnam is strongly associated at a policy level with the sustainable development of the country’s economy, particularly concerning the direct risks posed to the agriculture, fishery, and forestry sectors, which together constitute nearly 14% of Vietnam’s GDP (Ministry of Natural Resources and Environment 2007, Vietnam General Statistic Office 2019). The Vietnamese National Assembly hence considers climate change, as well as disasters and environmental degradation, as posing direct impacts to national natural resources and therefore threatening national development gains (The Party Central Committee XI 2013). In this way, climate change poses an existential threat to the nation’s agricultural production on two fronts: productivity and land availability, both of which are critical for the country’s poverty reduction plan to succeed (The Party Central Committee XI 2013; Pham et al. 2019). This national strategy has been challenged, particularly in disaster-prone areas and highland areas, where livelihoods and main forms of production are strongly tied to natural resources (Communist Party of Vietnam 2020). Additionally, the UNDP has stressed resource-based conflicts fuelled by climate stressors in the Asian mega deltas, where Vietnam as an end-user of the Mekong River Basin is in a vulnerable riparian position when it comes to competition over water resources for agriculture and fishery, which then impacts national health (Blondel 2012).

The COVID-19 pandemic further highlights Vietnam’s focus on blending national security strongly with social security and human security. The compounding challenges of the COVID-19 pandemic, together with the escalating climate extremes in

the Mekong Delta and coastline, have compelled Vietnamese governance strategies to place emphasis on a human-centred approach (Do 2021). In this regard, Prime Minister Nguyen Xuan Phuc demonstrated to the UN that people are placed at the centre of political movements, particularly human security, to highlight access to vaccines and affordable COVID 19 drug treatment (Vietnamese Government 2020). The “do not leave anyone behind” approach to disaster management is the consistent approach of the Vietnamese government in targeting food security, sustainable poverty reduction, social security, and livelihood stabilisation. Generally, Vietnam has recognised and embedded climate change into all aspects of development, including conventional disaster management and the pursuit of green growth. The country has instituted mandates for establishing and strengthening the resilience of local governance, the community, and other actors in society through both mitigation and adaptation mechanisms (The Prime Minister of Vietnam 2008, 2017; Đảng cộng sản Việt Nam 2011; The Prime Minister of Vietnam 2011; Ministry of Natural Resources and Environment 2019).

16.3 The Political and Institutional Responses

The following section explores how climate security is understood/approached in foreign policy and the different actors and responses and.

16.3.1 *Climate Security in Foreign Policy*

To tackle global insecurities, Vietnam orients its defence and diplomacy strategy on the basis of peace-making, equality, and mutual respect through open, multilateral, and diversified cooperation and contributions to regional and world peace and security, including climate security (Ministry of National Defence 2019: 14). Since the 1990s, Vietnam has ratified the United Nations Framework Convention on Climate Change (UNFCCC), followed by the Kyoto Protocol, the Doha Amendment, the Paris Agreement, the SENDAI framework, and the 2030 Agenda for Sustainable Development (Strauch et al. 2018; Vietnam Disaster Management Authority 2018). Vietnam has continuously enacted legal documents, national plans and actions to follow international climate agreements. Concerning the 2015 Paris Agreement, Vietnam submitted to the UN its Nationally Determined Contributions (NDCs) in 2015 and 2020 as a show of strong commitment to greenhouse gas reduction and adaptation targets (Government of Vietnam 2015; The Socialist Republic of Viet Nam 2020). The adoption of the Paris Agreement enables a shift in climate governance towards inclusive cooperation of multi-level governance – one that undertakes domestic actions at national, regional and local scales (Strauch et al. 2018). Therefore, the UN plays a critical role in orienting Vietnamese collective responses to

climate threats and acts as a catalyst for further international cooperation (Strauch et al. 2018; Ministry of National Defence 2019). Bilateral and multilateral cooperation is a key approach in the diplomatic activities of Vietnam, particularly in disaster management, water security, food security, and human security. This is expressed acutely through Vietnamese involvement in international platforms such as the UN, the ASEAN Regional Forum (ARF), Asia-Pacific Economic Cooperation (APEC), The Multinational Communications Interoperability Program (MCIP), United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), and ASEAN along with ASEAN Defence – Military Meeting (ADMM) in particular (Vietnam Disaster Management Authority 2018; Viet Nam National Committee for Search and Rescue 2017). In the Mekong Delta and the South China Sea, Vietnam plays an active and proactive role in mainstreaming climate security into cross-national water security and human security issues through the inter-governmental organizations of the Mekong River Commission and ASEAN, particularly in regard to the escalating tensions in disputed waters. Accordingly, Vietnam prioritises the trans-national cooperation between ASEAN and China, Japan and Korea (ASEAN + 3), and engages with the ASEAN Environment Ministers’ Meetings (AMME) and enhances cooperation between ASEAN and the United Nations to build data-sharing platforms and to strengthen adaptive capacities (Nguyen 2021).

16.3.2 Climate Security: Vietnam and UNSC

The above international actions are also aligned within the broader considerations of UNSC recently, wherein climate change was included amongst seven targets for Vietnamese actions as a non-permanent member of the UNSC from 2020 to 2021, following issues such as conflict prevention and preventive diplomacy, as well as the strengthening of regional organisations and the protection of children in military conflicts (Ministry of Foreign Affairs 2019). At the UNSC on 28th July 2020 the Vietnamese representative affirmed the adverse effect of climate change as “a dangerous threat multiplier” in volatile political and security situations (Pham 2020). In this regard, Vietnam has placed a premium on the security challenges of sustainable development, particularly food and water insecurity, which might result in mass relocation and resource rivalry. As a strong affirmation, in the 2020 UN Arria-Formula Meeting on climate security co-organised by Vietnam, the Prime Minister of Vietnam stressed climate change as a cause of conflicts which threaten international security and peace, through its effects on poverty, inequality, water, and food insecurity (The Prime Minister of Vietnam 2021). Therefore, as a member of the Security Council, a strong commitment and duty from Vietnam to all key international legal instruments regarding climate change was emphasised at the UNSC. These pursuits should be made in coordination with national governments and regional organisations (The Prime Minister of Vietnam 2021; Dang 2020). In this regard, a substantial amount of

active work has been undertaken, with strong messages from the Vietnamese government to promote multilateral cooperation, which is coordinated by the UN, particularly regarding the role of ASEAN to enhance knowledge, coordination and resilience through the ASEAN Joint Response to Climate Change (Pham 2020: 12, Pham 2021).

To address climate security challenges, Vietnam's representative highlighted the significance of the UN Security Council in this area, calling for members to respect "the sovereignty, national ownership, and primary responsibility of States, and act in line with the specific mandates" (Pham 2020: 12). Vietnam also stressed the need for improved cooperation between the UN Security Council and all other UN entities, as well as the significance of the United Nations Framework Convention on Climate Change and the Paris Agreement as the primary direction for national and international actions based on mitigation, adaptation, and resilience, particularly in developing, least-developed, small-island and landlocked countries. Furthermore, Vietnam has also highlighted the need for better data on, and analysis of, climate-related security risks in order for the UNSC to prepare for complex situations by, for example, monitoring the impacts of climate change on peace operations and peacebuilding efforts (Dang 2020). Within the UN's recent debate on peacekeeping operations, Vietnam stressed the preparedness capacity of peacekeepers, including information, knowledge, facilities, and rectification of resource constraints to counter emerging threats like COVID-19 (Nhân Dân online 2021).

16.4 Climate Security: Political Response and Actors

Vietnam frames its approach to peace on the basis of national development, where the stability of political, economic and social dimensions of the state needs to be ensured. In this way, conventional security has still focused on border disputes in both territorial and maritime areas, with the current South China Sea disputes seen as a major threat to the State. However, since the 1986 *Đổi Mới* economic reforms, the Vietnamese government has placed considerable focus on "sustainable development" as a conceptual foundation for independence, sovereignty, unity and territorial integrity (The National Assembly of the Socialist Republic of Vietnam 2004a). The Vietnamese government also early on recognised and extended the preoccupation with non-traditional security which was first introduced in the Congress Agenda VIII (1987) and then reemphasised in the National Defence of Vietnam in 2009 (Doan 2017; Ministry of National Defence 2009). Explicitly, the Vietnamese concept of security has seen expansion towards non-military dimensions which embrace the stability of political regimes, society, and then recently also individuals (Do 2021; Ministry of National Defence 2019; Pham et al. 2019).

16.4.1 National Legislation on Climate Change

Vietnam has constructed and strengthened its legislative frameworks, institutions, and resolutions to strengthen its national capacity to respond rapidly to climate stresses. These strategies include catastrophe risk management, adaptive management, and climate risk reduction, including management of potential disease outbreaks. The country has enacted the National Target Programme to Respond to Climate Change (The Prime Minister of Vietnam 2008) as a foundation to launch the 2011 National Climate Change Strategy with prioritised projects (The Prime Minister of Vietnam 2011), then the National Action Plan on Climate Change for the periods of 2012–2020 and 2021–2030 (The Prime Minister of Vietnam 2012, 2020), and the National Strategy on Environment Protection issued by the Ministry of Natural Resources and Environment (The Prime Minister of Vietnam 2012), along with the National Strategy of Green Growth (The Prime Minister of Vietnam 2012). To facilitate national action, CPV has prioritised active responses to climate change in conjunction with natural resource and environmental protection (The Party Central Committee XI 2013), and recently issued the National Action Strategy on Health Adaptation to Climate Change (Ministry of Health 2018). These measures are complemented by a range of laws, such as the Law on Water Resources (National Assembly of the Socialist Republic of Vietnam 2012), Law on Natural Disaster Prevention and Control (National Assembly of the Socialist Republic of Vietnam 2013), Law of Land (National Assembly of the Socialist Republic of Vietnam 2013), Law of Environmental Protection (National Assembly of the Socialist Republic of Vietnam 2014), Law of Meteorology and Hydrology (National Assembly of the Socialist Republic of Vietnam 2015), and Law of Natural Resources, Environment of Sea and Islands (National Assembly of the Socialist Republic of Vietnam 2015). The National Climate Change Strategy emphasised climate-related considerations and prioritised strategies for national responses across all relevant sectors, with the goal of safeguarding the nation's quality of life, security, and sustainable development at multiple levels of governance (The Prime Minister of Vietnam 2011). The National Climate Change Strategy's primary objectives are food security, energy security, water security, poverty reduction, gender equality, social security, public health, livelihood enhancement, and the protection of natural resources (The Prime Minister of Vietnam 2011, Government of Vietnam 2015). Moving forward, the National Action Plan on Climate Change produced in 2020 has placed a premium on developing capacity for climate governance and community development, including all sectors and important actors, notably in the infrastructure, construction, and urban development sectors (The Prime Minister of Vietnam 2020).

16.4.2 National Defence Force

As a disaster-prone country, disaster management has long been recognised as a non-military mission of the Vietnamese Ministry of Defence (MoD). The establishment in 1996 of the National Committee for Search and Rescue of Vietnam is an example of this recognition (The Prime Minister of Vietnam 1996). The MoD takes a leading role in search and rescue efforts to ensure the sovereignty of Vietnam's territory and performs rescue and damage containment (The Prime Minister of Vietnam 2017). The Vietnamese army plays a key role in disaster prevention and response, together with search and rescue activities nationwide (Viet Nam National Committee for Search and Rescue 2017). The MoD both provides strategic disaster management and planning to the central government and directly coordinates disaster responses by national forces (The Vietnamese Government 2020; Viet Nam National Committee for Search and Rescue 2017). The MoD also prioritises international bilateral and multilateral cooperation in disaster management and search and rescue activities, together with the protection of territorial sovereignty, with regional countries and international organisations, such as ASEAN, ARF, APEC, ADMM+, MCIP, UNOCHA (Viet Nam National Committee for Search and Rescue 2017).

16.4.3 Intra-Governmental Cooperation

Significant efforts are being made to establish an enabling framework for managing climate-related issues involving a greater variety of actors, in response to a strong request for intra-governmental coordination across various Vietnamese agencies. Multi-level governance enables Vietnam to collaborate across political systems, acting vertically and horizontally to regulate climate response actions (Strauch et al. 2018).

The military has been a critical actor in climate change responses, although it is generally not seen as a “governance actor” in the literature on climate governance. However, it does have an important role in knowledge production, resource delivery, and decision-making (Jayaram/Brisbois 2021). Similarly, Vietnam has largely addressed climate change through democratic civilian mechanisms; however, the military is always strongly attached to the CPV and the State, so it is difficult to disentangle them.

Climate governance in Vietnam covers three key domains: disaster response and rescue, disaster prevention and control, and climate change. The controlling role of the central government is felt through influential national committees which cover these domains. The national committees are overseen by the Prime Minister, but they take a leading role in addressing specific issues and are further supported by multi-level governmental agencies. Each domain is governed by specific ministries

which are further supported by other relevant ministries and local governments (see Fig. 16.1). Within such a system, the role of military actors through the MoD has been increasingly involved in broader climate governance at multi-level scales. The MoD has therefore taken a leading role in disaster/incident response and rescue and occupies an important supporting position within other national committees. The MoD’s significant climate role includes addressing territorial disputes. In addition, through collaboration with the Ministries of Agriculture and Rural Development (MARD), Health (MOH), and Natural Resources and Environment (MONRE), it helps protect food security, human security, and natural resources, respectively (Ministry of Agriculture and Rural Development and Vietnam Border Guard 2014; Ministry of Defence and Ministry of Health 2015; Ministry of Defence and Ministry of Natural Resources and Environment 2015). Finally, the MoD is used as a rapid response force in dealing with disasters. For instance, it has been active in dealing with saline intrusion into the freshwater supply and has also dealt with transnational water security issues together with neighbouring countries, such as China, Laos, and Cambodia (Nguyen/Nguyen 2018; Tran/Nguyen 2013).

Collaboration and involvement between the MoH and MoD, in particular, have been increasingly visible in post-disaster recovery and climate-induced health challenges to provide human security in the form of clean water and environment, and sanitation, encompassing the health service, training, and communication (Ministry of Health 2017, 2018). Regarding climate threats to the Mekong Delta of Vietnam,

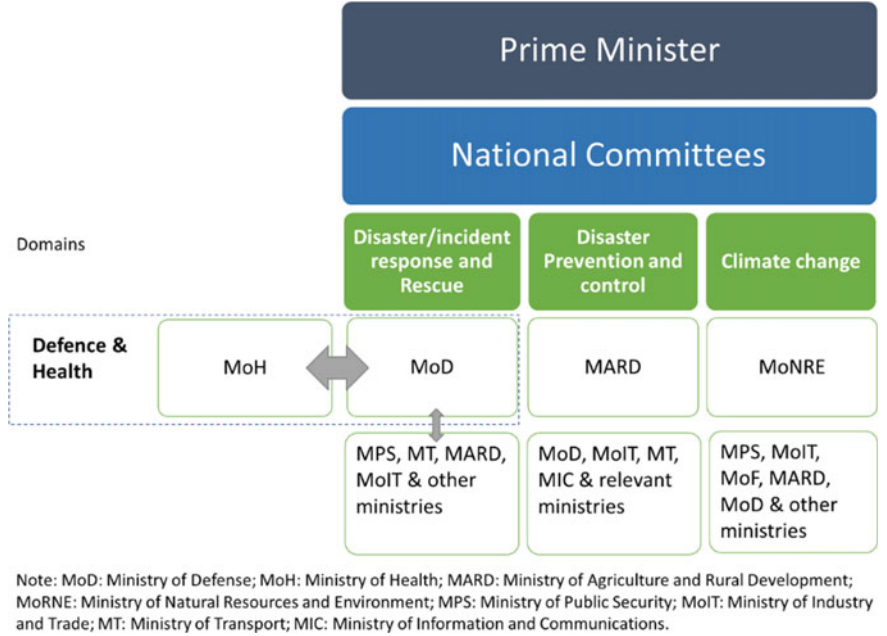


Fig. 16.1 Climate change related security architecture in Vietnam. *Source* Designed by the author

MARD, through the Vietnam National Mekong Committee, together with MONRE, plays a key role in ensuring integrated and coordinated measures in order to enhance the adaptive capacities and resilience of the agriculture-based economy and local communities (News of Resources and Environment 2018; Strauch et al. 2018).

Generally, the mandated role of the four ministries is legislated within the three national committees, reflective of the strong commitment to embed climate change into all relevant governing actors.

16.4.4 Non-Governmental Actors and their Contributions

The Vietnamese government has engaged with a number of non-governmental actors on climate change solutions. These non-governmental actors include academic institutions, corporate sector representatives, foreign development partners, and, more recently, local communities (Government of Vietnam 2015). Academics have helped compile important scientific evidence on food security (van Dijk et al. 2013; Tran et al. 2019), water security (News of Resources and Environment 2018; World Bank Group 2019), maritime security (Tran/Nguyen 2013; Nguyen/Nguyen 2018) and environmental security (Shaw 2006). More importantly, Vietnamese civil society is increasingly influencing the conversation about climate and broader environmental issues, in partnership with scientists. However, rather than leading and creating environmental agendas, it adapts to specific challenges by actively participating in bottom-up actions (Asian Development Bank 2013: 23). It generally focuses on health, equality, and socioeconomic vulnerability. However, the governance architecture in Vietnam is primarily top-down, making it difficult to fully involve civil society, specialists, corporations, or even communities in policymaking (Strauch et al. 2018). In this sense, scientists and civil society have until now had a limited influence in policymaking on climate security.

16.5 Conclusion

Aligned with the UNSC's debates since 2007 on recognising climate threats to security, Vietnam has acknowledged climate change as a threat multiplier for both national and international security since at least 2009 (Nguyen 2021). It also recognises that security in the country must move towards protecting and enhancing human security. However, this reconceptualisation is not complete, and human security discourses are still strongly embedded within frameworks of national security which are set up address new threats and guarantee the peace and stability of states, society, and human lives (Nguyen/Nguyen 2021).

Climate change is determined by the government as a “matter of life” (The Prime Minister of Vietnam 2011). Its impacts are categorised, and responses are largely framed, according to non-traditional security. The main approach of Vietnam is to

attach climate implications to the national Sustainable Development Goals and prioritise poverty reduction as a matter of human security. Environmental security (specifically water and food) is seen as a societal stressor which possibly fuels national and transnational resource conflicts, risking peace and international cooperation (The Prime Minister of Vietnam 2011; Ministry of National Defence 2019).

The recognition of climate threats has been an early concern for the country. It has used climate threats to frame the protection of national socio-economic structures, as well as the livelihoods of specifically-affected communities, particularly in the Mekong Delta, the Red River Delta, and the central coast (Government of Vietnam 2015). In this regard, Vietnam has long taken steps to address climate-induced shocks and stressors within the country. Internationally, Vietnam heeded the warning from the United Nations Environment Programme that climate change is fuelling resource conflicts and tension over access rights and use in Asian mega deltas (Blondel 2012). Therefore, it has called for multilateral cooperation from the international community, particularly emphasising the need for improved cooperation between the UNSC and all other UN entities. Vietnam demonstrated its strong commitment to international legal instruments, and actively supports efforts of the UNSC to address climate change, particularly the perspective of sustainable development (Pham 2020: 22).

As a one-party state, Vietnam has built top-down governance structures, and yet it still engages with a diverse range of actors in order to establish and strengthen adaptive and responsive processes, most notably through recognising the need for robust collaboration across governing agencies. Vietnam has developed a strong institutional structure based on multi-level governance, which enables various governing bodies to collaborate on implementation, knowledge creation, and policy formulation (Strauch et al. 2018). However, the Vietnamese central government remains fundamentally responsible for addressing both the short- and long-term responses to climate threats. It organises this responsibility and authority through three national committees that encompass disaster response, prevention, and mitigation. In this context, the Vietnamese security apparatus has responded to climate-related catastrophes, environmental preservation, and poverty reduction through a range of roles and collaborations driven by the metaphor of “an army ready to work” (Ministry of National Defence 2019: 79).

With avowed peace-making at its core, Vietnam’s foreign diplomacy prioritises multilateral and diverse cooperation to protect global security, including climate security. It also focuses a great deal of attention on the potential for regional conflicts in the South China Sea and Mekong Delta. In these instances, ASEAN and the Mekong River Commission play a vital role in advocating for an appropriate agreement to resolve latent insecurity in water and natural resource rivalry between South East Asian nations and China.

This chapter demonstrated Vietnam’s debate on climate security, which places sustainable development at the centre of climate discourse, in order to help develop future issues that must be examined. The dynamics of the climate security concept should be investigated further through theory–practice analysis to re-examine fundamental assumptions in comparison to the actions and practices of involved actors.

In addition, this aspect highlights the need for more research on climate security knowledge to re-evaluate the efficacy of the climate response, as well as the pathway to determine the severity of the multiple and hitherto undiscovered climate change-induced threats.

References

- Adger, W. Neil, 2000: "Institutional Adaptation to Environmental Risk under the Transition in Vietnam", in: *Annals of the Association of American Geographers*, 90,4: 738–58.
- Asian Development Bank, 2013: "Viet Nam: Environment and Climate Change Assessment" (Mandaluyong City: Asian Development Bank); at: https://www.adb.org/sites/default/files/institutional-document/33916/viet-nam-environment-climate-change_0.pdf.
- Barbu, Constantin-Horia; Sand, Camelia; Oprean, Letitia, 2007: "Introduction to Environmental Security". Paper Presented at the Strategies to Enhance Environmental Security in Transition Countries (Dordrecht); at: https://link.springer.com/chapter/10.1007/978-1-4020-5996-4_1.
- Blondel, Alice, 2012: "Climate Change Fuelling Resource-Based Conflicts in the Asia-Pacific: Asia-Pacific Human Development Report Background Papers Series 2012/12" (New York: UN Development Programme); at: <https://www.unclearn.org/wp-content/uploads/library/undp304.pdf>.
- Brauch, Hans Günter, 2008: "Introduction: Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century", in: Brauch, Hans Günter; Oswald Spring, Úrsula; Mesjasz, Czesław; Grin, John; Dunay, Pál; Chadha Behera, Navnita; Chourou, Béchir; Kameri-Mbote, Patricia; Liotta, P. H. (Eds.): *Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century* (Berlin, Heidelberg: Springer): 27–43.
- Brock, Steve; et al., 2021: "The World Climate and Security Report 2021" (Munich: International Military Council on Climate and Security [IMCCS]); at: <https://imccs.org/wp-content/uploads/2021/06/World-Climate-and-Security-Report-2021.pdf>.
- Communist Party of Vietnam, 2020: "Sustainable Poverty Reduction after 2020: A Need of the State's Regulatory Role"; at: <https://dangcongsan.vn/xa-hoi/bai-4-giam-ngheo-ben-vung-sau-2020-can-vai-tro-dieu-tiet-cua-nha-nuoc-561075.html>.
- Đảng cộng sản Việt Nam, 2011: "Documents of the 11th National Congress of the Communist Party of Việt Nam" (Hà Nội, Việt Nam: Thế Giới Publishers).
- Dang, Dinh Quy 2020: "Statement During the Unsc Arria-Formula Meeting on Climate and Security Risks" (New York; UNSC); at: https://digitallibrary.un.org/record/3847743/files/S_2020_30-EN.pdf?ln=en.
- Daria, Ivleva; et al., 2015: "Climate Security at the UNSC: A Short History" (Climate Security Expert Network); at: <https://climate-security-expert-network.org/unsc-engagement>.
- Detraz, Nicole; Betsill, Michele M., 2009: "Climate Change and Environmental Security: For Whom the Discourse Shifts", in: *International Studies Perspectives*, 10,3: 303–20.
- Diez, Thomas; von Lucke, Franziskus; Wellmann, Zehra, 2016: *The Securitisation of Climate Change: Actors, Processes and Consequences* (London: Routledge).
- Do, Hai Au, 2021: "Human Security in the New Situation – All-People"; at: <http://m.tapchiquptd.vn/vi/nghien-cuu-thuc-hien-nghi-quyet/an-ninh-con-nguoi-trong-tinh-hinh-moi-16822.html>.
- Doan, Minh Huan, 2017: "Non-Traditional Security: Key Concepts and Characteristics"; at: <http://tapchimattran.vn/nghien-cuu/an-ninh-phi-truyen-thong-quan-niem-va-dac-diem-chu-yeu-10490.html>.
- Fetzek, Shiloh; Fleishman, Rachel; Rezzonico, Andrea, 2021: "Climate Security and the Strategic Energy Pathway in Southeast Asia: Part of the World Climate and Security Report 2020" (Munich: International Military Council on Climate and Security

- [IMCCS]); at: https://imccs.org/wp-content/uploads/2021/01/Climate-Security-and-the-Strategic-Energy-Pathway-in-SOUTH-Asia_February-2021.pdf.
- Goh, Evelyn, 2002: “Environmental Security in Southeast Asia”, presented at the UNU – Ford Foundation Conference; at: <https://archive.unu.edu/ona/seminars/securityinasia/goh.pdf>.
- Government of Vietnam, 2015: “Intended Nationally Determined Contribution of Viet Nam”; at: <https://vietnam.un.org/en/9283-intended-nationally-determined-contribution-viet-nam>.
- Hardt, Judith Nora, 2021: “Encounters between Security and Earth System Sciences: Planetary Boundaries and Hothouse Earth”, in: Chandler, David; Müller, Franziska; Rothe, Delf (Eds.): *Inter-national Relations in the Anthropocene: New Agendas, New Agencies and New Approaches* (Cham: Springer International Publishing): 39–57.
- Jayaram, Dhanasree; Brisbois, Marie Claire, 2021: “Aiding or Undermining? The Military as an Emergent Actor in Global Climate Governance”, in: *Earth System Governance*, 9: 100107.
- Kasumawati, Ampuan Yura, 2021: “14th Track II Network of Asean Defence and Security Institutions (Nadi) Annual Meeting” (Brunei Darussalam: International Convention Centre); at: https://www.rsis.edu.sg/nadi/pdfs/nadi14/Chairman_Report.pdf.
- Koubi, Vally; Spilker, Gabriele; Schaffer, Lena; Bernauer, Thomas, 2016: “Environmental Stressors and Migration: Evidence from Vietnam”, in: *World Development*, 79: 197–210.
- McAdam, Jane, 2010: *Climate Change and Displacement: Multidisciplinary Perspectives* (Oxford, Portland, Oregon: Hart Publishing).
- Mesjasz, Czesław, 2008: “Security as Attributes of Social Systems”, in: Brauch, Hans Günter; Oswald Spring, Ursula; Mesjasz, Czesław; Grin, John; Dunay, Pál; Chadha Behera, Navnita; Chourou, Béchir; Kameri-Mbote, Patricia; Liotta, P. H. (Eds.): *Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century* (Berlin, Heidelberg: Springer): 45–62.
- Miller, Fiona, 2019: “Exploring the Consequences of Climate-Related Displacement for Just Resilience in Vietnam”, in: *Urban Studies*, 57,7: 1570–87.
- Ministry of Agriculture and Rural Development, and Vietnam Border Guard, 2014: “Regulation No 6074/Qcph-Bnn-Btlbp on Cooperation between Vietnam Border Guard and Ministry of Agriculture and Rural Development” (Hanoi: Ministry of Agriculture and Rural Development and Vietnam Border Guard).
- Ministry of Defence, and Ministry of Health, 2015: “Regulation No 162/Qcph-Bqp-Byt on Cooperation between Ministry of Defence and Ministry of Health” (Hanoi: Ministry of Defence and Ministry of Health).
- Ministry of Defence, and Ministry of Natural Resources and Environment, 2015: “Regulation No 162/Qcph-Bqp-Byt on Cooperation between Ministry of Defence and Ministry of Health” (Hanoi: Ministry of Defence and Ministry of Natural Resources and Environment).
- Ministry of Foreign Affairs, 2019: “United Nations: Multilateral Action Towards People” (Hanoi: Ministry of Foreign Affairs).
- Ministry of Health, 2017: “Input from Minister of Health on the Activities to Ensure Safe Water, Environment, Sanitation after Natural Disaster” (Nha Trang: Ministry of Health); at: <https://www.apec-epwg.org/media/2305/12ad68e2973607cdb5d2390ddcc98bd3.pdf>.
- Ministry of Health, 2018: “Decision 7562/Qd-Byt 2018 on the Climate Change Response Plan for the Period of 2019 2030” (Hanoi: Ministry of Health).
- Ministry of National Defence, 2009: “Vietnam National Defence 2009” (Hà Nội: Ministry of National Defence); at: <http://mod.gov.vn/en/intro/detail?1dmy&current=true&urle=wcm%3apath%3a/mod/sa-mod-en/vnd/sa-en-dod-dp/sa-en-dv-mf-stqp/62f8a315-e824-43c9-8a87-3dcdb145c41d>.
- Ministry of National Defence, 2019: “Vietnam National Defence 2019” (Hanoi: Ministry of National Defence, National Political Publishing House).
- Ministry of Natural Resources and Environment, 2007: “Resolution No. 60/2007/Nq-Cp Dated 3rd December 2007 on National Target Program to Response to Climate Change” (Hanoi: Ministry of Natural Resources and Environment); at: <https://www.ngocentre.org.vn/files/docs/NTP%20English.pdf>.

- Ministry of Natural Resources and Environment, 2019: “The 3rd National Communication of Vietnam to the United Nations Framework Convention on Climate Change” (Hanoi: Ministry of Natural Resources and Environment); at: https://www4.unfccc.int/sites/SubmissionsStaging/NationalReports/Documents/260315_Viet%20Nam-NC3-2-Viet%20Nam%20-%20NC3.pdf.
- National Assembly of the Socialist Republic of Vietnam, 2004: “Law No. 29/2004/Qh11 on Forest Protection and Development” (Hanoi: National Assembly of the Socialist Republic of Vietnam); at: <http://www.rcrc-resilience-southeastasia.org/wp-content/uploads/2018/01/2004-Law-on-Forest-Development-and-Protection.pdf>.
- National Assembly of the Socialist Republic of Vietnam, 2004a: “Law No. 32/2004/Qh11 on National Security” (Ha Noi: The National Assembly of the Socialist Republic of Vietnam); at: <https://www.icj.org/wp-content/uploads/2013/03/VietNam-Law-on-National-Security-2004-eng.pdf>.
- National Assembly of the Socialist Republic of Vietnam, 2006: “Law No. 79/2006/Qh11 on Dykes” (Hanoi: National Assembly of the Socialist Republic of Vietnam).
- National Assembly of the Socialist Republic of Vietnam, 2010: “Law No. 50/2010/Qh12 on Economical and Efficient Use of Energy” (Hanoi: National Assembly of the Socialist Republic of Vietnam); at: <http://faolex.fao.org/docs/pdf/vie99579.pdf>.
- National Assembly of the Socialist Republic of Vietnam, 2012: “Law No. 17/2012/Qh13 on Water Resources” (Hanoi: National Assembly of the Socialist Republic of Vietnam); at: <https://faolex.fao.org/docs/pdf/vie117928.pdf>.
- National Assembly of the Socialist Republic of Vietnam, 2012a: “Law No. 20/2008/Qh12 on Biodiversity” (Hanoi: National Assembly of the Socialist Republic of Vietnam); at: <https://www.cbd.int/doc/measures/abs/msr-abs-vn-en.pdf>.
- National Assembly of the Socialist Republic of Vietnam, 2013: “Constitution of the Socialist Republic of Vietnam” (Hanoi: National Assembly of the Socialist Republic of Vietnam); at: https://constitutionnet.org/sites/default/files/tranlation_of_vietnams_new_constitution_enuk_2.pdf.
- National Assembly of the Socialist Republic of Vietnam, 2013a: “Law No. 33/2013/Qh13 on Natural Disaster Prevention and Control” (Hanoi: National Assembly of the Socialist Republic of Vietnam); at: <http://faolex.fao.org/docs/pdf/vie164788.pdf>.
- National Assembly of the Socialist Republic of Vietnam, 2013b: “Law of Land No. 45/2013/Qh13, Issued in 2013” (Hanoi: National Assembly of the Socialist Republic of Vietnam); at: <https://lawnet.vn/vb/land-law-no-45-2013-gh13-dated-november-29-2013-36f55.html>.
- National Assembly of the Socialist Republic of Vietnam, 2014: “Law No. 55/2014/Qh13 on Environmental Protection” (Hanoi: National Assembly of the Socialist Republic of Vietnam); at: <http://ljp.vn/web/images/stories/enviroment-documents/Law%20on%20Environmental%20Protection%20No%2055.2014.QH13.pdf>.
- National Assembly of the Socialist Republic of Vietnam, 2015: “Law No. 82/2015/Qh13 Natural Resources and Environment of Sea and Islands” (Hanoi: National Assembly of the Socialist Republic of Vietnam); at: <https://faolex.fao.org/docs/pdf/vie168548.pdf>.
- National Assembly of the Socialist Republic of Vietnam, 2015a: “Law No. 90/2015/Qh13 on Meteorology and Hydrology” (Hanoi: National Assembly of the Socialist Republic of Vietnam); at: <https://thuvienphapluat.vn/van-ban/Tai-nguyen-Moi-truong/Law-No-90-2015b-QH13-Hydrometeorology-302898.aspx>.
- Negri, Stefania, 2021: “United Nations Security Council Resolution 2532”, in: *International Legal Materials*, 60,1: 24–29.
- News of Resources and Environment, 2018: “Đảm Bảo an Ninh Nguồn Nước Xuyên Biên Giới Tại Lưu Vực Sông Mê Công” (Hanoi: Agency of The Ministry of Natural Resources and Environment); at: <http://dwrn.gov.vn/index.php?language=vi&nv=news&op=Tai-nguyen-nuoc/Dam-bao-an-ninh-nguon-nuoc-xuyen-bien-gioi-tai-luu-vuc-song-Me-Cong-7066>.
- Nguyen, Cao Viet Hung, 2020: “Vietnam’s Struggles in the South China Sea: Challenges and Opportunities” (Center for International Maritime Security); at: <https://cimsec.org/vietnams-struggles-in-the-south-china-sea-challenges-and-opportunities/>.

- Nguyen, Xuan Cuong; Nguyen, Thi Phuong Hoa, 2018: “Non-Traditional Security Issues across Vietnam and China Land Borders”, in: *East Asian Policy*, 10,02: 109–22.
- Nguyen, Viet Lam, 2021: “Tác Động Của Biến Đổi Khí Hậu Đến Hòa Bình, an Ninh Quốc Tế Hiện Nay Và Đề Xuất Đối Với Việt Nam”, in: *Journal of Vietnam Communist Party*.
- Nguyen, Xuan Yem; Nguyen, Viet Linh, 2021: “New Perceptions on National Security in the New Situation”, in: *Journal of The Central Propaganda and Education Commission*, 14,7.
- Nhân Dân online, 2021: “Vietnam Condemns Deliberate Attacks against Peacekeepers in Unsc Open Debate”; at: <http://en.nhandan.vn/world/item/9915702-vietnam-condemns-deliberate-attacks-against-peacekeepers-in-unsc-open-debate.html>.
- Pham, Binh Minh, 2020: “Statement by the Deputy Prime Minister and Minister of Foreign Affairs of Viet Nam” (New York: UNSC); at: <https://undocs.org/Home/Mobile?FinalSymbol=S%2F2020%2F751&Language=E&DeviceType=Desktop&LangRequested=False>.
- Pham, Hai Anh, 2021: “Statement by the Chargé D’affaires of Viet Nam to the United Nations; Letter dated 87/10/04 from the Chargé d’affaires a.i. of the Permanent Mission of Viet Nam to the United Nations addressed to the Secretary-General”; at: https://digitallibrary.un.org/record/144513/files/A_42_615--S_19173-EN.pdf.
- Pham, Lan Dung, et al., 2019: “The Concept of Human Security in Vietnam”, in: Mine, Yoichi; Gómez, Oscar A.; Muto, Ako (Eds.): *Human Security Norms in East Asia* (Cham: Springer International Publishing): 249–71.
- Shaw, Rajib, 2006: “Community-Based Climate Change Adaptation in Vietnam: Inter-Linkages of Environment, Disaster, and Human Security”, in: *Multiple Dimension of Global Environmental Changes*, 521–47.
- Strauch, Lisa; Robiou du Pont, Yann; Balanowski, Julia, 2018: “Multi-Level Climate Governance in Vietnam: Bridging National Planning and Local Climate Action” (Berlin: adelphi); at: <https://www.adelphi.de/en/system/files/mediathek/bilder/Multi-level%20climate%20governance%20in%20Vietnam%20-%20adelphi.pdf>.
- The Central Organ of The Communist Party of Vietnam, 2021: “New Perceptions, New Thinking on National Security”; at: <https://dangcongsan.vn/xay-dung-dang/nhung-nhan-thuc-moi-va-tu-duy-moi-ve-quoc-phong-viet-nam-577419.html>.
- The Party Central Committee XI, 2013: “Resolution No. 24-Nq/Tw on Proactively Responding to Climate Change, Strengthening Natural Resource Management and Environmental Protection.” (Hanoi: The Party Central Committee XI); at: https://climate-laws.org/document/resolution-24-nq-tw-active-response-to-climate-change-improvement-of-natural-resource-management-and-environmental-protection_e369.
- The Prime Minister of Vietnam, 1996: “Decision No. 780-Ttg on the Establishment of a National Commission for Search and Rescue in the Air and Sea” (Hanoi: The Prime Minister of Vietnam).
- The Prime Minister of Vietnam, 2008: “Decision No. 158/Qđ-Ttg Approving the National Target Program on Response to Climate Change” (Hanoi: The Prime Minister of Vietnam); https://climate-laws.org/document/decision-no-158-2008-qd-ttg-on-the-approval-of-the-national-target-programme-to-respond-to-climate-change_505a.
- The Prime Minister of Vietnam, 2011: “Decision No. 2139/Qđ-Ttg on National Approval of Climate Change” (Hanoi: The Prime Minister of Vietnam); at: <http://vietnamlawmagazine.vn/decision-no-2139-qd-ttg-of-december-5-2011-approving-the-national-strategy-for-climate-change-4728.html>.
- The Prime Minister of Vietnam, 2012: “Decision No. 1216/Qđ-Ttg Approving the National Strategy for Environmental Protection to 2020, with a Vision to 2030” (Hanoi: The Prime Minister of Vietnam); at: <https://vanbanphapluat.co/decision-no-1216-qd-ttg-approving-the-strategy-for-protecting-the-national>.
- The Prime Minister of Vietnam, 2012a: “Decision No. 1393/Qđ-Ttg Approving the National Strategy on Green Growth” (Hanoi: The Prime Minister of Vietnam); at: <http://faolex.fao.org/docs/pdf/vie119146.pdf>.
- The Prime Minister of Vietnam, 2012b: “Decision No. 1474/Qđ-Ttg Promulgating the National Action Plan on Climate Change for the Period 2012–2020” (Hanoi: The Prime Minister

- of Vietnam); at: <https://thuvienphapluat.vn/van-ban/Tai-nguyen-Moi-truong/Decision-No-1474-QD-TTg-on-issuance-of-national-action-plan-on-climate-change-182078.aspx>.
- The Prime Minister of Vietnam, 2017: “Decision No. 1670/Qđ-Ttg Approving the Target Program to Respond to Climate Change and Green Growth in the 2016–2020 Period” (Hanoi: The Prime Minister of Vietnam); at: https://data.opendevelopmentmekong.net/laws_record/quy-t-d-nh-s-1670-qd-ttg-phe-duy-t-chuong-trinh-m-c-tieu-ng-pho-v-i-bi-n-d-i-khi-h-u-va-tang-tru-ng/resource/30e4dd06-42d2-4c7d-9f12-2b32cbd12298.
- The Prime Minister of Vietnam, 2020: “Directive No. 10/Ct-Ttg 2020 on Enhancement of the Prevention of Covid 19 Epidemic” (Hanoi: The Prime Minister of Vietnam); at: <https://thuvienphapluat.vn/van-ban/EN/The-thao-Y-te/Directive-10-CT-TTg-2020-enhancement-of-Covid-19-prevention-and-control/435857/tieng-anh.aspx>.
- The Prime Minister of Vietnam, 2020a: “Decision No. 1055/Qđ-Ttg on the National Plan to Adapt to Climate Change for the Period 2021–2030, with a Vision to 2050” (Hanoi: The Prime Minister of Vietnam); at: <https://english.luatvietnam.vn/ecision-no-1055-qd-ttg-on-promulgating-the-national-climate-change-adaptation-plan-for-the-2021-2030-per-187092-Doc1.html#:~:text=Decision%2520No.-,1055%2520FQD%2520DTTg%25202020%2520National%2520Climate%2520Change,Adaptation%2520Plan%2520in%25202021%2520%2520D%202030%2526text=On%2520July%252020%252C%25202020%252C%2520the,with%2520a%2520vision%2520toward%25202050>.
- The Prime Minister of Vietnam, 2021: “Remarks by H.E. Mr. Nguyen Xuan Phuc, Prime Minister of the Socialist Republic of Viet Nam at Security Council Open Debate on Addressing Climate-Related Risks to International Peace and Security”; at: <https://vnmission-newyork.mofa.gov.vn/en-us/News/ConsulateNews/Pages/23.2.2021.aspx?p=4>.
- The Socialist Republic of Viet Nam, 2020: “Updated Nationally Determined Contribution (Ndc)” (Ha Noi); at: https://unfccc.int/sites/default/files/NDC/2022-06/Viet%2520Nam_NDC_2020_Eng.pdf.
- The Vietnamese Government, 2020: “Resolution No. 169/Nq-Cp on the Government’s Regular Meeting – October 2020” (Ha Noi: The government of the socialist republic of Viet Nam); at: <https://www.mpi.gov.vn/en/Pages/tinbai.aspx?idTin=48975&idcm=121>.
- The World Bank Group, The Asia Development Bank, 2020: “Climate Risk Country Profile: Viet Nam” (Washington, D.C.: The World Bank Group); at: <https://www.adb.org/sites/default/files/publication/653596/climate-risk-country-profile-viet-nam.pdf>.
- To, Anh Dung, 2020: “Statement by the Deputy Minister for Foreign Affairs of Viet Nam” (New York: UNSC); https://www.securitycouncilreport.org/atf/cf/%7B65BF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/S_2020_663.pdf.
- Tran, Thi Nhung; Vo, Le Phu; Vu, Van Nghi; Ho, Quoc Bang, 2019: “Salt Intrusion Adaptation Measures for Sustainable Agricultural Development under Climate Change Effects: A Case of Ca Mau Peninsula, Vietnam”, in: *Climate Risk Management*, 23: 88–100.
- Tran, Thuy Truong; Nguyen, Minh Ngoc, 2013: “Vietnam’s Security Challenges: Priorities, Policy Implications and Prospects for Regional Cooperation”; The Fourth International Workshop on Asia-Pacific Security, Tokyo, Japan, Tokyo, Japan.
- TTXVN, 2021: “Đặt Nhân Tổ Con Người, an Ninh Con Người Là Trung Tâm Mọi Hoạt Động”; at: <https://daihoidang.vn/dat-nhan-to-con-nguoi-an-ninh-con-nguoi-lam-trung-tam-moi-hoat-dong/1889.vnp>.
- United Nations Environment Programme, 2021: “Making Peace with Nature: A Scientific Blueprint to Tackle the Climate, Biodiversity and Pollution Emergencies” (Nairobi: UNEP); at: <https://www.unep.org/resources/making-peace-nature>.
- United Nations Secretary-General, 2020: “Secretary-General’s Remarks to the Security Council on the Covid-19 Pandemic” (New York: United Nations); at: <https://www.un.org/sg/en/content/sg/statement/2020-04-09/secretary-generals-remarks-the-security-council-the-covid-19-pandemic-delivered>.
- van Dijk, Michiel; et al., 2013: “Land-Use Change, Food Security and Climate Change in Vietnam: A Global-to-Local Modelling Approach” (The Hague, Wageningen UR: LEI).

- Viet Nam National Committee for Search and Rescue, 2017: “Viet Nam Search and Rescue to Present Natural Disaster Search and Rescue Activities in Viet Nam” (Nha Trang: Asia-Pacific Economic Cooperation); at: <https://www.apec-epwg.org/media/2306/3950a47d32e61a723608b3066fa074c6.pdf>.
- Vietnam Disaster Management Authority, 2018: “Introduction of Sendai Framework for Disaster Risk Reduction for the Period 2015–2030 and Proposal for Integration of Disaster Risk Reduction in Vietnam”; at: <https://phongchongthientai.mard.gov.vn/Pages/gioi-thieu-khung-sendai-ve-giam-nhe-rui-ro-thien-tai-giai-doan-2015-2030-va-de-xuat-noi-dung-long-.aspx>.
- Vietnam General Statistic Office, 2019: “The Overview of Socio-Economic Situation in 2019” (Ha Noi: Vietnam General Statistic Office); at: https://www.gso.gov.vn/wp-content/uploads/2020/01/Bao-cau-12-2019.En_-1.docx.
- Vietnamese Government, 2020: “Message of the Prime Minister to the Un Special Agenda on Covid-19” (Government Electronic Newspaper); at: <http://baochinhphu.vn/Cac-bai-phat-bieu-cua-Thu-tuong-Nguyen-Xuan-Phuc/Thong-diep-cua-Thu-tuong-gui-phien-hop-dac-biet-cua-Lien-Hop-Quoc-ve-COVID19/416018.vgp>.
- World Bank Group, 2019: “Vietnam” (Washington, D.C.: World Bank).

Chapter 17

Climate Security at a Crossroads: The Evolution and Future of Climate Security in the United Nations Security Council and its Member States



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Abstract This concluding chapter summarizes and reflects upon the findings from the book, *Climate Security in the Anthropocene – Exploring the Approaches of United Nations Security Council Member-States*. It lays out the empirical data found in the book chapters and presents the book’s three central conclusions: (1) climate change is a contested and political concept; (2) different states perceive different climate security threats; (3) different states employ different responses to climate security threats. The overriding conclusion is that human security perceptions and human security-informed policies have largely characterized state responses to climate security to date. However, this may in fact be changing as new sectors, such as national armed forces begin to occupy more space and exert more influence on the discussions. The chapter then reflects on the theoretical and practical implications of these findings, arguing that it is vital to clearly communicate how one understands the term climate security before advocating for one set of policy prescriptions over another. The chapter concludes with a commentary on the potential future pathways that climate security discussions might take as it reaches its current crossroads.

Keywords Climate security · United Nations · United Nations Security Council (UNSC) · National security · Human security · Ecological security · Anthropocene

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The aim of this book has been to analyse whether the concept of security has shifted over time with respect to climate change, and if so, how these shifts have occurred in state practices. We have thus looked at the central international institution responsible for translating conceptions of security into political practice: the United Nations Security Council (UNSC) and its permanent and non-permanent member states. A key example of changing security practices in recent years has been the increasing number of UNSC debates on the security implications of climate change. Yet, despite the increasing prominence of climate security¹ in the UNSC, these debates, discussions, and resolutions have not yet led to an official recognition of climate change as a threat to security.

This book has provided an empirical analysis of climate security perceptions and practices in the 15 member-states of the UNSC for the year 2020 (see Fig. 17.1). Based on these insights, it follows claims from other practitioners and academics that the UNSC cannot continue to ignore climate change and its multiple, cross-sectoral, and multi-scalar security implications (Hardt/Viehoff 2020; Hardt 2020, 2021; Scott/Ku 2018; Conca 2019). The book does not conclusively answer how the UNSC and its member-states *should* respond to climate change. Instead, the analysis has presented empirical underpinnings that might help initiate empirically informed discussions for a better-informed dialogue on climate change and security in theory and practice.

In the 15 country-specific chapters that preceded this conclusion, the authors have assessed the different views and practices of the UNSC member states when it comes to perceiving and institutionalising climate security. The research has been guided by an overarching analytical framework (the introduction to this book) that



Fig. 17.1 Geographic spread of UNSC member states 2020. *Source* Developed by the authors

¹ We refer here either to *climate security* or the *climate-security nexus*.

differentiates three concepts of climate security (*national security*, *human security* and *ecological security*), but which also allows for individual country peculiarities. The empirical analysis has been carried out by 15 country experts (often from the respective countries themselves), who have based much of their research on primary documents and then analysed when and how government ministries and other key actors have made links between climate change and security. This approach has allowed us to go beyond discussing the climate-security nexus as a future issue and instead focus on the practices and perceptions that are already taking place at international, national, and local scales. Thus, this book has gone beyond theoretical discussions on the links between security and climate change and instead explores if and how these links are being made in practice.

The following sections present general conclusions from the preceding chapters.² They outline the contested and politicised nature of climate security (Section 17.1); present a comparison of security threat perceptions (Section 17.2); offer an overview of security responses (Section 17.3); and discuss the implications for theory and practice (Section 17.4). Ultimately, the entire analysis is anchored in the context of the ongoing climate emergency (see Box 17.1). We close the book with concluding remarks and a brief commentary on what the future may hold for climate security (Section 17.5).

17.1 Climate Security is a Contested and Politicised Concept

The chapters in this volume clearly show that climate security is a contested concept. This is noticeable in the deep division between those UNSC permanent members who view the UNSC as a necessary institution for discussions on climate change (e.g. the United Kingdom (UK), France and the United States (US) under the Obama and Biden administrations),³ and those who argue against a further securitisation of the climate (e.g. Russia and China).

Generally, critics emphasise the risks of militarisation, the extension of power politics to climate change, the duplication of tasks within the UN, the potential to

² The following UNSC member states descriptions and the comparison between them are based on the corresponding chapters of this book: Belgium (Orsini, this volume), China (Vuori, this volume), Dominican Republic (Ovalle, this volume), Estonia (Loik and Jürgensen, this volume), France (Estève, this volume); Germany (von Lucke, this volume), Indonesia (Wicaksana and Santoso, this volume), Niger (Kalilou, this volume), Russia (Stepanov, this volume), South Africa (Ouweneel and Simpson, this volume), St. Vincent and the Grenadines (Smith, this volume), Tunisia (Estève and Personat, this volume), the UK (Harrington, this volume), the US (Briggs, this volume) and Vietnam (Vo Dao Chi, this volume). The chapter authors are referred to only the first time mentioned.

³ The US case is peculiar as it showcases to an extreme degree how much impact the Presidential administration (Obama-Trump-Biden) has on its UNSC position. This position is unique among the other case studies.

overrule sovereign decision-making, and inadequate and simplified responses to the interlinked climate-security threat. These concerns appear throughout almost all the UNSC debates on the topic since 2007, with major cleavages seen recently in the case of the UNSC open debate in July 2020 (Permanent Mission of Russia 2020; Permanent Mission of US 2020; UNSC 2020). In the year 2020, the primary focus of our book, the sceptics were Russia, China, South Africa, and the United States (under Trump). These states have often argued that it is the UNFCCC and the Paris Agreement that are responsible for dealing with climate change, and that the UNSC has a different mandate and is an inappropriate forum for dealing with the issue. A further concern is that the available resources and expertise of the UNFCCC and the UNSC should not overlap (Stepanov, this volume; Vuori, this volume). Other arguments are that there is not enough scientific evidence to prove the links between climate change and conflict, that conflict dynamics and causes are country- or region-specific and that the root causes of conflicts are too complex to label them climate-driven, even if climate change might be one of the factors (Hardt 2021a).

In 2020, the advocates for including climate change in the UNSC were the UK, France, Vietnam, Germany, Belgium, Tunisia, St. Vincent and the Grenadines (SVG), Niger, the Dominican Republic, Indonesia and Estonia. They claimed that climate change could no longer be ignored, as it heavily impacts different political domains, including international security (Permanent Representation of the Federal Republic Germany to the UN 2020). Climate change in this respect is often described by these states as a *threat multiplier*, which means that climate change is not a single identifiable threat, but is a complex phenomenon that exacerbates already-existing insecurities such as economic inequality, infrastructural problems, or institutions with weak governance. This notion of climate change as *threat multiplier* has also increasingly gained traction across a wide range of research fields and is used in the Intergovernmental Panel for Climate Change (IPCC) 6th assessment. Thus, advocates highlight the need to adapt the UNSC to these new threats to security and, as for example Vietnam points out, to “contribute to the prevention of climate-induced conflicts and crises” (UNSC 2020: 12).

The debates between sceptics and advocates are often shaped by the possible directions, tools, and forms of broader security policy. These discussions are complex and their rationales diverse, because UNSC debates on climate change can include a vast array of other issues, with many potential effects for national and international security. They also include various timescales. Finally, they are also influenced by broader discussions on the responsibilities, capacities, and authority – the very legitimacy – of the council, and the lack of reform of the Security Council in a changing world (Conca 2019).

In this sense, climate security cannot be divorced from the broader political and strategic relationships that characterise the UNSC, particularly amongst its permanent membership. That said, it would be a mistake to view climate security framings in binary terms, with states assembling into rudimentary *pro* or *anti* securitisation camps that generally fall along Western and non-Western lines. Doing so would only prolong the ongoing debates on the issue and would miss the diversity of climate security frames around the world, anchoring and limiting it primarily to great power

politics. Instead, the 15 case studies in this book show a great deal of diversity within and between states over whether to frame climate change as a security issue – and especially what kind of security issue – and what the climate-security nexus entails according to their formulations. Across the whole UNSC membership, there is no uniform understanding of what climate security is, let alone how member-states might address it.

Despite the ongoing contestation over the nature of the climate-security nexus, the case studies demonstrate that member-states have increasingly framed climate change as a security issue both inside the UNSC and outside, at domestic and international political levels. This trend can be observed at the UNSC, as only three open debates on the subject took place between 2007 and 2018. Yet, between 2019 and 2021 an additional four open debates occurred, alongside numerous other initiatives, such as the creation of the UN Climate Security Mechanism⁴ (introduction of this book). Across the chapters, however, the institution of the UNSC is seen to play an important role for states to organise and diffuse the implications of climate security. Take, for example, the leadup to the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change in Glasgow, when the UK positioned climate change as the main theme of its UNSC Presidency in February 2021 (Fillion 2021; Harrington, this volume). For some members seeking election to a non-permanent seat, such as Germany, climate security became a focal point of their campaign and their subsequent membership for the years 2019–2020 (von Lucke, this volume). Niger is another example, as it has played an influential role in highlighting the connections between climate change and security in the UNSC through its co-sponsoring of UNSC Resolution 2349 (2017) on the Sahel Region and the Lake Chad Basin Region (Kalilou, this volume). The resolution describes “the adverse effects of climate change and ecological changes among other factors on the stability of the region, including through water scarcity, drought, desertification, land degradation, and food insecurity, and emphasises the need for adequate risk assessments and risk management strategies by governments and the United Nations relating to these factors” (UNSC 2017: 17). As Kalilou (this volume) explains, the country was able to use its time on the UNSC to take a diplomatic leadership role and advance its long-standing support of climate security initiatives. The topic has also recently allowed for several other non-permanent member states (e.g. Sweden, the Dominican Republic, and Germany) to actively collaborate on the issue after their period of membership had ended (Permanent Representation of the Federal Republic Germany to the UN 2020).

This momentum has, however, stalled more recently. A December 2021 draft resolution on integrating climate-related security risk into conflict-prevention strategies, co-sponsored by Niger and Ireland and supported by more than 110 states within the UN, was defeated by Russia and India (UNSC 2021). At the time of writing (October 2022), with the exceptions of two Arria Formula Meetings, the topic of climate security has not been formally debated or discussed in the UNSC in 2022. This may be

⁴ At: <https://www.unssc.org/news-and-insights/blog/joint-efforts-sustaining-peace-meet-un-climate-security-mechanism> (11 October 2022).

attributed to the December 2021 resolution defeat, as well as the Russian invasion of Ukraine in February 2022 and the cascading global crises which have emanated from it, but it is nevertheless a general setback. At the same time, it calls attention to the fact that the UNSC, despite having not officially recognised climate change as a security threat, has done so indirectly (Maertens 2021), as several resolutions limited to specific geographic regions and states include climate change references.⁵

If we move the focus away from the UNSC, the cases found in this book all demonstrate an increased national focus on climate security issues over the last decade. This is perhaps not surprising for some countries such as SVG, the Dominican Republic and Indonesia, which are all strongly impacted by climate change. We see also that Russia, which is opposed to discussing climate security in the UNSC, has increasingly framed climate change as a security issue with significant consequences at a national level. As Stepanov (this volume) explains, despite Russia's consistent scepticism over climate securitisation, the country has increasingly emphasised new climate-induced military risks emerging from a thawing Arctic. For China, climate change has not been directly tied to its military security, but the country has increasingly deployed security discourse to describe the need for strong national climate mitigation efforts. China frequently promotes the need to build greater economic, energy, food, and ecological security in the face of rapid climate change (Vuori, this volume).

To argue that climate security thus becomes increasingly acknowledged at national policy level is perhaps an unsurprising finding, given the speed and scale of climatic changes and the amplification of emergency framings of climate change through IPCC reports (IPCC 2007, 2014, 2021, 2022) and other declarations by states and non-state actors (McHugh et al. 2021). Nevertheless, the increased acknowledgement by UNSC member-states signals an important development for researchers and practitioners seeking to better understand how the discourses and logics of climate security interact with specific state practices. It indicates that climate change can no longer be credibly separated from other issues of global politics, as an issue better left to *science* to tackle, or framed primarily as a development issue. It also suggests that states are increasing their use of both traditional and non-traditional security tools to advance various forms of climate security. This is exemplified by South Africa, which, as Ouweneel and Simpson (this volume) show, employs a *whole-of-society* approach to climate security. This entails the involvement of both private and public, state and non-state security actors and is indicative of a very broad risk-based approach to the issue.

⁵ The resolutions that include references to climate change are focused on the Lake Chad Basin Region (Resolution 2349), Darfur (Sudan) (UNAMID, Resolution 2429), Somalia (UNSOM, Resolution 2461), Central Africa (MINUSCA, Resolution 2499), Mali (MINUSMA, Resolution 2480) and the Democratic Republic of the Congo (MONUSCO, Resolution 2502). Some new geographic regions have been included through the Iraq Resolution 2576 (2021) and the Cyprus Resolution 2587 (2021), although these last two reference climate change but do not clearly name the links to security.

All of this has important ramifications, not just for our evolving understanding of security, but also for the specific actors and practices that are empowered or disempowered by such a shift. Some countries, such as the UK (Harrington, this volume) and the US (Briggs, this volume), have incorporated climate security into their traditional military and diplomatic sectors, while other countries such as Tunisia (Estève and Personat, this volume) and Indonesia (Wicaksana and Santoso, this volume) – by leveraging human and ecological security frames – accord influence to a diverse set of non-traditional security actors. Also, Niger (Kalilou, this volume) and SVG (Smith, this volume) have gained a lot of visibility as being particularly vulnerable to climate change, thanks to their roles in the UNSC.

Overall, the findings show that climate security, broadly understood, is deeply contested, both in theory and in practice between states and within the UNSC.

17.2 States Perceive Different Types of Climate Security Threats

There is a diversity of perceptions regarding the main security threats posed by climate change, which can range from smaller operational challenges for militaries to existential threats to states, regions, and even humanity as a whole. All of these different descriptions were found throughout the analysis of the 15 UNSC member states.

Though each country's case is relatively unique in terms of how they view climate threats, for the sake of brevity they can be arranged into two loose camps: those that emphasise internal threats from climate change to domestic security and those that emphasise a more expansive set of threats to both domestic and international security. Of course, there are instances where the distinction is unclear, and some countries, such as the UK and the US (under Obama and Biden) that recognise the transboundary nature of climate change risks, emphasise the hybrid and/or compound nature of climate threats that easily blur the distinctions between internal and external threats to human, national, and ecological security.

A select number of permanent and non-permanent members of the UNSC emphasise domestic security threats from climate change. These perceptions of domestic threats vary, however, and may be attributed to each country's unique historical, political, geographical, and strategic context. The US focuses on the role of military forces, infrastructure, and activity and on how climate change affects these. Some climate change effects, such as sea level rise and extreme weather, are frequently highlighted as a physical threat to states in terms of territorial integrity and their populations (e.g. in Russia). There are also knock-on-effects to food security, highlighted by SVG, Niger and South Africa; water security, highlighted by Indonesia and South Africa; and energy security, highlighted by Russia and Tunisia. Russia references the domestic security implications of a global energy transition. It sees opportunity in potential transport routes for their greenhouse gas exports across a

thawing Arctic and views transition away from oil, coal and natural gas as a threat to its fossil fuel-driven economy and therefore its security, which may partly be explained by its economic dependence on domestic fossil fuel industries.

For some non-permanent UNSC members, such as the Dominican Republic, Indonesia, Vietnam, and South Africa, climate security threats are also viewed primarily in domestic terms via a risk-disaster lens. Ovalle (this volume) explains how the Dominican Republic views the threats to its domestic physical security, food systems and infrastructural integrity from changing climatic patterns and extreme weather events. Ouweeneel and Simpson (this volume) argue that the South African government sees climate change primarily as a threat to its domestic water, food, and energy security and indirectly how climate impacts on these climate-exposed sectors might affect domestic or regional insecurity, particularly through cascading effects of climate impacts on poverty, a *just energy transition*, and other dimensions of well-being. Other countries, such as Niger and Tunisia, tend to primarily view climate change threats in terms of their socio-economic effects (e.g., resource scarcity, spread of diseases, irregular migration, etc.), but they also highlight the national security concerns that might emanate from rapidly deteriorating environmental conditions in already-vulnerable regions such as the Sahel and the Maghreb. For others, such as Vietnam, climate change is framed as a *matter of life*, but this framing is primarily directed at the domestic level and along non-traditional security lines. As Vo (this volume) argues, this owes in part to Vietnam's specific vulnerability to climate disasters and the state's prioritisation of poverty reduction. In contrast, SVG as a Small Island Developing States (SIDS) forcefully presents climate change as an existential threat, facing as it does significant vulnerability from rising seas and extreme weather (Smith, this volume).

In contrast to countries which emphasise domestic climate security threats, many Western states such as the US (under Obama and Biden), the UK, Germany, France (Estève, this volume), and Belgium (Orsini, this volume), tend to perceive climate security threats in terms of their foreign policy impacts. States such as Germany have emphasised especially the impacts of climate change on violent conflict, migration and the loss of statehood in the case of some SIDS. Other states, such as France, stress how traditional security sectors can promote dialogue, cooperation and peace in the climate space (Estève, this volume). Threats to both human and national security, such as extreme weather events or food/water insecurity are often placed *offshore* – in states and regions viewed as already vulnerable (e.g., the Sahel region, the SIDS and along the Mekong River) or in geopolitically important and resource-rich regions such as the Arctic. Nevertheless, these threats that are placed *elsewhere* often have indirect effects on those states (e.g. Germany and Belgium) or affect regional security deemed as of national interest. As Hardt and Viehoff (2020: 106) describe, the promotion of offshore threats is also being put forward as an indirect effect and used, for example, to implement domestic environmental and climate policies (for example Estonia and the UK). Others, such as France, highlight how the state

might be potentially affected by domestic tensions in this regard, as for example with references to *gilet jaunes* protests.

Across the UNSC debates on the topic, we see that the advocates for climate security highlight the diverse implications of climate change on conflict, and they often differentiate between direct and indirect impacts. It is claimed that climate change can “potentially exacerbate, prolong or contribute to the risk of future conflicts and instability” (Ten-UNSC-MS, 2020). Or, as Rene Kokk, the Minister of the Environment of Estonia states during the 2020 UNSC debate, it “intensifies important drivers of conflict and fragility” (UNSC 2020: 14). Niger highlights in this respect a vicious cycle between conflict and climate change, given that the local and contextual situation inhibits adaptation measures to climate change and is therefore in turn more prone again to conflict (UNSC 2020: 5–6).

It is striking that our findings show an absence – at both the UNSC and at national policy levels – of security framings that highlight threats to the stability of the Earth System. In the following quote, the German Foreign Minister Heiko Maas at the UNSC debate in July 2020 alludes to the broader acknowledgement of Nature but the threat description deviates from repeated scientific warnings on the implications of climate change to the Earth system (IPCC 2021; Lenton et al. 2019):

as diplomats and politicians, we tend to think that everything is negotiable. This is also the underlying idea behind the Security Council: building international consensus. But we cannot negotiate with nature. The physical, chemical and geographical realities of global warming will not compromise with us... The fight against climate change should not divide us. We fight it to save ourselves, and we fight it for the people around the world who are already facing violence and displacement as a result of climate change. They cannot afford to wait. The time for diplomatic patience is therefore over. The Security Council cannot negotiate with the realities of nature. Action is all that counts (UNSC 2020: 13).

In other words, it is very rare for states to use the Earth system as a referent object of security, and we detect a strong disconnect and growing tension between political commitments and action on climate change and the urgency and scope of transformation called for from science (see Box 17.1).

17.3 States have Different Types of Climate Security Responses – National, Human, and Ecological Security

Across the 15 case studies we can identify a diversity of state actors tasked with climate security roles, spanning different policy areas (e.g., defence, foreign affairs, agriculture, development and environment). Our analysis further shows that the threat descriptions vary within the national level between different institutions and sectors. As the following Table 17.1 indicates, there is a broad array of ministries that primarily link climate change to security in their official documents.

Table 17.1 Climate-security links at domestic policy level of 2020 UNSC member states

	Actors and Ministries				
	Ministry of Defence/Security Strategies	Head of Government, Ministry of Foreign Affairs, Ministry of Development	Ministry of Environment	Ministry of Interior, of Planning, Health, Economy, Energy, Internal Development	Disaster Risk Management
Belgium					
Dominican Republic					
Estonia					
China					
Germany					
France					
Indonesia					
Niger					
Russia					
South Africa					
SVG					
Tunisia					
USA					
UK					
Vietnam					

Source Developed by the authors

Together, all the different state ministries and agencies present a complex picture of the responses provided by governments. It is therefore challenging to come up with an exhaustive comparison of all the case studies. Some states demonstrate a clear institutionalisation of climate security, such as in the case of France and its Ecological Defense Council. It is clear that states emphasise different forms of climate security. The following section details the conclusions from our analysis on whether states approach climate security along national, human, or ecological security lines.

First, the chapters show that national security responses are increasingly gaining importance and becoming tools for handling climate threats. National security organisations (namely ministries of defence and military institutions) now typically acknowledge climate change as a threat (or as a threat multiplier) in thirteen member states, with the exceptions of the Dominican Republic, Tunisia (where no links were found) and Saint Vincent and the Grenadines (where there is no military) (Hardt 2020). However, we noticed a trend for providing militarised solutions to pre-constructed climate-related security issues (migration, terrorism, and armed conflict). For example, following the rise of migration flows in the Mediterranean in the 2010s and early 2020s and its continuous securitisation in political debates (Lucarelli et al. 2020), military doctrines call for national security measures against climate-induced migrations (such as border control) in all the European UNSC member states: Belgium, Estonia (Loik and Jürgenson, this volume), France, Germany, and the United Kingdom. Similar statements are made in South Africa, but other countries tend to frame climate-induced migrations more as human security matters, and call for economic development, humanitarian, or climate adaptation policies (for example in China, SVG, or Tunisia).

The amplification of threats from climate-induced terrorism can be identified in China, the United States, France, Belgium, Estonia, Niger, and South Africa. In these

cases, states mostly underline the complementarity of military and humanitarian solutions (in the case of France, in the Sahel region, for example). Disaster response and rescue are also among the most present national security responses. Vietnam, for example, has increased the presence of its military in disaster/incident response and rescue operations, alongside civil security agencies. More broadly, the security of the national territory in the face of climate threats is a concern in Russia, where natural catastrophes are represented in national security documents. However, a general trend of militarisation of the issue was not found there. We see other acknowledgements, as in the case of South Africa, where the Defence Strategy recognises the existential threat of climate change as being part of the “most serious threats to humanity” through, for example, hurricanes, floods and wildfires, and the promotion of well-being, such as the protection of the environment for future generations (Department of Defence [DoD] 2014: 13; 2015: 2).

In terms of climate security responses, the traditional national security sector is establishing expertise on climate change (for example, in France, Germany, and the US). Most of these countries acknowledge the domestic effects of climate change to a certain but limited degree. This need for preventive assessment by drawing from scientific expertise could be interpreted as a trend of *riskification* of security (Corry 2012; Estève 2021). One of the symptoms of riskification is the replacement of traditional security concepts (such as threat and defence) with new ones like risk and resilience. The difference is important, because, as Corry (2014: 256) explains, “resilience does not imagine specific scenarios against which defences (or pre-emptive strikes) must be prepared” but keeps them open. In contrast, the idea of defence, and in fact pre-emption or preparedness, requires the singling out of a very particular threat (that is, requires the suspending of uncertainty). In this reading of riskification from Corry (2012: 246), climate change does not present states with immediate and direct forms of aggression or harm, at least to the extent that requires traditional security mobilisation, but instead is perceived as “a second-order security politics that directs attention to the level of conditions of danger or harm”.

Human security responses appear to be more prevalent than national security responses across all fifteen UNSC member states. While some countries such as Tunisia, China, or the Dominican Republic remain cautious when it comes to the linkage between national security and climate change, they do adopt a human security focus. Their climate security responses include mostly non-military, preventive, and protective measures such as climate planning, scientific assessments, disaster risk management, and humanitarian and development aid. In the case of Tunisia, for example, the Ministry of Environment coordinates national climate adaptation plans and frameworks, where climate security is explicitly mentioned through an agricultural lens in which the livelihood of the people is the main priority (i.e. food security). In China, human security responses such as assistance to the local communities threatened by desertification or sea level rise are often mentioned. In the Dominican Republic, water and food security are prioritised in public policies, and disaster-risk management measures are at the core of climate security responses. Climate change has also been mentioned in the country’s constitution since 2010: “The formulation and execution, through law, of a plan of territorial ordering that ensures the efficient

and sustainable use of the natural resources of the Nation, in accordance with the necessity of adaptation to climate change, is a priority of the State”⁶ (Constitución Política de la República Dominicana 2010).

All fifteen case studies show how human security perspectives are becoming mainstreamed in diplomatic exchanges over climate security, with several strong statements on the matter identified by the authors both within and outside of UNSC debates. The typical approach here is exemplified by Indonesia, where human security is put forward both in domestic climate change policies through development and poverty reduction programmes, and at the international level through the support given to adaptation plans and strategies in areas where the livelihood of the people is threatened.

Ecological security responses draw a more complex picture than national and human security measures. In all countries we found some recognition of the anthropogenic cause of climate change, with the exceptions of Russia and the US (under Trump). However, as regards mitigation measures, the descriptions are not always explicitly connected to ecological security narratives. In addition, in the case of the US, it has been noted that climate security and climate mitigation are sometimes used interchangeably in policy dialogues. The contemporary ecological discourse on climate change being a threat to the future of mankind or to the habitability of the Earth is also mentioned by policy actors in climate security and environmental policies in, for example, the UK and in France (especially by governmental bodies in charge of environmental protection and mitigation policies). In Germany, a 1989 parliamentary debate argued that “[t]he threat to the Earth’s atmosphere endangers life on Earth if the present trend is not fully and comprehensively halted”⁷ (Deutscher Bundestag 1989: 1).

UNSC member states from the Global South seem to connect ecological security more specifically to adaptation policies. In the case of Niger and Tunisia, environmental restoration and land management programmes are framed as ecological security measures, as biodiversity loss and climate resilience are constructed as interconnected issues. This makes sense given the connectedness of their economies to the productivity of land. Indonesia offers an interesting combination of human and ecological security measures through its National Action Plans, where spatial planning and land use lie at the core of the concerns. Ecological security could also become a powerful foreign policy discourse in China through its “ecological civilisation” narrative. As Vuori (this volume) outlines, “ensuring harmony between human and nature” is a part of “socialism with Chinese characteristics in the new era”, as is a “holistic approach to national security” that includes elements such as “traditional and non-traditional security, and China’s own and common security” that aim to “foster new thinking on common, comprehensive, cooperative, and sustainable security”⁸ (Xi 2017: 20–22).

⁶ Translated from Ana Ovalle (see the chapter on Dominican Republic, this volume).

⁷ Translated by Franziskus von Lucke (see the chapter on Germany, this volume).

⁸ Translated from Juha Vuori (see the chapter on China, this volume).

In terms of how climate security is approached within the UNSC itself, proponents highlight the need for cooperation and multilateral activities throughout the UN bodies, the need for systemic assessments of how climate change impacts on security, with a local and context-focused analysis of threats and responses, whereby sovereignty issues and mandates should be respected. Other initiatives suggested in the UNSC include mainstreaming climate-related security risks into different UNSC assessments and decision-making, systematic reporting on climate-related security risks by the Secretary-General, a climate *proofing* of UNSC resolutions, and acquiring institutional support for the UNSC on climate security from a special Envoy and/or Special Representative and/or from an expert group (suggested by e.g. Estonia, Germany, SVG, and the UK). These non-militarised/non-traditional security responses are relatively similar to member-state responses.

However, the depicted responses do not in any ways measure up to the necessary actions and the urgency for fundamental transformation described by scientists. Greta Thunberg described the need for action with “I want you to act as you would in a crisis. I want you to act as if our house is on fire. Because it is.”⁹

17.4 *Quo Vadis* Climate Security? Critically Exploring the Practical and Theoretical Implications of Linking Climate Change to Security

The insights of how the 15 analysed states have perceived and operationalised responses to climate security allow us to critically discuss some of the advantages and pitfalls of constructing climate change as a national, human, or ecological security issue. While this is, on the one hand, of interest in light of the longstanding theoretical debate on whether the environment and climate change should be securitised or not (Floyd/Matthew 2013; Floyd 2019), it also has immense practical implications.

The literature on the securitisation of climate change has long been critical when it comes to constructing climate change as a threat to the *national security* of states. Scholars have argued that based on the negative value of security, this might lead to a militarisation of climate change (Wagner 2008; Hartmann 2010), to a focus on tackling the short-term (security) symptoms of climate change instead of its root causes (von Lucke 2020: 227), and might cement outdated, nationalist, and confrontational conceptions of security that will not be able to cope with the new challenges of the Anthropocene (Dalby 2014; Chaturvedi/Doyle 2015; Hardt 2018). However, when we look at the case studies of this book, we find that the practical picture is much more diverse. In some countries national security perceptions of climate change have undoubtedly led to increased attention in the defence sector by military actors and thus to a certain extent focused the attention too much on tackling

⁹ World Economic Forum in Davos, Switzerland on January 25, 2019; at: <https://www.theguardian.com/environment/2019/jan/25/our-house-is-on-fire-greta-thunberg16-urges-leaders-to-act-on-climate> (15 October 2022).

symptoms such as preventing violent conflict, migration, or political instability. This has been the case in the US, where a long-standing national security framing of climate change has led to an integration of climate change into the planning and practices of the Pentagon and the wider military. For example, when it comes to training practices and planning for increased humanitarian missions. The same has been true for France, and to a lesser extent for Niger, where climate change has been increasingly integrated into the risk planning of the defence sector concerning armed violence, migration, or terrorism.

Yet, it also is clear that in many other of the 15 cases, national security has been understood more broadly. For example, Vietnam and the Dominican Republic have not systematically deployed narrow national security conceptions of climate change. There is a notable absence of discussions of military threats or war responses in their respective defence sectors. Instead, they have largely directed their reactions to the threats of climate change towards a human-centred approach that first of all links to concerns about the availability of crucial resources such as water, food, energy, or disaster response capabilities, and thus eventually to an effective response of the state. Similarly, countries such as Germany, China, or the UK have largely avoided explicit national security conceptions and have framed the issue in far more global terms, and have hence linked it to international security, the UN system or to safeguarding humanity as a whole. Thus, while still not always thoroughly decoupled from its traditional origins, the notion of national security itself is undergoing profound changes (Trombetta 2008). Some claim that we increasingly see not just a securitisation of climate change but a *climatisation* of the security and defence sector that entails a broadening of traditional understandings of national security (Oels 2012; Maertens 2021).

The literature – but also political practitioners in the UNSC context – has generally been more sympathetic when it comes to discussing climate change as a threat to *human security* (Oels/von Lucke 2015; Barnett/Adger 2007), which highlights the positive value of security and aims to secure the basic needs of individuals (United Nations Development Programme [UNDP] 1994). Authors claim that such a reading might be able to emancipate and empower especially the poorest and most vulnerable people who will be affected first and hardest by climate change (Barnett/Adger 2007; Booth 1991; Scheffran et al. 2012; Floyd 2007). They argue that human security depictions of climate change can reorient the attention to helping individuals cope with climate change, and include new actors such as humanitarian NGOs (von Lucke 2020: 230).

Concerning the findings of the 15 country chapters, several cases to some extent confirm these favourable assumptions. Thus, smaller countries in the Global South that are heavily affected by the direct physical effects of climate change (e.g. the Dominican Republic, SVG, Vietnam, South Africa, and Tunisia) have emphasised the human security implication of climate change for their populations. This has often particularly influenced domestic responses to climate change. For instance, it has led to greater attention to the needs and vulnerabilities of individuals, especially when it comes to food and water (in)security or protection against natural disasters. It has also helped to permanently anchor concerns for these issues into

the institutional frameworks of these countries and to gradually broaden formerly narrow and military-focused national security conceptions. Yet, as the Indonesian case emphasises, human security-focused policies can lack the proper inclusion of local perceptions, and by no means guarantee the emancipation and empowerment of poor populations and those directly affected.

In contrast to the above-described states, where the focus has been on domestic approaches to dealing with the immediate effects of climate change for their own populations, in many affluent countries of the Global North (e.g. Germany, the UK and France), human security-centred threat constructions of climate change have primarily driven international policies. Based on the – at least until recently – much lower perceived risks for their own citizens (see Leiserowitz 2005), these countries have mainly used a human security framing to integrate climate change into their development efforts or into diplomatic approaches to tackling climate change. A recurring theme has been advancing disaster risk management, resilience and climate insurance schemes for the most vulnerable populations in the Global South (e.g. the chapters on Germany and France, this volume).

While these measures can have positive effects and can support especially-vulnerable populations, the focus on tackling human security issues in the Global South has also to some extent been used to absolve these Northern countries from sufficiently tackling the root causes of climate change and from implementing the necessary transformations at home (Hardt 2018: 95; von Lucke 2020: 231). In some ways, it shifts the burden of tackling climate change towards far less responsible world regions, and at the same time reinforces a problematic hierarchy between powerful Northern countries and increasingly victimised Southern populations (von Lucke 2020: 231; Duffield/Waddell 2006). The chapter on SVG in this book exemplifies this intrinsic connection between climate (in)security and climate (in)justice and highlights how climate change can be seen as an aggression from the developed world aimed at vulnerable countries in the Global South. Thus, in a 2018 UNGA debate the Prime Minister of SVG, Ralph Gonsalves, complained that: “Major emitters that fail to set and honour ambitious mitigation pledges are committing a direct act of hostility against small island developing states” (UNGA 2018), and in 2020 its Ambassador to the UN made clear that SIDS needed to “be bold and advocate vociferously in the international arena for climate justice now [...]” (King 2020). Thus, while certainly broadening discussions, avoiding some of the pitfalls of national security and refocusing the attention on the most vulnerable, human security constructions of climate security are nevertheless not always unproblematic and often lack a clear focus on the overall challenges of climate change (see Box 17.1).

Finally, we have also explored the role of *ecological security* conceptions. With a view on the literature, such a conception of climate security has often been portrayed as being better suited to coping with the systemic challenges of the Anthropocene and as closest to the necessary fundamental changes in our thinking about security in general (Harrington/Shearing 2017; McDonald 2021; Hardt 2018). Looking at the country chapters of this book, we see that, overall, ecological security has played a less central role than national and human security. As the literature points out, this

may be because it is more difficult to mobilise political support for and attention to what are understood as *soft* threats (Hardt 2021) that merely affect ecosystems and non-humans. Of course, this ignores the growing scientific basis of the fundamental threats posed by altering the environment and climate (see Box 17.1) and as Hardt (2021a) states, the re-thinking of the categories of *soft* and *hard* threats in politics needs to be re-visited in the context of the Anthropocene. Thus, while ecological security conceptions played an important role in Germany in the 1990s and early 2000s for instance, they progressively lost their importance around the mid-2000s, when attention shifted to human and international security and when the German Foreign Office increasingly assumed responsibility for climate change and climate security.

Nevertheless, ecological security conceptions of climate change have played a role in justifying climate policies in several of the 15 case studies. They contributed to legitimising progressive climate policies and the far-reaching *energy turn* in Germany, and helped accelerate the implementation of the Paris Agreement, the decarbonisation of the economy and to legitimising the 2021 *Climate and Resilience law* in France. Moreover, narratives on *global ecological security* have played a role in China's increasing efforts to become a more responsible force for climate abatement since 2017. Ecological security conceptions have also been linked to combatting environmental destruction (e.g., desertification) or the protection of natural resources in Tunisia and the Dominican Republic.

In most of the 15 cases, however, ecological security has not been particularly influential as a standalone narrative. Instead, political actors have often combined concerns for the environment or certain ecosystems with human security (or less often national security) considerations (see the chapters on SVG, Indonesia, Dominican Republic, or Belgium). Thus, ecological security is often – as for example in the Belgium case – only the first element or *domino piece* in a chain of argument that at its core tries to secure the wellbeing of humans and sometimes nations. Notwithstanding these limitations, some of the case studies also exemplify the fact that ecological security might become more relevant again in the future with the realisation that in the era of the Anthropocene one cannot separate humans and their environment. Thus, for example in the UK, ecological security has seen a comeback in recent years, at least in analysing the discourses of official documents. Issues such as biodiversity loss have been labelled as a top strategic priority and the continued altering of the environment by human activity or widespread species extinctions have been explicitly considered as important threats. Here again, however, the expressed discourses will need to be measured up with the practice and we did not come across any transformational initiatives that would match the scientific descriptions.

Comparing the three ideal typical climate security conceptions, the case studies of this book and the previous discussions at the UNSC show that all use different and mixed forms of climate security. While generating the most attention (and often being applied more broadly than the literature feared), national security conceptions also run the highest risk of focusing too much on tackling only the (security) symptoms of climate change and strengthening outdated, and in parts militaristic, security paradigms (Dumaine 2022). By contrast, a combination of human and ecological

security conceptions might be better able to heed the Anthropocene's key lesson – the unescapable human entanglement with nature – and to aid the much-needed rethinking of security in political practice. Looking at the problematic distribution of power in the UNSC and international institutions in general, such a view of climate security might also be better able to forge a consensus between different states that often still jealously guard anything related to national security.

17.5 Concluding Remarks and Outlook: Future Transformation and Implications

This book has aimed to analyse climate security with a focus on the UNSC and specifically on the national approaches of its member-states. We have assessed if and how the link between climate change and security was included in the national policies and Security Council contributions of the 2020 member-states of the UNSC. The research design has aimed to confront some of the main challenges that accompany the climate security literature and practical discussions arising from it. We have examined the case studies in reference to (a) the discussions on whether the link exists or not (b) the difficulties in locating the climate-security nexus because many different (sometimes contradictory) conceptions and discussions exist; (c) the differences between how states evaluate and use climate security, and the implications of these differences with respect to the scientific descriptions of climate change and the Anthropocene. We believe that answering these questions is vital, given the increasingly alarming findings from climate scientists on the dire consequences of accelerating climate change and the rapidly narrowing political window of opportunity to do something against this development (see Box 17.1).

Box 17.1 The scientific basis of future risk to security in the context of climate change and the Anthropocene. Source: developed by the authors.

The IPCC (2021) has established that it is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, oceans, cryosphere and biosphere have occurred. Global warming records have been repeatedly broken and extreme weather events have been linked with greater confidence to rising temperatures (IPCC 2021). Under the Paris Agreement, almost all the countries of the world committed to “pursue efforts to limit the global average temperature increase to 1.5°C above pre-industrial” times (UNFCCC 2015). However, unless there are immediate, rapid and large-scale reductions in greenhouse gas emissions, limiting warming to close to below 2°C of the global average, will be beyond reach, contrary to the targets set in the Paris Agreement (IPCC 2021). Current best estimates indicate that the world will pass 1.5°C of warming somewhere between 2030 and 2035 and pass 2°C between the early 2040s and the early 2050s (IPCC 2021). There is a one-in-four chance that the world will exceed 1.5°C for at least one year by 2025 (World Meteorological Organisation 2019). The consequences of climate change for security

will be determined by how the climate impacts proxy drivers, such as where energy, mobility or water are constrained. Compared to other socioeconomic factors, the influence of climate on conflict is assessed with *high confidence* by the IPCC at current warming levels as relatively weak (IPCC 2022). The risk of violent conflict in the near-term will be driven by multiple dimensions of vulnerability, such as socioeconomic conditions and governance, more than by climate change (IPCC 2022). However, at higher global warming levels, impacts of weather and climate extremes, particularly drought, by increasing vulnerability, will increasingly affect interpersonal (Trisos et al. 2022; Birkmann et al. 2022) and violent intrastate conflict (IPCC 2022). The historical influence of climate on conflict is judged to be small when compared with dominant conflict drivers (Mach et al. 2019). It needs to be taken into account that much of the research on climate security is limited to (parts of) Sub-Saharan Africa, which raises some concerns about selection bias and generalisability of results (Adams et al. 2018). There is a lot of evidence linking increased temperatures and drought to conflict risk in Africa (Trisos et al. 2022; von Uexkull et al. 2016; Linke et al. 2017; Mach et al. 2019). Agriculturally-dependent and politically-excluded groups are especially vulnerable to drought-associated conflict risk (Trisos et al. 2022; Birkmann et al. 2022). However, climate is one of many interacting risk factors, and may explain a small share of total variation in conflict incidence (Trisos et al. 2022). While climate change may increase armed conflict risks in certain contexts (Mach et al. 2019), responses to climate change will be crucial to mitigating these risks (Birkmann et al. 2022).

With reference to the Earth System Sciences and to the context of the Anthropocene, the understanding of security becomes even broader, as seen in the above-described foci on the linkages between climate change and conflict, peace and development (Hardt 2021). The scientific description of Hothouse Earth (Steffen et al. 2018) and Planetary Boundaries (Rockström et al. 2009; Steffen et al. 2015) correlate with security conceptions by pointing at how the entire Earth System is highly endangered by several processes that are caused by or intertwined with human activity. The Hothouse Earth theory shows how temperature increases caused by human emissions push Earth towards crossing the planetary threshold. If the trajectory is not corrected in time, later attempts to redirect or influence the trajectory will fail. Within the projections of Earth being trapped in an inescapable Hothouse Earth, intrinsic feedback in complex regional processes will lead to a global cascade of tipping points that will affect the entire planet (Lenton et al. 2019: 595) causing “serious disruptions to ecosystems, society, and economics” (Steffen et al. 2018: 1), and leading to a new, less habitable, “‘hothouse’ climate state” (Lenton et al. 2019: 594). The “emergency response” (Lenton et al. 2019: 592) lies in *Earth System Stewardship* and entails, among other measures, the cutting and limiting of emissions to 1.5°C. The Planetary Boundaries concept (Rockström et al. 2009; Steffen et al. 2015), broadens the focus from climate change to a total of nine systemic control variables, among others biodiversity, climate change, and bio-geochemical cycles, that are each described as being threatened and pushed to the corresponding thresholds by human activity (Steffen et al. 2015; Rockström et al. 2009). On the basis of these thresholds and a determined scientific data set the *safe operating space* for humanity is defined (Rockström et al. 2009: 2). In general, the urgency for action has been recently re-iterated by Lenton et al. (2019) in “doing the maths” of planetary emergency and by Armstrong McKay et al. (2022)

who further push the need for action. The re-thinking of security conceptions, policies and governance within these contexts is thus a fundamental and existential concern.

In response to these major research tasks, the findings of the 15 country cases and the above reflections showcase many different approaches and initiatives on climate security at the national level. The clear deployment in practice of many different forms of climate security shows how obsolete the frequent discussions on the question of whether links between security and climate change exist in theory and practice are. What this book has also clearly shown is that the variety of responses is much broader across geographies and policy domains. It is certainly no longer solely fixated on the climate-conflict link, which is the traditional and still dominant link made in the theoretical literature (von Uexkull/Buhaug 2021). These findings demonstrate the need for further research and a more concerted acknowledgement of climate-security issues within policy circles.

At the UNSC level, we conclude that an official recognition of climate change as a threat to security would be an important step to make in the context of the vast empirics and implications of the climate-security nexus. We further support the efforts to establish and sustain a productive dialogue on these issues at the UN level, such as in the Climate Security Mechanism or within the Group of Friends. However, we also think that it is important to re-direct the discussion away from a simplistic two-camp typology: those who support and those who oppose climate security. In fact, there is a multiplicity of existing approaches. Instead of engaging in more discussion that fight over whether to evaluate climate security either as, “a magic potion or as a poison” (Hardt 2021a: 5) this variety should be acknowledged and responded to.

The stark differences in the perceptions and institutional responses in the case studies underline that to constructively deal with the challenges, it is vital to clearly communicate how one understands the term *climate security*. These dialogues need to be clear in terms of the specific threats emanating from climate change, who (or what) is threatened, and what actions might counter these threats in a just and sustainable way. The dynamic framework used in this book that differs between the three concepts of *national*, *human*, and *ecological security* and which has guided the 15 chapters might help to orient the discussion. We also hope that the variety of approaches which have been identified (e.g. how traditional security sectors are shifting in light of climate threats), might help inspire creative, just, and effective security responses. Nevertheless, questions of power politics and political bargaining are crucial to the topic, even if they do not define it. This is clear especially in the context of the UNSC and the relationship between its non- and permanent member states. These issues were not assessed in this research as the study design focused primarily on the alignment and discrepancies amongst the UNSC member states position and their policies, and future research needs to engage specifically with the dynamics of power politics (Hardt 2021a). Pushing climate security is often suspected as serving hidden underlying interests. At the other extreme, attempts to

depoliticise the climate-security nexus should be treated with caution (Ide 2020) and further research should engage with these questions.

Projections into the future are as always problematic, but it has to be stated that fifteen years after the first climate security debate occurred at the UNSC, any collective understanding of its meanings and dynamics remain elusive. It can however be stated that, in spite of the changing constellations of the UNSC, a certain repeating pattern of the proponent states in the UNSC can be detected. There seems to be an emerging trend of recognition of the security implications of climate change in the UNSC (the introduction, this volume) that could be interpreted as being close to an official recognition, especially if we take into account the multiple acknowledgments at the national political level and in the indirect recognition of several UNSC resolutions (Hardt 2021a; Maertens 2021). In contrast, however, the December 2021 veto of the draft climate security resolution at the UNSC, together with the Russian invasion of Ukraine, has generated new *spoiler* dynamics and should be seen as an important revision to the broader trend of climate security. At the same time, we have seen how changes of government (see the US case of Obama-Trump-Biden administrations) and changing UNSC member state constellations can greatly influence its behaviour. One glimmer of hope may be that states are highly likely to continue developing and deploying a variety of climate security frames, both within and outside the UNSC.

This book demonstrates just how dynamic and vast the issue of climate security is. Yet it needs to be stressed that in comparison to other topics climate security still plays a very minor role. Clearly this marginalisation does not measure up in any way with the issue's relevance. The issue presents significant threats to states (e.g. SVG, Dominican Republic) in the short term, the wider community of states in the longer term, and even to all living and future beings who are dependent upon a stable Earth System. Despite the scientific consensus that humanity faces an unprecedented existential threat (see Box 17.1), the responses are mainly limited to forms of incremental climate politics (such as climate adaptation and mitigation). This being said, we must acknowledge that our research was based on and thus limited to official sources. A future research project might evaluate in starker terms the quality of responses. It is very likely they will find further worrying results that show a wide discrepancy between words and action. Already within this limited research design, we have seen that the much needed changes are not in sight.

An important impediment to note is that, as we have seen throughout the case studies and the debates in the UNSC, the major focus on war and peace is currently very unlikely to change, and, like many others, we state that the UNSC is not equipped to respond to these profound existential threats, nor does it have the scientific capacity in its current shape (Conca 2019). We furthermore state that a transformative fundamental change to the UNSC and of the meaning and politics of security in the face of the threat dimensions connected to climate change demanded by the scientific assessments is currently not in sight.

A creative focus on future (and past) generations, or on expanding the agency of acutely threatened populations to include both human and non-human beings, or articulating a plan to secure the Earth system outside of techno-utopian geoengineering schemes, requires a totally different kind of politics. Among the case studies

there are barely any mentions of different referent objects such as future generations or on the climate vulnerable/threatened, nor was the term *Anthropocene* mentioned in the UNSC documents and debates (Maertens/Hardt 2021: 53). The groundwork for this type of politics – the building of a deeper socio-ecological consciousness – seems perilously absent at the official level. Directly connected hereto is the fact that the institutional gaps in governance systems reaching from national level to the UN system, especially as regards the discussion between the UNSC and the UNFCCC on how to address existential security threats in the context of the Anthropocene, also require urgent future research (Hardt 2021a). Securing something akin to the Earth System would need a totally different kind of politics and a much deeper understanding of the intertwined socio-ecological consciousness and the context-dependent political nature of climate change. This is not an easy sell at the UNSC or in ministerial meeting rooms.

Throughout the analysis, we also observed that references to science are often very minor or missing completely. In this context, it is noteworthy that all UNSC member states (whether opponents or not) agree on the need for more scientific research on the links between climate change and security and at the same time acknowledge (also through the established UNSC resolutions), to a certain degree, effects on some geographies and local contexts. However, the literature on the topic of climate and security that has been growing since the 1970s (introduction, this volume) is not mentioned. The more recent Earth System Science data has also not yet found its way into the UNSC debates and is seldom mentioned in domestic security documents. The questions over how and why this heavy knowledge gap exists and on how it can be overcome will also have to be addressed in future research. This existing disconnect between the scientific research on climate change and its security implications (see Box 17.1) and political decision makers is of tremendous importance and needs to be addressed explicitly in the future. This is one out of many important steps in order to advance political responses that are up to the challenge presented by ecological security in the Anthropocene. We hope that this book can contribute to unveil some of the problems/implications and future tasks and open up the necessary dialogue about the future of climate security in theory and practice and might inspire urgently needed creative responses, needed for Future.

References

- Adams, Courtland; Ide, Tobias; Barnett, Jon; Detges, Adrien, 2018: “Sampling Bias in Climate–Conflict Research”, in: *Nature Climate Change*, 8,3: 200–03.
- Armstrong McKay, David I.; et al., 2022: “Exceeding 1.5°C Global Warming Could Trigger Multiple Climate Tipping Points”, in: *Science*, 377,6611: eabn7950.
- Barnett, Jon; Adger, W. Neil, 2007: “Climate Change, Human Security and Violent Conflict”, in: *Political Geography*, 26,6: 639–55.
- Birkmann, J., et al., 2022: “Poverty, Livelihoods and Sustainable Development”, in: *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK, New

- York, NY: Cambridge University Press); at: <https://www.ipcc.ch/report/sixth-assessment-report-working-group-ii/>.
- Booth, Ken, 1991: "Security and Emancipation", in: *Review of International Studies*, 17,4: 313–26.
- Chaturvedi, Sanjay; Doyle, Timothy, 2015: *Climate Terror: A Critical Geopolitics of Climate Change* (London: Palgrave Macmillan).
- Conca, Ken, 2019: "Is There a Role for the UN Security Council on Climate Change?", in: *Environment: Science and Policy for Sustainable Development*, 61,1: 4–15.
- Constitución Política de la República Dominicana, 2010: "Political Constitution of the Dominican Republic" (Santo Domingo); at: <https://presidencia.gob.do/sites/default/files/statics/transparencia/base-legal/Constitucion-de-la-Republica-Dominicana-2015-actualizada.pdf>.
- Corry, Olaf, 2012: "Securitisation and 'Riskification': Second-Order Security and the Politics of Climate Change", in: *Millennium – Journal of International Studies*, 40,2: 235–58.
- Corry, Olaf, 2014: "From Defense to Resilience: Environmental Security Beyond Neo-Liberalism." in: *International Political Sociology*, 8,3: 256–74.
- Dalby, Simon, 2014: "Rethinking Geopolitics: Climate Security in the Anthropocene", in: *Glob Policy*, 5,1: 1–9.
- Department of Defence (DoD), 2014: "South African Defence Review 2014" (Pretoria: Department of Defence); at: https://www.gov.za/sites/default/files/gcis_document/201409/dfencereview2014.pdf.
- DoD, 2015: "South African Defence Review 2015" (Pretoria: Department of Defence of the Republic of South Africa); at: <https://static.pmg.org.za/170512review.pdf>.
- Deutscher Bundestag, 1989: "Erste Beschlussempfehlung und Bericht des Ausschusses für Umwelt, Naturschutz und Reaktorsicherheit (21. Ausschuss) Zu dem Ersten Zwischenbericht der Enquete-Kommission „Vorsorge Zum Schutz Der Erdatmosphäre“: Gemäß Beschluss des Deutschen Bundestages vom 16 Oktober und 27 November 1987, Drs. 11/533, 11/787, 11/971, 11/1351, 11/3246" (Bonn: Deutscher Bundestag).
- Duffield, Mark; Waddell, Nicholas, 2006: "Securing Humans in a Dangerous World", in: *International Politics*, 43,1: 1–23.
- Dumaine, C., 2022: "Redefining Security", in: *Issues in Science and Technology*, Winter.
- Estève, Adrien, 2021: "Preparing the French Military to a Warming World: Climatization through Riskification", in: *International Politics*, 58,4: 600–18.
- Fillion, S., 2021: "Can the Issue of Climate-induced Wars Stick to the UN Security Council Agenda? The UK Tries it out"; at: <https://www.passblue.com/2021/02/18/can-the-issue-of-climate-induced-wars-stick-to-the-un-security-council-agenda-the-uk-tries-it-out>.
- Floyd, Rita, 2007: "Human Security and the Copenhagen School's Securitization Approach", in: *Human Security Journal*, 5,37: 38–49.
- Floyd, Rita, 2019: *The Morality of Security: A Theory of Just Securitization* (Cambridge: Cambridge University Press).
- Floyd, Rita; Matthew, Richard (Eds.), 2013: *Environmental Security: Approaches and Issues* (Oxon, New York: Routledge).
- Hardt, Judith Nora, 2018: *Environmental Security in the Anthropocene* (London: Routledge).
- Hardt, Judith Nora 2020: "A Climate for Change in the UNSC? Member States' Approaches to the Climate-Security Nexus", *Policy Brief* (Hamburg: IFSH); at: <https://ifsh.de/en/news-detail/new-ifsh-policy-brief-a-climate-for-change-in-the-unscc>.
- Hardt, Judith Nora, 2021: "Encounters between Security and Earth System Sciences: Planetary Boundaries and Hothouse Earth", in: Chandler, David; Müller, Franziska; Rothe, Delf (Eds.): *International Relations in the Anthropocene: New Agendas, New Agencies and New Approaches* (Cham: Springer International Publishing): 39–57.
- Hardt, Judith Nora, 2021a: "The United Nations Security Council at the Edge of Climate Change." in: *Journal Politics and Governance*, 9: 5–15.
- Hardt, Judith Nora; Viehoff, Alina, 2020: *A Climate for Change in the UNSC? Member States' Approaches to the Climate-Security Nexus* (Hamburg: Institute for Peace Research and Security); at: <https://ifsh.de/en/publications/research-report/research-report-005>.

- Hartmann, Betsy, 2010: "Rethinking Climate Refugees and Climate Conflict: Rhetoric, Reality and the Politics of Policy Discourse." in: *Journal of International Development*, 22,2: 233–46.
- Harrington, Cameron; Shearing, Clifford, 2017: *Security in the Anthropocene: Reflections on Safety and Care* (Bielefeld: Transcript Verlag).
- Ide, Tobias, 2020: "The Dark Side of Environmental Peacebuilding", in: *World Development*, 127,104777.
- Intergovernmental Panel on Climate Change_IPCC, 2007: *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Edited by O. F. Canziani, J. P. Palutikof, P. J. van der Linden and C. E. Hanson, (Cambridge, United Kingdom: Cambridge University Press), at: https://www.ipcc.ch/site/assets/uploads/2018/03/ar4_wg2_full_report.pdf.
- Intergovernmental Panel on Climate Change_IPCC, 2021: *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK; New York: Cambridge University Press); at: <https://www.ipcc.ch/report/ar6/wg1/>.
- IPCC, 2014: "Summary for Policymakers", in: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by C. B. Field, V. R. Barros, D. J. Dokken, K. J. Mach, M. D. Mastrandrea, T. E. Bilir, M. Chatterjee, K. L. Ebi, Y. O. Estrada, R. C. Genova, B. Girma, E. S. Kissel, A. N. Levy, S. MacCracken, P. R. Mastrandrea and L. L. White, 1–32 (Cambridge, United Kingdom, and New York, NY, USA: Cambridge University Press) at: https://www.ipcc.ch/site/assets/uploads/2018/02/ar5_wgII_spm_en.pdf.
- IPCC, 2021: "Summary for Policymakers", in: *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK; New York: Cambridge University Press); at: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf.
- IPCC, 2022: "Summary for Policymakers" (Cambridge, UK; New York: Cambridge University Press); at: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf.
- King, Nelson A., 2020: "Svg Begins 'Historic Journey' on UN Security Council" *Caribbean News Online*; at: <https://www.caribbeanlife.com/svg-begins-historic-journey-on-un-security-council/>.
- Leiserowitz, Anthony A., 2005: "American Risk Perceptions: Is Climate Change Dangerous?", in: *Risk Analysis*, 25,6: 1433–42.
- Lenton, Timothy M.; et al., 2019: "Climate Tipping Points – Too Risky to Bet Against" in: *Nature* (London; Nature).
- Linke, Andrew M.; et al., 2017: "Drought, Local Institutional Contexts, and Support for Violence in Kenya", in: *Journal of Conflict Resolution*, 62,7: 1544–78.
- Lucarelli, Sonia; Sperling, James; Webber, Mark, 2020: *Collective Securitisation and Security Governance in the European Union* (London: Routledge).
- Mach, Katharine J., et al., 2019: "Climate as a Risk Factor for Armed Conflict", in: *Nature*, 571,7764: 193–97.
- Maertens, Lucile, 2021: "Climatizing the Un Security Council", in: *International Politics*, 58,4: 640–60.
- Maertens, Lucile; Hardt, Judith Nora, 2021: "Climate Change and Security within the United Nations: Insights from the UN Security Council and the UN Environment Programme", in: Lövbrand, Eva; Mobjörk, Malin (Eds.): *Anthropocene Securities: Recollections and Reflections 50 Years after the Stockholm Conference on the Human Environment* (Cambridge, MA: MIT Press): 34–50.
- McDonald, Matt, 2021: *Ecological Security: Climate Change and the Construction of Security* (Cambridge: Cambridge University Press).
- McHugh, Lucy Holmes; Lemos, Maria Carmen; Hope Morrison, Tiffany, 2021: "Risk? Crisis? Emergency? Implications of the New Climate Emergency Framing for Governance and Policy", in: *WIREs Climate Change*, 12,6: e736.

- Oels, Angela, 2012: "From 'Securitization' of Climate Change to 'Climatization' of the Security Field: Comparing Three Theoretical Perspectives", in: Scheffran, Jürgen; Brzoska, Michael; Brauch, Hans Günter; Link, Peter Michael; Schilling, Janpeter (Eds.): *Climate Change, Human Security and Violent Conflict: Challenges for Societal Stability* (Berlin, Heidelberg: Springer): 185–205.
- Oels, Angela; von Lucke, Franziskus, 2015: "Gescheiterte Versicherheitlichung oder Sicherheit im Wandel: Hilft uns die Kopenhagener Schule beim Thema Klimawandel?", in: *Zeitschrift für Internationale Beziehungen*, 22,1: 43–70.
- Permanent Mission of Russia, 2020: "Statement by Vassily Nebenizia, Permanent Representative of Russia to the UN, at the VTC of UNSC Members 'Climate and Security'", at: https://russia.un.org/en/news/climate_240720.
- Permanent Mission of US, 2020: "Remarks at a UN Security Council Open Debate on Climate and Security (Via VTC)", at: <https://usun.usmission.gov/remarks-at-a-un-security-council-open-debate-on-climate-and-security-via-vtc/>.
- Permanent Representation of the Federal Republic Germany to the UN, 2020: "Joint Statement by 10 Members of the UN Security Council (Belgium, Dominican Republic, Estonia, France, Germany, Niger, Tunisia, St. Vincent and the Grenadines, United Kingdom, Vietnam) on Their Joint Initiative to Address Climate-Related Security Risks", at: <https://new-york-un.diplo.de/un-en/news-corner/200622-climate/2355076>.
- Rockström, Johan; et al., 2009: "Planetary Boundaries: Exploring the Safe Operating Space for Humanity" in: *Ecology and Society*, 14,2: 32.
- Scheffran, Jürgen; et al. (Eds.), 2012: *Climate Change, Human Security and Violent Conflict. Challenges for Societal Stability* (Berlin, Heidelberg: Springer).
- Scott, Shirley V.; Ku, Charlotte, 2018: *Climate Change and the UN Security Council* (Cheltenham: Edward Elgar).
- Steffen, Will; et al., 2015: "Planetary Boundaries: Guiding Human Development on a Changing Planet", in: *Science*, 347,6223: 1259855.
- Steffen, Will; et al., 2018: "Trajectories of the Earth System in the Anthropocene", in: *Proceedings of the National Academy of Sciences*, 115,33: 8252–59.
- Trisos, Christopher H.; et al., 2022: "Africa": in: *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK; New York, NY: Cambridge University Press); at: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_Chapter09.pdf.
- Trombetta, Maria Julia, 2008: "Environmental Security and Climate Change: Analysing the Discourse", in: *Cambridge Review of International Affairs*, 21,4: 585–602.
- United Nations Development Programme_UNDP, 1994: "Human Development Report 1994: New Dimensions of Human Security" (New York, NY: UNDP); at: <https://hdr.undp.org/system/files/documents/hdr1994encompletenostatpdf.pdf>.
- United Nations Framework on Climate Change Center_UNFCCC, 2015: "Adoption of the Paris Agreement" (New York. UNFCCC); at: <http://unfccc.int/resource/docs/2015/cop21/eng/l09.pdf>.
- United Nations General Assembly_UNGA, 2018: "Statement by H.E. Ms. Hilda Heine President of the Republic of the Marshall Islands, New York, 25 September 2018, 73th Session of the United Nations General Assembly" (New York: UNGA); at: <https://pacificwomen.org/news/marshall-islands-to-stand-for-un-human-rights-council/>.
- United Nations Security Council_UNSC, 2017: "Resolution 2349, S/Res/2349" (New York: UNSC); at: [https://undocs.org/S/RES/2349\(2017\)](https://undocs.org/S/RES/2349(2017)).
- UNSC, 2020: "Letter Dated 28 July 2020 from the President of the Security Council Addressed to the Secretary-General and the Permanent Representatives of the Members of the Security Council (S/2020/751)", at: <https://digitallibrary.un.org/record/3880587>.
- UNSC, 2021: "Draft Resolution" (New York: UNSC); at: https://www.securitycouncilreport.org/atf/cf/%7B65BF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_2021_990.pdf.

- von Lucke, Franziskus, 2020: *The Securitisation of Climate Change and the Governmentalisation of Security* (Houndmills Basingstoke: Palgrave Macmillan; Cham: Springer Nature Switzerland).
- von Uexkull, Nina; Buhaug, Halvard, 2021: "Security Implications of Climate Change: A Decade of Scientific Progress", in: *Journal of Peace Research*, 58,1: 3–17.
- von Uexkull, Nina; Croicu, Mihai; Fjelde, Hanne; Buhaug, Halvard, 2016: "Civil Conflict Sensitivity to Growing-Season Drought", in: *Proceedings of the National Academy of Sciences*, 113,44: 12391–96.
- Wagner, J., 2008: "Die Versicherheitlichung des Klimawandels. Wie Brüssel die Erderwärmung für die Militarisierung der Europäischen Union instrumentalisiert", in: *IMI Magazin*: 14–16.
- World Meteorological Organisation, 2019: "Global Annual to Decadal Climate Update": at: https://hadleyserver.metoffice.gov.uk/wmolc/WMO_GADCU_2019.pdf.
- Xi, Jinping, 2017: "Work Together to Build a Community of Shared Future for Mankind" (Xinhua News Agency); at: http://www.xinhuanet.com/english/2017-01/19/c_135994707.htm.

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