

Response to “Withering the coloniality of the forest transition?”

Thomas K. Rudel , Patrick Meyfroidt, Robin Chazdon,
Frans Bongers, Sean Sloan, H. Ricardo Grau, Tracy Van Holt

Received: 1 April 2021 / Accepted: 22 April 2021

Comment to: Liebman, A., and J. Gagliano. 2021. Withering the coloniality of the forest transition. *Ambio*. <https://doi.org/10.1007/s13280-021-01558-2>

INTRODUCTION

Our “Whither the Forest Transition” article (Rudel et al. 2020) reviews the usefulness of the forest transition concept in light of recent global changes in forest cover and forest policies. In their comment, Liebman and Gagliano (2021) claim that our argument ignores the place of the forest transitioning nations in the world system. In other words, they find our argument about the emergence of latecomer forest transitions insufficiently ‘relational’. Their critique misreads our argument in two fundamental respects.

First, in the section of our paper entitled ‘Agricultural intensification and the spatial redistribution of forests’, we point out how, with the globalization of agricultural production, nations often displace their need for foodstuffs overseas to agricultural regions in the Global South. The displacement reduces the demand for locally grown foodstuffs. In doing so, it makes possible forest expansion from the abandonment of less productive agricultural lands in the consuming nation (Meyfroidt et al. 2010). The presence of extensive production elsewhere in the world system drives forest expansion in a country. A trading ‘relation’ induces land use change. These trading relations and the associated displacement of land use result from multiple factors, including the economic situations of the trading countries, their political power, their positioning in the world system, and the legacies of their past colonial relationships.

Second, Liebman and Gagliano argue that the Gerschenkron’s latecomer argument is not relational. This assertion misreads his argument. Gerschenkron (1962) describes how German elites created an industrial policy after observing the industrial experience in England. Because the English experience with industrialization began in the mid-19th century, the Germans during the late 19th century represented latecomers to industrialization. They could read about English experience and draw lessons from it in crafting German policies to expedite industrialization. Their awareness of the English position at the core of the world system shaped German policy. This is exactly the kind of sensibility that one would expect to see among policymakers in a widely understood and acknowledged world system. In this sense, Gerschenkron’s latecomer argument fits easily into a world systemic understanding of policymaking that features ‘relations’ between nations.

Applying the latecomer effect argument to forest policies, Laos, for example, has emphasized the creation of forest plantations during the 21st century in part because Chinese organizations, that had already become adept at creating rubber plantations in China, wanted to create additional rubber plantations in neighboring countries like Laos (Barney 2008). In this instance, forest policies in Laos, as a latecomer, are not interpretable without understanding the earlier evolution of land uses and policies in China. Again, the policies adopted by latecomers reflect tendencies and events in countries whose forest expansions preceded their own expansion. This kind of thinking is relational in that it acknowledges the influence of earlier overseas actors on current forest cover trends within countries.

Finally, we agree with our critics that forest transitions do not occur in deterministic or teleological ways, as in

simple modernization narratives. Rather transitions from forest decline to forest expansion have historically contingent and contextual qualities. Acknowledging all the while these varied historical experiences, we can still observe empirical regularities in forest transitions. The goal of scientific endeavors is, at least to some extent, to identify, describe, and explain these empirical regularities in ways that allow for some generalized forms of knowledge. These efforts require difficult but crucial balancing acts that acknowledge historical specificities while making clear those patterns that recur across nations. This task is of particular importance with regard to forest expansions during an era of climate change. Forest expansions promise a natural climate solution through negative emissions at the same time that growth in the scale of corporate production and human consumption has made further forest expansions difficult to achieve. In this context, we think it is important to describe political conditions, like the late-comer effect, that promise to facilitate further forest expansions. Our *Ambio* article tries to achieve this end.

Acknowledgements This paper is a product of the PARTNERS Research Coordination Network grant #DEB1313788 from the USA. NSF Coupled Natural and Human Systems Program.

Author Contributions The authors of this work have been collaborating as part of a research coordination network for the past 5 years on issues of forest regeneration in the tropics. TKR, the senior author on this manuscript, has done extensive research on this issue in Ecuador. RC has done extensive research on forest regeneration in Costa Rica. PM has worked on this issue in Russia, Vietnam, and most recently in Mozambique. FB has worked most extensively in recent years in Ethiopia. SS has done his most intensive field research in Panama. TH has examined the expansion of forest plantations in Chile. In sum, the authors of this paper have broad experience with issues of landscape change discussed in the article.

REFERENCES

- Barney, K. 2008. China and the production of forest-lands in Lao PDR: A political ecology of transnational enclosure. In *Taking Southeast Asia to market: Commodities, nature, and people in the neo-liberal age*, ed. J. Nevins and N. Peluso, 91–107. Ithaca: Cornell University Press.
- Gershenkron, A. 1962. *Economic backwardness in historical perspective*. Cambridge: Harvard University Press.

Liebman A., and J. Gagliano 2021. Withering the coloniality of the forest transition. *Ambio*. <https://doi.org/10.1007/s13280-021-01558-2>

Meyfroidt, P., T. Rudel, and E. Lambin. 2010. Forest transitions, trade, and the displacement of land use. *Proceedings of the National Academies of Science (PNAS)* 107: 20917–20922. <https://doi.org/10.1073/pnas.1014773107>.

Rudel, T., P. Meyfroidt, R. Chazdon, F. Bongers, S. Sloan, R. Grau, T. Van Holt, and L. Schneider. 2020. Whither the forest transition? Climate change, policy responses, and redistributed forests in the twenty-first century. *Ambio* 49: 74–84. <https://doi.org/10.1007/s13280-018-01143-0>.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Thomas K. Rudel (✉)

Address: Department of Human Ecology, School of Environmental and Biological Sciences, Rutgers University, 55 Dudley Road, New Brunswick, NJ 08901, USA.
e-mail: Rudel@sebs.rutgers.edu

Patrick Meyfroidt

Address: Universite Catholique de Louvain, Place Pasteur 3, Louvain-La-Neuve, Belgium.
e-mail: Patrick.meyfroidt@uclouvain.be

Robin Chazdon

Address: Department of Ecology and Evolutionary Biology, University of Connecticut, Storrs, CT, USA.
e-mail: rchazdon@gmail.com

Frans Bongers

Address: Department of Environmental Sciences, Wageningen University, P.O. Box 47, 6700AA Wageningen, The Netherlands.
e-mail: frans.bongers@wur.nl

Sean Sloan

Address: James Cook University, 14-88 MacGregor Rd, Sir Robert Norman Building, Smithfield, QLD, Australia.
e-mail: sean.sloan@jcu.edu.au

H. Ricardo Grau

Address: Instituto de Ecología Regional, Universidad Nacional de Tucuman, Edificio Las Cupulas, Tucuman, Argentina.
e-mail: chilograu@gmail.com

Tracy Van Holt

Address: Academic Research, Center for Sustainable Business, Stern School of Business, New York University, 44 West Fourth Street, New York, NY 10012, USA.
e-mail: tvanholt@stern.nyu.edu