

Université catholique de Louvain
Faculté de santé publique
IRSS - Institut de Recherche Santé et Société
IREC - Institut de Recherche Expérimentale et Clinique - EPID
Bruxelles, Belgique



*Sector-Wide Approach (SWAp) as support to Health
Sector Reforms and results at operational level in rural
environment in Tanzania*



Véronique Zinnen

Promotor: Professor Annie Robert
Co-promotor: Professor Denis Porignon

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“Hapana marefu yasio na mwisho”

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Members of the Jury

- Promotor: **Prof. Annie Robert, MSc, PhD**
Pôle Epidémiologie et Biostatistique
Institut de Recherche Expérimentale et Clinique
Secteur des Sciences de la Santé
Faculté de Santé Publique
Université catholique de Louvain
Brussels – Belgium
- Co-promotor: **Prof. Denis Porignon, MD, MPH, PhD**
- Département de Santé Publique
Université de Liège
Luik – Belgium
- Department for Health Policy, Development and Services
World Health Organisation
Geneva – Switzerland
- President of the Jury: **Prof. William D’Hoore, MD, MPH, PhD**
Institut de Recherche Santé et Société
Secteur des Sciences de la Santé
Faculté de Santé Publique
Université catholique de Louvain
Brussels – Belgium
- UCL Members: **Prof. Jean Macq, MD, MPH, PhD**
Institut de recherche Santé et Société
Secteur des Sciences de la Santé
Faculté de Santé Publique
Université catholique de Louvain
Brussels – Belgium
- External Members: **Prof. Bruno Dujardin, MD, MPH, PhD**
Unité de Politiques et Programmes en Santé internationale
Ecole de Santé Publique
Université libre de Bruxelles
Brussels – Belgium
- Dr. Aziza Mwisongo, MD, MSc, PhD**
- National Institute of Medical Research - NIMR
Dar Es Salaam – Tanzania
- INDEPTH Effectiveness and Safety Studies of Anti-Malarial
Drugs in Africa - INESS
Dar Es Salaam – Tanzania

List of abbreviations

AAA: Accra Agenda for Action
AMO: Assistant Medical Officer
BF: Basket Fund(ing)
BG: Block Grant
CCHP: Comprehensive Council Health Plan
CFR: Case Fatality Rate
CHF: Community Health Fund
CHMT: Council Health management Team
CHSB: Council Health Service Board
CO: Clinical Officer
CS: Cost Sharing
DDH: Designated District Hospital
DH: District Hospital
DMO: District Medical Officer
DP: Development Partner
DPF: District Processing File
DPG: Development Partners Group
DPT3: Diphtheria, Pertussis, Tetanus vaccine-3 doses
EHP: Essential Health Package
EIPH: Essential Health Intervention Package
EPI: Expanded Programme on Immunisation
FGD: Focus Group Discussion
FSB: Fresh Still Birth
FY: Fiscal Year
GAVI: Global Alliance for Vaccines and Immunisations
GBS: Global/General Budget Support
GDP: Gross Domestic Product
GFATM: Global Fund for Aids, Tuberculosis and Malaria
GHI: Global Health Initiatives
GHP: Global Health Partnerships
HA: Health Assistant
HATS: Health as a Tracer Sector
HBF: Health Basket Funds
HC: Health Centre
HF: Health Facility
HFs: Health Facilities
HGC: Hospital Governing Committee
HHA: Harmonisation for Health in Africa
HIS: Health Information System
HMIS: Health Management Information System
HRH: Human Resource for Health
HSBF: Health Sector Basket Funds
HSR: Health Sector Reform
HSS: Health System Strengthening
HSSP: Health Sector Strategic Plan
IDI: In Depth Interview
ILG: Integrated Logistics System
IMR: Infant Mortality Rate

JAHSR: Joint Annual Health Sector Review
 JAS: Joint Assistance Strategy
 JAST: Joint Assistance Strategy for Tanzania
 JRF: Joint Rehabilitation Funds
 LGA: Local Government Authorities
 LGCDG: Local Government Capital Development Grant
 LGR: Local Government Reform
 LGRP: Local Government Reform Programme
 LHSBG: Local Health Sector Block Grant
 MDGs: Millennium Development Goals
 MMR: Maternal Mortality Ratio
 NMW: Nurse Midwife
 MO: Medical Officer
 MOF: Ministry of Finance
 MOH: Ministry of Health
 MOHSW: Ministry of Health and Social Welfare
 MSD: Medical Store Department
 MTUHA: Mfumo wa Taarifa za Uendeshaji wa Huduma za Afya.
 NA: Nurse Assistant
 NGO: Non-Governmental Organisation
 NHIF: National Health Insurance Fund
 NMR: Neonatal Mortality Rate
 NO: Nurse Officer
 NSGRP: National Strategy for Growth and Reduction of Poverty
 OC: Other Charges
 OECD: Organisation for Economic Co-operation and Development
 PD: Paris Declaration
 PE: Personnel Emoluments
 PEPFAR: Presidential Emergency Plan for AIDS Relief
 PER: Public Expenditure Reviews
 PFP: Private For Profit
 PHN: Public Health Nurse
 PHSDP: Primary Health Service Development Programme
 PNFP: Private Not-For-Profit
 PMO-RALG: Prime Minister's Office - Regional Administration and Local Government
 PRSP: Poverty Reduction Strategic Plan
 RHMT: Regional Health Management Team
 RMO: Regional Medical Office / Regional Medical Officer
 SAM: Service Availability Mapping
 STI: Sexually Transmitted Infections
 SWAp: Sector Wide Approach
 TB: Tuberculosis
 TBA: Traditional Birth Attendant
 TN: Trained Nurse
 TzSh: Tanzanian Shillings
 UFM: Under Five Mortality Rate
 VCT: Voluntary Counselling and Testing
 WHO: World Health Organisation

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Summary

The sector-wide approach (SWAp) was introduced to increase the impact of donor funds and local management of resources in developing countries. It gained progressively the support of major bilateral donors. In June 1998, the Tanzanian Ministry of Health and a group of donors adopted a SWAp in order to support health sector reforms and to increase coordination between donors and government. In fine, the main aim of the health reforms was to improve availability and quality of essential health service delivery through one comprehensive and coherent health sector programme.

Despite increased attention during the past few years to explore the gaps between policies and results/outcomes at operational level, scarce evidence has been produced.

Our multiple-case study design used mixed methods for data collection and analyses. It intended to evaluate and understand how the health sector reforms supported by a SWAp were implemented, and how they were eventually associated with health system improvements and a better health service delivery to the Tanzanian population. To fulfil that objective, we explored the conditions for success and/or failure of the national policy implementation through an analytical framework with functional links between the national and operational level. Our evaluation supported the fact that the adoption of a health SWAp in Tanzania played a major role in the implementing the health sector reforms. This was particularly true for the decentralisation process and the application of new policy on health financing sources. In addition, the different mechanisms under the framework of the SWAp contributed to strengthen the national health system, analyzed through six building blocks (finance, human resource, information, service, drug and equipment, and governance). At operational level, despite some improvements in the planning, supervision, finance, training, salary, and infrastructures, the overall results remained modest. Several components essential to quality health services, like referral system, working and living conditions, and reliable supplying system did not really improve, and policy implementation of community health fund mechanism failed. Incoherence between policies, lack of preparedness and human capacity buildings, absence of synergy between programmes, and shortcomings in having firm grip on context-reality are some of the policy-implementation gaps pointed out. Those gaps inhibit the success of strategies implementation and threaten the slight progresses already obtained.

The more recent aid effectiveness policy, including Paris Declaration and International Health Partnership are more challenging than ever. Our validated method and analytical framework could, hopefully, guide further research on policy transfer, implementation and effectiveness at operational level.

Foreword: GRAP-SWAP and GRAP-PA Santé

“GRAP-SWAP and GRAP-PA¹ Santé” are two successive inter-university² research groups on sector health policy that are financed by the Belgian development cooperation through the University Commission on Development (Commission Universitaire pour le Développement - CUD).

The GRAP-SWAP focused on the application of the sector-wide approach to the health sector in Africa from 2005 to 2009. The central research objective was to evaluate SWAP adoption, its implementation modalities and its efficiency compared to traditional cooperation approaches. Our current study was initiated and developed in the overall objective frame of the main research question; it was also financed by the project.

The GRAP-PA is a follow on from GRAP-SWAP to analyse the implementation of the international agenda for aid effectiveness within the health sector.

Outlines

This manuscript is divided in two parts in order to keep clarity in the discourse. Indeed, ***“Sector-Wide Approach (SWAp) as a support to Health Sector Reforms and results at operational level in rural environment in Tanzania”*** is a wide and complex subject. We developed in depth analysis of multiple-case studies. The design and the mixed methods approach led to large amount of documentary evidence, in the form of reports, publications, and data analysis.

The first part is the main body of our work. It starts with the background that brought the research question and objective. After that, the study design, analytical framework, and methods are presented. Results from qualitative and quantitative data are then synthesized and integrated within the overall framework to provide a comprehensive analysis of the research objective. Afterward, the main findings are discussed and conclusions with some perspectives are presented at the end of this first part.

In the second part, the reader will find support for the general results presented in the part one. In this separate section, we present detailed country findings, detailed sampling procedure at operational level, district-specific findings, and method-specific findings. Consequently, a large part of evidence-support can be consulted when specific point or questioning need in-depth understanding.

Some important documents like Paris Declaration, Accra Agenda for Action, and Millennium Development Goals have also been annexed because they play a key role in the international aid effectiveness, especially in the health sector.

¹ GRAP for “Groupe de Recherche en Appui à la Politique”, SWAp for Sector-Wide Approach and PA for Paris and Accra (from Paris Declaration and Accra Agenda for Action).

² Université catholique de Louvain, Université de Liège, Université Libre de Bruxelles.

*FIRST PART:
HEALTH SECTOR REFORMS
SUPPORTED BY A SWAp AND
HEALTH SERVICE DELIVERY
IN TANZANIA*

CHAPTER I – INTRODUCTION/BACKGROUND

1. Development cooperation strategy: evolution of aid modalities

In the 1990s, different aid evaluations pointed a multitude of problems and lack of effectiveness of the development cooperation, especially in the health sector. In reaction, the roles of the donors and the recipient countries have been redefined and the Sector Wide Approach (SWAp) was developed to increase the impact of donor funds and local management of resources in developing countries (“Aid effectiveness”). SWAp was designed to avoid the weaknesses of traditional cooperation modalities (in particular the project-based approach) and to promote better ownership of development policies by government and other national stakeholders, reinforced partnership between donors and beneficiary countries, and better governance (Paul et al 2008). SWAp has been adopted as a cooperation modality of reference in many developing countries, especially in the health sector and in Sub-Saharan Africa.

In the next pages³, we first briefly look into the origins of SWAp, and the general theoretical foundations that support the claim that they may lead to an increase in effectiveness and sustainability of aid interventions, particularly in the health sector.

³ Chapter in a book: *«Le défi de l'équité et de l'accessibilité en santé dans le tiers-monde: entre droit fondamental, justice sociale et logique marchande»* Sous la direction de Hachimi Sanni Yaya - L'Harmattan, Paris 2009. An English translation made by “Centre Traduction Louvain – UCL” is available in ANNEXE 1.

CHAPITRE 12

Vers un nouveau paradigme de l'aide au développement : l'approche sectorielle en santé, quels constats ?

Véronique Zinnen, Samia Laokri et Elisabeth Paul

INTRODUCTION

Confrontées à des critiques pressantes et à une remise en cause de l'efficacité voire de la légitimité de l'aide au développement, les agences de coopération, en particulier la Banque Mondiale, ont entrepris depuis une quinzaine d'années une vaste offensive d'évaluation de leurs actions et modes de fonctionnement. Ces études ont mis en avant les limites des modalités d'interventions traditionnelles et suscité l'amorce d'un changement dans le système d'aide internationale, vers un « nouveau paradigme partenarial » de gestion de l'aide.

Cette nouvelle approche repose sur la volonté commune de répondre à différents enjeux : appropriation, responsabilité conjointe, partenariat, vision globale, réduction de la pauvreté et gouvernance. Cette volonté se concrétise par un engagement mutuel des pays partenaires et des bailleurs de fonds autour de principes énoncés dans les Déclarations de Rome (2003) et de Paris (2005), et complété par le Code de Conduite européen sur la Complémentarité et la Division du Travail.

La communauté internationale reconnaît à présent le besoin d'intégrer les programmes de coopération dans les structures nationales, appuyant les politiques conçues par les pays bénéficiaires et en utilisant, dans la mesure du possible, des systèmes de gestion harmonisés ou même issus des pays bénéficiaires.

L'émergence des approches sectorielles se situe et doit être analysée dans ce contexte.

L'ÉVOLUTION DES MODALITÉS DE L'AIDE

Malgré l'aide très importante que beaucoup de pays en développement ont reçue pendant des périodes relativement longues, dans l'espoir de voir le développement se généraliser et la pauvreté régresser, les grands indicateurs de développement n'ont guère ou pas évolué de façon satisfaisante (World Bank 1998).

L'AIDE VIA L'APPROCHE PROJET

L'approche projet constitue le principal véhicule de l'aide depuis le début de la coopération au développement. Sa remise en question n'est apparue que dans le milieu des années 1990.

LOGIQUE DE CHOIX ET AVANTAGES DE CE TYPE D'APPROCHE

Les économistes du développement ont longtemps pensé que l'obstacle principal au développement était l'insuffisance d'investissements, et donc que les projets étaient le meilleur moyen de réaliser des dépenses en capital (European Commission 2003). Les projets permettent en effet de sélectionner un ensemble gérable de problèmes issus d'une réalité complexe et de prescrire les moyens à mettre en œuvre pour stimuler le développement local (OCDE 2001). L'approche apparaissait également attractive et rassurante du point de vue des bailleurs de fonds (Yamada 2002), et ce à plusieurs égards. Tout d'abord, les résultats des projets peuvent être très visibles, à la fois pour le pays bénéficiaire et pour le pays donateur, puisque le cadre logique permet de garantir des résultats concrets et mesurables. En outre, ils utilisent fréquemment des technologies simples et claires, qui sont en fait souvent de simples transferts d'une technique déjà disponible dans le pays donateur. Enfin, ce type d'aide permet de contourner le manque de transparence et d'efficacité des systèmes de gestion des finances publiques et des marchés publics des pays bénéficiaires, et donc représente une bonne solution pour minimiser les risques de malversations financières (European Commission 2003).

Au total, logiquement, l'approche projet est la seule possible dans des situations où il est nécessaire d'avoir des résultats visibles à court terme ou s'il est indispensable de garder un contrôle direct sur les fonds engagés. Cette approche reste aussi la meilleure pour des pays dont la dépendance vis-à-vis de l'aide extérieure est moindre (Lavergne & Anneli 2003) (voir la discussion).

PROBLÈMES LIÉS À CETTE APPROCHE

Plusieurs critiques de l'approche projet ont été pointées dans la littérature. Elle ne suscite guère l'appropriation, par les gouvernements et par les populations locales, des projets de développement. La multiplicité des bailleurs implique nécessairement la multiplicité des projets, des procédures et des modes de gestion qui, en absence de concertation et de coordination, peut entraîner des risques élevés de duplication et d'incohérence, de surcharge de travail pour les autorités locales, de déséquilibre dans les secteurs et dans les régions aidés, et également avoir des coûts de transaction très élevés (European Commission 2003; Lavergne & Anneli 2003). En outre, le fait de contourner et/ou d'éviter les systèmes et les structures des autorités locales ne permet pas de les améliorer ni de les renforcer. Enfin, les nombreux projets détournent du personnel local qualifié déjà rare (Lavergne & Anneli 2003), et beaucoup de projets ne s'insèrent pas dans les stratégies et les processus de développement nationaux. En ne tenant pas compte du contexte socio-économique dans lequel ils s'insèrent, ils ne permettent pas d'aller au-delà de quelques résultats sans impact réel sur le développement global d'un pays.

L'AIDE VIA L'APPROCHE MACROÉCONOMIQUE

L'approche macroéconomique a été adoptée un peu « en catastrophe » au début des années 1980, la crise de l'endettement des pays pauvres menaçant la stabilité du système financier international. Cette stratégie consiste à apporter un appui budgétaire macroéconomique en échange de l'adoption, par les pays bénéficiaires, de mesures de stabilisation et d'ajustement structurel (réduction des déficits publics, développement des exportations pour réduire le déséquilibre de la balance des paiements, etc.). Dans le sillage du Fonds Monétaire International (FMI), chef de file pour la conduite des programmes d'ajustement structurels (PAS), les principaux bailleurs multilatéraux –dont la Banque Mondiale et la Communauté Européenne– ainsi que certains bailleurs bilatéraux ont transformé une partie de leur aide au développement en aide budgétaire directe visant à soutenir la balance des paiements et les réformes structurelles dans leur ensemble.

Axée sur différentes réformes à visée purement économique et reposant sur des solutions « pré-formatées » imposées à tous les pays sans prise en compte de leurs spécificités, cette stratégie comportait des contradictions inhérentes, et elle

a été violemment critiquée. Non seulement elle a été relativement inefficace (faible capacité à stimuler la croissance économique, réduction de la demande intérieure, accentuation de la dépendance économique et financière vis-à-vis des bailleurs de fonds), mais en plus elle a eu des effets mitigés voire désastreux sur les secteurs sociaux des pays bénéficiaires – qui ont vu, en particulier, leurs budgets de santé et d'éducation considérablement réduits.

REMISES EN QUESTION

Les événements des années 1990 ont modifié l'environnement de l'aide étrangère. D'une part, les problèmes de déficits budgétaires des pays donateurs ont poussé ceux-ci à réduire l'aide octroyée pour le développement (qui déjà représentait généralement moins de 0,5% de leur PNB) – ce qui impliquait de mieux utiliser une ressource devenue plus rare. D'autre part, la fin de la guerre froide a ouvert de nouveaux horizons puisque l'aide n'était plus conditionnée par des objectifs stratégiques, elle devait faire en sorte de mieux servir sa fonction première, à savoir promouvoir la croissance économique à long terme et réduire la pauvreté (World Bank 1998).

Dans la seconde moitié des années 1990, ce changement de contexte, couplé à un constat d'échec des programmes d'ajustement structurel PAS, a donné lieu à une nouvelle évolution des stratégies de coopération. La réduction de la pauvreté –plutôt que l'ajustement structurel– a ainsi été remise au centre des préoccupations de l'aide au développement. L'adoption des Objectifs du Millénaire pour le Développement (OMD) traduit également la volonté accrue de la communauté internationale de s'attaquer à la pauvreté dans ses diverses dimensions.

En ce qui concerne l'efficacité de l'aide, de multiples études commanditées par les bailleurs de fonds ainsi qu'une vaste remise en question des modes de coopération au développement ont mis en évidence les cinq points suivants :

- l'ambiguïté des rapports entre aide, croissance et réduction de la pauvreté, et le manque général d'évolution satisfaisante des grands indicateurs de développement au regard des moyens mobilisés ;
- la fongibilité de l'aide, qui plaide en faveur d'une aide moins ciblée ;
- les effets pervers de la conditionnalité ;
- les frustrations de plus en plus vives des gouvernements « assistés », notamment celles générées par les effets pervers de l'approche projets (appropriation nationale insuffisante, manque de coordination entre

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bailleurs de fonds, manque d'intégration de l'aide dans les politiques nationales, etc.) ;

- le fait que l'aide n'a que peu d'effet dans des pays mal gouvernés, tandis que la bonne gouvernance permet à l'aide financière d'avoir des effets positifs sur la croissance, la réduction de la pauvreté et l'amélioration des indicateurs sociaux (World Bank 1998).

Les auteurs de l'ouvrage de référence de la Banque Mondiale « Assessing Aid » (World Bank 1998), qui synthétise les résultats de nombreuses recherches et évaluations, concluent que pour rendre l'aide plus efficace et pour réduire la pauvreté, plusieurs réformes du système de l'aide étaient nécessaires. Ils mentionnent notamment un meilleur ciblage de l'assistance financière, une meilleure adéquation entre les instruments d'aide et le calendrier des réformes, l'adaptation des activités aux conditions du pays et du secteur considérés, ainsi que le renforcement des capacités nationales et de la gouvernance.

Par ailleurs, les nombreuses évaluations menées à l'initiative des agences de coopération suggéraient de nouvelles voies en matière de relations entre bailleurs et bénéficiaires, pour tenter de s'éloigner d'une relation de domination économique et politique et aller vers une relation empreinte de responsabilité et de respect mutuel (Hill 2002).

L'APPROCHE SECTORIELLE

La demande conjointe des donateurs et des receveurs d'élaborer de nouveaux mécanismes prenant en compte l'environnement social et politique dans lequel ils s'inscrivent et se basant sur davantage de responsabilisation des gouvernements bénéficiaires, a donné naissance à l'approche sectorielle (AS) ou sector-wide approach (SWAp) en anglais. Il s'agit donc bien de l'émergence d'un nouveau paradigme de gestion de l'aide au développement, caractérisé par le passage d'un modèle d'application des contraintes émanant des bailleurs de fonds (FMI, BM) vers davantage de libertés pour les pays en développement dans la conception des programmes et la gestion de l'aide, en contrepartie d'une responsabilité accrue dans leur chef (Paul 2003). Poussée surtout par la Banque Mondiale, l'OMS et les pays scandinaves, cette approche a été largement adoptée par la majorité de la communauté internationale (Union Européenne, Comité d'Aide au Développement [CAD] de l'OCDE, agences bilatérales, etc.).

Le passage à une approche plus globale signifie l'adoption d'un nouveau cadre de référence, d'un nouveau modèle, d'une nouvelle vision qui seront à la

base du choix de nouvelles analyses et de nouveaux modes d'action (Dujardin 2003).

DÉFINITION

Il n'existe pas de définition unique de l'approche sectorielle mais une revue de la littérature pointe qu'il s'agit d'un processus, d'une méthode de travail entre le gouvernement et les bailleurs de fonds, qui travaillent ensemble :

- à la mise en place progressive d'une politique et d'une stratégie sectorielles complètes et cohérentes, soit une approche commune pour l'ensemble d'un secteur particulier ;
- au développement du leadership et de l'appropriation (ownership) du gouvernement local qui doit être dans le « siège conducteur » ;
- à la coordination entre les bailleurs de fonds ;
- à l'harmonisation des procédures et à la progression vers l'utilisation de celles des gouvernements locaux pour la gestion des fonds, le suivi et l'évaluation ;
- à la mise en place d'un système de concertation et de participation de toutes les parties prenantes locales (Cassels 1997 ; European Commission 2003 ; EuropeAid 2007 ; OCDE 2006).

C'est donc bien un processus, et non pas un modèle, qui se veut flexible et adaptable aux spécificités de son environnement. L'approche sectorielle nécessite donc une vision dynamique : ce qui importe, c'est l'orientation du changement plutôt que l'avancement déjà atteint par rapport aux différents aspects de l'approche, à un moment donné.

Quant à la notion de secteur et de sa dimension, il peut être aussi vaste que le décide le gouvernement qui gère le processus. Cependant, pour réduire l'augmentation de la complexité administrative et organisationnelle et être plus efficace, la préférence a été donnée à une conception plus étroite du « secteur », c'est à dire le domaine sous la responsabilité d'un seul ministère sectoriel (EuropeAid 2007). Les secteurs peuvent également être vus par grands thèmes comme la pauvreté ou l'environnement, mais étant donné l'absence de structures institutionnelles appropriées, cela n'a pas semblé être suffisamment opportun pour être retenu.

OBJECTIFS

Partant d'un soutien à des activités spécifiques, l'adoption d'une approche sectorielle fait évoluer l'aide vers le cofinancement d'une politique avec le pays

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partenaire et les bailleurs de fonds, en fonction d'objectifs définis par le gouvernement (appropriation, leadership) dans le cadre d'un programme cohérent des dépenses publiques.

Cette approche doit permettre de développer une politique sectorielle complète et réaliste visant à produire :

- plus de cohérence (coordination, harmonisation) ;
- une réduction du nombre des projets et de leurs coûts de transaction ;
- une diminution de la dispersion des capacités administratives ;
- un renforcement des capacités locales au niveau des systèmes financiers, de gestion, de planification, de suivi et d'évaluation ;
- une augmentation de l'influence des bailleurs de fonds sur la politique, les réformes sectorielles et l'évaluation ;
- la réalisation des objectifs définis par le secteur, soit une aide efficace et efficiente (EuropeAid, 2007).

BONNES PRATIQUES

Les lignes directrices du Comité d'Aide au Développement de l'OCDE en matière d'approches sectorielles (OCDE 2006 : 45-46) sont organisées autour des principes directeurs suivants :

- Il faut favoriser l'appropriation et la conduite des opérations par le gouvernement du pays partenaire ;
- Il faut s'employer, en collaboration avec le gouvernement, à renforcer les capacités institutionnelles et les obligations de rendre des comptes ;
- Le programme sectoriel doit être replacé dans son contexte ;
- Une vision stratégique à long terme est impérative ;
- Faire preuve de pragmatisme et de souplesse est essentiel.

Quant aux bonnes pratiques identifiées en matière d'approche sectorielle, l'expérience recueillie par le CAD (OCDE 2006 : 46-50) laisse à penser que les facteurs suivants sont déterminants pour le succès de la mise sur pied d'une approche sectorielle : la stabilité politique et macroéconomique, une appropriation large et effective par le gouvernement, de même qu'un large consensus entre le gouvernement et les donateurs sur la politique sectorielle et les problèmes liés à la gestion du secteur.

Pour ce qui concerne l'ordonnancement des activités, le CAD souligne qu'il convient d'éviter d'être trop ambitieux, qu'il faut soutenir les efforts

d'élaboration de la politique et de la stratégie sectorielles du gouvernement partenaire, que les mécanismes de mise en œuvre sont importants, que les dispositifs communs peuvent être délicats à manier et qu'une bonne collaboration entre donateurs est indispensable.

Enfin, concernant les politiques et stratégies sectorielles, les bonnes pratiques montrent que les documents doivent présenter les caractéristiques suivantes : avoir été élaborés par le gouvernement, traiter explicitement du rôle de l'Etat dans le secteur, définir la répartition des responsabilités au sein du gouvernement, mettre en évidence les besoins en ressources de l'ensemble du secteur, être nettement axés sur les résultats, et définir clairement les modalités de suivi, d'évaluation et d'actualisation de la politique.

OUTILS D'APPLICATION

La mise en pratique de l'approche sectorielle repose sur un Programme Sectoriel, qui repose principalement sur la politique sectorielle et un mécanisme de coordination des parties prenantes. Les bailleurs de fonds développent alors des instruments de financement et d'appui à ce programme sectoriel.

LE PROGRAMME SECTORIEL

Dans le cadre d'une approche sectorielle, le gouvernement, avec ses bailleurs de fonds partenaires et les autres parties prenantes, élaborent une politique sectorielle et un plan d'action actualisé. La Commission Européenne identifie trois composantes essentielles et deux autres éléments clés d'un programme sectoriel (EuropeAid 2007) :

- Primo, une politique et une stratégie sectorielles qui clarifient l'objectif du gouvernement dans le secteur et les moyens utilisés pour l'atteindre. Généralement, celles-ci doivent s'intégrer ou concerner un secteur prioritaire d'une stratégie nationale de développement, le plus souvent un Document de Stratégie de Réduction de la Pauvreté (DSRP) ;
- Deuxio, un programme des dépenses sectorielles à moyen terme avec un plan d'action complet (« comprehensive »), réaliste et clair, qui intègre toutes les ressources internes et externes disponibles et toutes les dépenses proposées concernant les résultats attendus, et qui est validé à un niveau politique élevé ;
- Tercio, un cadre de coordination sectorielle sous le leadership du gouvernement, qui assure la coordination entre toutes les parties prenantes nationales et entre tous les donateurs.

Les deux autres éléments clés identifiés par la CE sont le développement du cadre institutionnel et des capacités locales pour renforcer les systèmes nationaux permettant aux gouvernements locaux d'être aux commandes, de même qu'un système de suivi des performances pour mesurer les progrès au regard des objectifs et des résultats visés.

En outre, deux éléments additionnels vont influencer les performances d'un programme sectoriel, à savoir une politique macroéconomique qui détermine un environnement plus ou moins stable assurant la prédictibilité des ressources, ainsi qu'une gestion des finances publiques qui garantit que les priorités se reflètent dans les allocations budgétaires (EuropeAid 2007).

A noter qu'un mécanisme systématique de consultation des usagers et des bénéficiaires des services publics et des prestataires des services non-gouvernementaux devrait également faire partie d'un programme sectoriel. Les préoccupations de ces derniers doivent être comprises et intégrées dans l'élaboration de la politique et de la stratégie sectorielles (European Commission 2003).

Les programmes sectoriels sont, pour rappel, un processus en évolution constante. Les composantes proposées ci-dessus peuvent ne pas être toutes rencontrées dans certains contextes ou plus généralement, chacune de ces composantes doit être mise en place sous une forme élémentaire avant d'être affinée ultérieurement (European Commission 2003). Il faudra néanmoins toujours trouver un équilibre entre trois exigences. Tout d'abord, apporter des améliorations techniques aux composantes tout en tenant compte de leur interdépendance et du besoin de cohérence. Ensuite, tout cela doit être adopté et respecté par les parties prenantes majeures, ce qui va nécessiter une consultation permanente. Enfin et surtout, les activités gouvernementales doivent continuer à être gérées et les services fournis, ce qui en clair veut dire qu'il faut tenir compte qu'une attention excessive pour la réforme pourrait bloquer le fonctionnement au quotidien des activités (European Commission 2003).

LES INSTRUMENTS D'APPUI À UNE POLITIQUE SECTORIELLE

Les bailleurs de fonds vont développer des instruments de soutien technique et financier au programme sectoriel du gouvernement partenaire. La Commission Européenne, par exemple, appelle son instrument « programme d'appui à une

politique sectorielle » (PAPS). C'est néanmoins plus qu'un simple instrument de financement. Il implique un engagement documenté dans le processus ; il nécessite une contribution structurée à l'élaboration de la politique sectorielle et à la planification des actions, à la préparation du budget et au suivi des performances pour l'ensemble du secteur (European Commission 2003).

D'un point de vue opérationnel, le type d'appui peut varier en fonction du bailleur ou en fonction de différents facteurs comme les différentes composantes d'un programme sectoriel en place ou selon leur évolution, selon le cadre macroéconomique, les capacités locales de gestion, etc. Les principaux types d'instruments de financement d'un programme sectoriel rencontrés sont l'appui budgétaire général, l'appui budgétaire sectoriel, les fonds communs, les financements spécifiques (projets) et bien entendu une combinaison des différents types d'aide existants.

L'appui budgétaire général contribue au financement de l'ensemble du programme gouvernemental, y compris le secteur considéré. L'appui budgétaire sectoriel, quant à lui, vise lui un impact au niveau sectoriel. C'est un appui au niveau d'un secteur particulier, qui utilise les procédures budgétaires de l'Etat concerné. Il est destiné à soutenir les stratégies nationales cohérentes définies dans le programme sectoriel.

Les fonds communs (basket fund ou pool funding) constituent des systèmes spécialement conçus pour recueillir les ressources de plusieurs sources de financement –provenant de différents donateurs et éventuellement du gouvernement– mais sans s'intégrer dans le budget gouvernemental. Ces fonds sont soit gérés par le gouvernement, soit par les bailleurs de fonds. Ils peuvent financer l'ensemble du programme sectoriel ou, plus souvent, sont concentrés sur des dépenses ou des groupes d'activités spécifiques. Ils peuvent utiliser les procédures des systèmes gouvernementaux, d'une organisation donatrice ou être élaborés sur mesure. Tout cela dépend en fait des capacités de gestion du gouvernement et de la volonté et/ou des règlements particuliers des bailleurs de fonds.

L'utilisation des fonds communs est surtout indiquée quand la situation est mûre pour aller au delà du financement projets mais quand la qualité de gestion des dépenses publiques n'est pas suffisante pour mettre en place un appui budgétaire sectoriel. De fait, ce type de financement est souvent considéré

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comme un mécanisme de transition entre le financement de projets et l'appui budgétaire sectoriel (EuropeAid, 2007).

Entre la gestion de l'aide uniquement au moyen de projets et le « tout à l'appui budgétaire général », il existe un panel de possibilités intermédiaires. Dans la pratique, les bailleurs de fonds combinent souvent divers instruments et la mise en place opérationnelle de ces nouvelles techniques de financement s'effectue de façon progressive (processus dynamique). Il s'agit de modifier petit à petit la façon d'opérer des bailleurs et des gouvernements.

On assiste, néanmoins, à une réduction progressive de l'aide via l'approche projet au profit de l'aide budgétaire et de fonds communs (Lavergne & Anneli 2003).

L'APPROCHE SECTORIELLE APPLIQUÉE AU SECTEUR DE LA SANTÉ

LE SECTEUR DE LA SANTÉ ET SES RÉFORMES

Pour remédier aux multiples problèmes que connaissait le domaine de la santé, de nombreux gouvernements ont lancé, dès les années 1980, des réformes dans ce secteur.

Cinq grands objectifs sous-tendent généralement les réformes engagées : l'efficacité, la qualité, l'équité, l'écoute et la viabilité des systèmes de santé (Dmytraczenko, Rao & Ashford 2003).

Notons que les approches nationales de la réforme du secteur de la santé varient énormément d'un pays à un autre. Il est néanmoins possible de regrouper la plupart des réformes en trois grandes catégories que sont :

- les réformes du financement visant à pallier à la rareté des ressources, soit trouver des recettes alternatives avec le développement des politiques de recouvrement des fonds, des mutuelles, assurances, etc. ;
- les réformes organisationnelles visant à surmonter la faiblesse des structures de gestion ainsi que l'absence d'incitants fondés sur la performance dans le secteur public avec les politiques de décentralisation, le partenariat public-privé, l'intégration des prestations de service et l'amélioration des procédures ;
- les réformes politiques qui incluent la définition des programmes avec les priorités, la législation et la réglementation (Dmytraczenko, Rao & Ashford 2003).

Le processus de réforme du secteur de la santé est bien plus qu'un simple exercice technique, il s'agit d'une activité intensément politique où les bailleurs

de fond peuvent jouer un rôle essentiel. Leur contribution financière peut faciliter le processus de réforme, leur compétence technique peut être utilisée pour la conception et la mise en œuvre des réformes ; et ils sont eux-mêmes acteurs du processus (Dmytraczenko, Rao & Ashford 2003).

LE SECTEUR DE LA SANTÉ ET L'APPROCHE SECTORIELLE

En 1993, la Banque Mondiale (BM) affirmait son rôle dans la politique internationale de santé en publiant un rapport sur le développement mondial intitulé « Investing in Health » (WB 1993), qui allait déclencher l'adoption à vaste échelle des réformes du secteur de la santé déjà évoquées. Ces réformes étaient alors généralement acceptées comme étant la clef pour améliorer la santé dans les pays en développement (Buse & Gwin 1998, Hill 2002).

En 1995, la BM a augmenté le rôle des financements pour la santé et a légitimé son leadership en modelant les priorités et les directions dans la santé internationale (Buse & Gwin 1998).

En 1997, le gouvernement danois et la BM ont financé une conférence rassemblant les donateurs pour atteindre un consensus sur l'approche sectorielle et son rôle dans le domaine de la santé. Les résultats de ces discussions ont été publiés sous forme d'un guide « A guide to sector-wide approaches for health development » (Cassels 1997). C'est ainsi que le modèle de l'approche sectorielle fut adopté tout d'abord dans le secteur de la santé, pour ensuite s'étendre à d'autres secteurs, en particulier celui de l'éducation.

Les auteurs de ce premier guide identifiaient deux objectifs principaux pour les approches sectorielles santé : d'une part, améliorer le fonctionnement du secteur afin d'améliorer la qualité des soins et les « outcomes » en matière de santé et d'autre part, créer des conditions favorables à une meilleure interaction entre gouvernement et donateurs (Cassels 1997). Les principes sous-jacents aux approches sectorielles furent par la suite élaborés de manière plus détaillée, au fur et à mesure que le concept était testé, pour aboutir à la définition actuelle.

L'approche sectorielle dans la santé présente toutes les caractéristiques de l'approche sectorielle telles qu'évoquées plus haut, impliquant notamment de passer d'un mode de planification et de gestion basé sur des projets à un cadre de travail global (politique, institutionnel et financier) dans lequel les soins de santé sont délivrés (Cassels 1997). Elle revêt la forme d'un partenariat à long terme

entre le gouvernement-hôte et les bailleurs de fonds (Dmytraczenko 2003). Le processus de développement est placé sous le leadership des autorités nationales, et prend en compte les besoins du secteur dans son ensemble. Il explore la manière dont le gouvernement et les donateurs peuvent utiliser des systèmes de gestion et de planification conjoints et avancer progressivement vers un programme sectoriel de plus en plus complet, en mettant des fonds en commun (Hill 2002). Il inclut le développement de politiques et de stratégies, le renforcement des capacités institutionnelles et la réforme des institutions, en s'appuyant sur des dispositions communes en matière de planification, de gestion et de surveillance.

Le terme « secteur de la santé » n'est pas toujours très familier pour tout le monde et son interprétation est souvent contestée (Cassels & Janovsky 1998). Une définition globale devrait décrire ce secteur comme comprenant toutes les institutions ayant un rapport avec la santé (en référence à sa multisectionnalité). En pratique cependant, on se réfère plus étroitement aux organisations financées, gérées ou régulées par le ministère de la santé, en omettant ainsi de reconnaître la contribution d'autres ministères et d'agences autres que celles du gouvernement.

Il existe maintenant un large spectre d'expériences en approches sectorielles et santé, beaucoup de pays discutent les améliorations aux politiques du secteur et des approches conjointes avec les donateurs (European Commission 2000).

L'ÉVALUATION ET LE SUIVI D'UNE APPROCHE SECTORIELLE

La mise sur pied de mécanismes communs de suivi et d'évaluation constitue l'une des pierres angulaires des approches sectorielles. La question du suivi et de l'évaluation des performances se pose et ce différents niveaux :

- L'évaluation de la politique sectorielle en tant que telle ;
- L'évaluation de la faisabilité des politiques sectorielles (cadre macroéconomique, leadership, consensus, etc.) ;
- L'identification des indicateurs pour le suivi annuel ;
- Le suivi des résultats finaux (impact), comme les OMD (indicateurs disponibles) et ceux des Documents de Stratégie de la Réduction de la Pauvreté (indicateurs définis par pays et par documents).

L'adoption d'une approche axée sur les résultats est l'un des principes fondamentaux de l'efficacité de l'aide pour le Comité d'Aide au Développement de l'OCDE et pour un bon nombre d'agences bilatérales (Lavergne & Anneli

2003). De même, quand la Commission Européenne s'engage dans un programme sectoriel ou un appui budgétaire, l'un de ses objectifs fondamentaux est de pouvoir travailler avec le gouvernement pour se concentrer sur les résultats générés par les dépenses de développement (European Commission 2003).

Un cadre de suivi et d'évaluation est développé pour suivre l'évolution de tout secteur faisant l'objet d'un programme sectoriel, et la progression vers la réalisation des objectifs et résultats fixés. Ce cadre comporte une série d'indicateurs qui peuvent être classés selon diverses typologies. La qualité et l'utilité des indicateurs seront limitées par les données disponibles et par les moyens de les collecter et de les mesurer, tout en envisageant l'ensemble des facteurs qui influencent les résultats et l'impact des dépenses de développement (European Commission 2000).

DISCUSSIONS

Cette section ébauche, sans les détailler, quelques questions qui sont soulevées par l'approche sectorielle. Le lecteur se référera aux articles et ouvrages mentionnés pour plus d'informations sur ces questions.

QU'EN EST-IL DE L'APPROCHE PROJET ?

Malgré une volonté accrue de tourner de plus en plus définitivement le dos à l'approche projet comme modalité de référence, quelques remarques s'imposent. Le passage à l'approche sectorielle est un processus relativement lent et la période de transition peut très bien bénéficier de projets pour empêcher le recul ou la disparition de certaines activités essentielles.

Un point d'attention est celui de la forte dépendance des pays bénéficiaires à l'aide extérieure (Lavergne & Anneli 2003). En effet, les pays peu dépendants de l'aide seront logiquement moins ou pas intéressés par une approche sectorielle, laquelle implique la participation des donateurs dans l'élaboration des budgets du pays bénéficiaire, et par conséquent induit une certaine perte de souveraineté de la part de ce pays. Des pays tels que l'Inde, le Vietnam ou des pays d'Amérique Latine seront en général plus intéressés à satisfaire des besoins spécifiques au moyen d'une approche-projet qui tire parti des avantages comparatifs du pays donateur.

L'approche projet apparaît aussi comme la seule voie possible pour les pays en crise, déstructurés, instables, avec des gouvernements non fréquentables et/ou

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dont les minorités sont persécutées ou prises en otage. De même, dans les situations d'urgence ce type d'aide a également prouvé son efficacité. Cela semble également pertinent et utile dans une situation de recherche, de démonstration ou d'apprentissage (Dujardin 2003).

Par ailleurs, le projet peut rester un moyen de financement tout à fait acceptable dans le cadre d'une approche sectorielle, pourvu qu'il respecte un certain nombre de critères tels que (Lavergne & Anneli 2003) :

- Son intégration dans un programme de développement et compatible avec les priorités définies ;
- Sa mise en œuvre en partenariat avec les autres institutions tout en favorisant le leadership des pays bénéficiaires ;
- L'utilisation des procédures locales pour la gestion, le suivi et l'évaluation des activités ;
- La poursuite de résultats au niveau du programme.

LA DÉCENTRALISATION

Les effets que les approches sectorielles peuvent avoir sur la décentralisation est une question qui retient fortement l'attention (Lavergne & Anneli 2003). Bien souvent, les approches sectorielles ont été introduites dans des environnements institutionnels en pleine refonte (Health Sector Reforms), avec notamment la promotion de la décentralisation pour permettre une plus grande flexibilité, une meilleure efficacité et une responsabilité accrue en matière d'utilisation des ressources.

Les objectifs de l'approche sectorielle et de la décentralisation ne sont pour le moins pas incompatibles. Toutes deux visent à améliorer l'efficacité de l'utilisation des ressources et accordent une importance majeure au point de vue des acteurs locaux et des bénéficiaires. Elles ne sont donc pas en opposition mais plutôt complémentaires. Ce sont néanmoins deux processus complexes qui nécessitent d'importantes capacités administratives et de gestion. Leur mise en place simultanée peut entraîner des risques et des défis particuliers (European Commission 2003) :

- La coordination de deux processus de réformes parallèles, très souvent dirigés par des entités différentes, ayant des intérêts différents ;
- Des problèmes de transition typiques dans les premières phases de la décentralisation, comme la présence de capacités trop faibles de gestion ou techniques et de faiblesses dans les systèmes de responsabilisation ;

- Des problèmes de transition typiques dans les premières phases de l'approche sectorielle, pouvant être marquées par un certain nombre d'influences centralisatrices susceptibles de générer des problèmes de cohérence avec les réformes de décentralisation. Que le renforcement du rôle des ministères centraux induit par l'approche sectorielle ne se fasse pas au détriment des structures décentralisées constitue un réel défi.

LES PARTIES PRENANTES

Une approche sectorielle doit s'appuyer sur une vision d'ensemble et doit dès lors intégrer les contributions de toutes les parties prenantes, y compris les secteurs publics et privés, les organisations à but non lucratif, la société civile, les universités et les bénéficiaires des services publics (European Commission 2003). La définition des rôles appropriés des différentes parties prenantes et la mise en place des mécanismes appropriés de consultation et de prise de décisions représentent des défis importants.

Or, en pratique, les approches sectorielles sont généralement des processus peu participatifs, menés par les autorités centrales. La participation à la définition des programmes sectoriels est particulièrement faible au niveau des communautés et des districts. De plus, il est très rare que les informations arrivent à la base. La raison de ce manque de participation tient peut-être à la difficulté et la complexité de gérer un processus participatif – la gestion du dialogue entre bailleurs et pays partenaire, à elle seule, est déjà suffisamment complexe. Toutefois, un manque de participation risque de réduire la pertinence et l'efficacité des programmes sectoriels. Il faudrait donc davantage réfléchir aux possibilités d'intégrer un processus de consultation participatif à l'élaboration puis au suivi des programmes sectoriels et développer des mécanismes qui vont rendre capable les membres de la société en général d'influencer la façon dont les services de santé seront organisés.

APPROCHE SECTORIELLE ET APPROCHES VERTICALES

D'une façon générale, les programmes verticaux vont bien souvent à l'encontre des objectifs des approches sectorielles, que ce soit en termes d'appropriation, de développement des capacités nationales, de réduction de coûts de transaction, d'harmonisation des procédures, etc. De plus, l'approche sectorielle peut être moins efficace, moins cohérente et plus compliquée à gérer si certains donateurs maintiennent des projets financés séparément (Brown

2001). Pour cette raison, la plupart des approches sectorielles essaient d'intégrer des programmes verticaux, supportés par des fonds communs, dans le système national (Brown 2001). Néanmoins, beaucoup de donateurs et de gouvernements partenaires montrent une certaine réticence à abandonner certains programmes verticaux de peur de perdre en qualité et en efficience.

Le développement de nouvelles initiatives mondiales comme le Fonds Mondial de Lutte contre le Sida, la Tuberculose et la Malaria, offre des possibilités de financement considérables, parfois supérieures au budget consacré au secteur. Ceci pose de façon importante le problème de voir ré-émerger des structures parallèles avec des effets potentiellement dévastateurs pour les acquis de l'approche sectorielle –démotivation, délocalisation, fuite des cerveaux, etc. – (Sundewall & Sahlin-Andersson 2005).

RÉFORMES SUPPLÉMENTAIRES NÉCESSAIRES AU NIVEAU DU SECTEUR PUBLIC

Beaucoup d'instruments politiques et d'arrangements institutionnels nécessaires à l'amélioration d'un secteur –décentralisation, incitants pour le personnel, systèmes de gestion et de comptabilité, de déboursement, etc. – ne peuvent pas être introduits par un seul ministère. Des changements vont donc dépendre de réformes plus larges et générales organisées par le gouvernement dans le secteur public (Cassels 1997).

APPROPRIATION ET LEADERSHIP

La position de « siège conducteur » occupé par le gouvernement partenaire, qui lui procure un plus grand contrôle sur l'assistance extérieure en général, est une condition sine qua non à l'approche sectorielle (Cassels 1997: 30). En fait, le manque de direction et la gestion déficiente des gouvernements partenaires sont deux éléments souvent mis en évidence pour expliquer l'importance que les donateurs jouent encore dans la coordination (Hill 2002).

COORDINATION ENTRE LES DONATEURS

Pendant longtemps l'engagement des donateurs en matière de coordination ne s'est guère matérialisé (Hill 2002). Si les donateurs gagnent en influence dans l'approche sectorielle, ils sacrifient par la même occasion leur contrôle direct. En effet, l'arrivée d'un chef de file dans le groupe participant à l'approche sectorielle peut aussi générer des tensions. Certains peuvent alors craindre de voir

s'effriter leur influence dans la participation à cette approche. Ironiquement, plus le nombre de bailleurs impliqués augmente, plus le risque de désistement devient plus important (Hill 2002). Beaucoup reste à faire dans ce domaine, ce qui demande, de la part des donateurs, de sérieuses remises en question et un prochain changement de comportement.

HARMONISATION DES PROCÉDURES

La rhétorique de l'approche sectorielle insiste sur le fait que les pays donateurs doivent utiliser les mécanismes des gouvernements partenaires pour l'allocation et la distribution des ressources, ainsi que pour le mode de suivi et d'évaluation (Hill 2002).

Au niveau opérationnel, c'est finalement rarement le cas. Cet écart entre théorie et pratique s'explique en partie par l'obligation de respect de réglementations imposées par les gouvernements de certains bailleurs incompatibles avec celles des gouvernements partenaires, ces bailleurs maintiennent alors leurs chemins alternatifs.

La Déclaration de Paris de 2005, qui a réuni 91 pays et environ 40 organisations internationales, réaffirme pourtant cet engagement, déjà pris à Rome en 2003, « d'harmoniser l'aide pour en augmenter son impact, réduire la pauvreté et l'inégalité, augmenter la croissance et les capacités et accélérer l'achèvement des OMD ». Un accord est également intervenu sur le choix de douze indicateurs de suivi de ce processus, lequel a été marqué par le troisième Forum de Haut Niveau sur l'Efficacité de l'Aide tenu à Accra en septembre 2008.

SYSTÈMES DE SANTÉ DÉFICIENTS

Augmenter les ressources pour la santé est essentiel mais pas suffisant, les systèmes de santé dans les pays en développement sont trop fragiles et fragmentés pour assurer la qualité et la quantité de services nécessaires (WHO task force on health system research 2005). Or, selon plusieurs auteurs (Becerra-Posada et al. 2004; Travis et al. 2004; WHO task force on health system research 2005) et les évidences récentes, la plupart de ces pays n'atteindront certainement pas les OMD, du moins dans le domaine de la santé, pour 2015.

CONCLUSIONS

Il est clair que l'approche sectorielle est vue comme un changement de paradigme dans l'assistance au développement, avec de nouveaux concepts, de nouvelles réalités. L'amélioration de la coordination des bailleurs de fonds, l'importance donnée à l'appropriation locale, des cadres de politiques et de stratégies sectorielles et la transformation des systèmes de gestion et financiers seront de toute façon un legs durable qui doit sous-tendre les bases du type de coopération et d'aide.

Comme tout paradigme, il faudra du temps pour que son intégration soit complète et pour que toutes ses composantes soient d'application. Comme tout paradigme également, le contexte dans lequel il sera vécu ou appliqué influencera sa mise en œuvre ou sa définition.

Des améliorations durables dans le secteur de la santé dépendent de l'amélioration du fonctionnement du système de santé et surtout du fonctionnement du système de santé pris comme un tout. L'approche sectorielle peut certainement jouer un rôle important à ce niveau (Goodburn & Campbell 2001), notamment en élaborant des politiques sectorielles plus cohérentes que par le passé – même si les résultats directs de l'approche sectorielle en termes de performances générales du secteur ne sont pas encore mis en évidence. Il existe, en effet, de réelles difficultés d'évaluation d'impact puisque les systèmes de santé sont des systèmes extrêmement complexes, multisectoriels et où le contexte joue un rôle crucial.

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2. Recent development on aid modalities

“Principles of aid effectiveness such as harmonization, alignment and instruments to operationalize them, such as the sector-wide approach (SWAp), have long been regarded one means of bringing “order” to health aid at country level. More recently, these concepts have been extended to the global level in an attempt to shift the increasingly diverse aid environment from its current unstructured plurality towards a more purposeful plurality” (Dodd and Hill 2007).

2.1. International Health Partnership Plus (IHP+)

The International Health Partnership and related initiatives (IHP+) is a global partnership that puts the Paris and Accra principles on aid effectiveness into practice, with the aim of improving health services and health outcomes, particularly for the poor and vulnerable. The IHP+ is a new strategy that seeks to achieve better health results by mobilising donor countries and other development partners around a single country-led national health strategy, guided by the principles of the Paris Declaration (PD) on Aid Effectiveness and the Accra Agenda for Action (AAA)⁴. Launched in September 2007, the IHP+ aims to better harmonise donor funding commitments, and improve the way international agencies, donors and developing countries work together to develop and implement national health plans. An inter-agency working group has been established by IHP+ to develop a methodology for carrying out a Joint Assessments of national strategies; the Joint Assessment Report would be based on in-country discussions and a review of relevant existing documents (national health plans, disease-specific plans, budget frameworks, operational plans etc.). It would not make a specific “yes” or “no” funding recommendation. Rather, it would provide feedback to countries and donors on the strengths and weaknesses of the national strategy, perhaps during a scheduled national review of the strategy. A positive Joint Assessment report would facilitate the process of accessing increased financial support for national strategies from donors.

2.2. Health as a Tracer Sector (HATS)⁵

Looking at aid effectiveness with a sector lens ensures a stronger link with the Millennium Development Goals (MDGs)⁶ and development agenda. Health is one of the most – if not the most - complex and fragmented sectors with around 100 to 140 global health partnerships with a handful accounting for the bulk of aid and real opportunities for better concentration of aid. Yet results remain too slow towards the MDGs and other important international goals. Because of its complexity, the health sector has been selected to provide lessons that can be useful for adapting and fine-tuning the aid effectiveness framework. Other sectors have been interested by the work in health and the health work stream should play a role of leverage and invites in fact all sectors to think about their contribution to the aid effectiveness.

HATS team is supported by the Organisation for Economic Co-operation and Development (OECD) and includes specialists in aid effectiveness and health representing multilateral institutions, bilateral development agencies, developing countries and NGOs. Its mandate is to provide the ‘Working Party on Aid Effectiveness’ (international partnership of policy makers and aid practitioners from donor and developing countries hosted by the OECD’s Development Assistance Committee) and its subsidiary working groups with concrete illustrations of progress

⁴ The documents of Paris Declaration and Accra Agenda for Action are presented in the ANNEXE 2.

⁵ Source: Organisation for Economic Co-operation and Development (OECD)

<http://www.oecd.org/dac/effectiveness/health>.

⁶ The Millennium Development Goals with their respective indicators are presented in the ANNEXE 3.

and remaining bottlenecks in the implementation of the Paris Declaration and Accra Agenda for Action in the health sector.

2.3. Harmonisation for Health in Africa (HHA)

It is a regional initiative (December 2007) co-sponsored by the World Bank, UNICEF, African Development Bank (AfDB), WHO-AFRO and United Nations Population Fund (UNFPA). HHA is conceived as a regional mechanism through which collaborating partners agree to focus on providing support to the countries in the African region for reaching Health MDGs. Modalities of collaboration involve joint analytical work as well as planning and implementation support which partners would normally undertake as individual agencies.

3. SWAp Policy Evaluation

Since the late 1990s, SWAp has been adopted as a cooperation modality of reference in many developing countries, especially in the health sector and in sub-Saharan Africa. Today, a number of countries that do not yet have a proper health SWAp (e.g., Niger, Rwanda, etc.) are considering this option. At the same time, there is a growing trend among some development agencies to by-pass specific sector support and move to general budget support aimed at backing comprehensive poverty reduction strategies. Huge amounts of money dedicated to fighting specific diseases (e.g., AIDS) and channelled through vertical programs also tend to bypass, and sometimes de-structure health SWAp. It is thus legitimate, looking at the experience gained so far, to examine whether the SWAp remains a relevant cooperation modality and, in particular, whether it actually promotes a more sustainable development of healthcare systems in developing countries.

The assumption behind SWAP implementation is that, by adapting it to national policy and framework, the health sector reforms (HSR) should be better oriented towards sectoral objectives (Peters and Chao 1998). Overall, the aim of SWAp is to improve the health sector outcomes and therefore to increase the impact of funds (Hutton 2000).

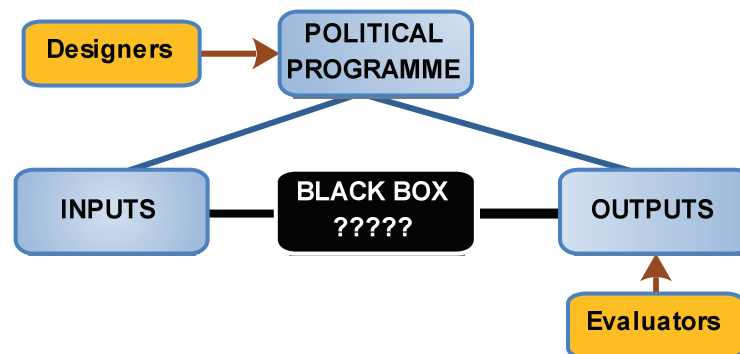
Because SWAp became a popular approach for many donors, much has been published about it (Sundewall and Sahlin-Andersson 2006). Two kinds of publications can be found. Firstly, most of existing publications and reports come from development or bi-lateral cooperation agencies (grey literature) and concern the model itself, the process and the dynamic of SWAp. In general, evaluations focus their attention on the implementation of the components or the core elements, e.g. sector strategic plan, Mid Term Expenditure Framework (MTEF), coordination, harmonisation, local leadership, funding mechanisms, etc. That gives a general overview of the status of the SWAp in the health sector, but ignores the most important aspect of health sector improvement strategies, i.e. the impact of the health service delivery and its access. Secondly, since the end of the 90s, academic publications are too much limited on the measurable effects produced by SWAp (additionally to indicators linked to the process of the approach itself that are more often analysed and more easily measurable). Rare publications claim the existence of a causal relation between SWAp and better health impact indicators like child mortality reduction. Two main flaws can be attributed to these studies. On one hand the explanation of the relation between the policy (SWAp) and the impact of health is not sought. Already in 1966, Donabedian emphasized that even if health outcomes could indicate a good or bad quality of health policy as a whole, they could not explain the nature or the place of the deficiencies or the successes (Donabedian 2005). In the 1990s, other researchers confirmed that most of health policy evaluations had a limited relevance because they neglected actors, process of implementation as well as the context in which it was realized; this impeded to explain

how and why certain policies succeeded and other failed (Barker 1996, Reich 1995, Walt and Gilson 1994). More recently, a literature review (1994-2007) on health policy analysis in low and middle income countries concluded that majority of publications concerning health policy processes is “small, diverse, fragmented and quite descriptive in nature” (Gilson and Raphaely 2008). On the other hand, measuring the impact of health policy, like different mortality rates, seems to be too ambitious and too early. Indeed, these impact indicators tend to respond slowly to health sector improvement (Foster et al 2000), are infrequently measured, and may be driven by non-health factors in the short term (e.g. drought, famine) or by changes in economic success (Hutton 2000). So, the evidence of a link between politics and systemic changes at national level and results and outcomes at operational level raises important challenges in the evaluation related to the complexity of the issue (Garner et al 2000).

The complex issue of the interface between evidence and policymaking has received increasing attention during the past few years and lack of empirical evidence for success has generated calls to explore the gap and to propose standardised framework for evaluation (Garner et al 1998, Syed et al 2008). Despite this interest, it appears that no much progress has been made to develop a comprehensive framework for analysing the effects of national level-policies on the operational level of health services and of the mechanisms through which policies are implemented (Hunter and Marks 2002).

This may be related to Figure 1 illustrating the “black box”⁷ problem which has disturbed for a long time the evaluation of programme or policy (Stame 2004). In that model, designers and evaluators work independently with almost no contact; the first one concentrating on policy while the second focusing on measuring the outputs when no one looks on how, when, and why the input are implemented (Stame 2004). Syed et al (2008) added the fact that decision makers and researchers often come from different cultures with different motivation and distinct priorities.

Figure 1: *Black box and gap between designers and evaluation*



Also, “it is essential that methods to improve the descriptions of complex interventions are further developed and tested with the expectation that they will complement existing systematic review methodology” (Shepperd et al 2009 page 4).

Our research wanted to address those weaknesses identified in SWAp evaluation and more largely in health policy evaluations.

4. Research objective

Our research stems from the assumption that SWAp should support and strengthen the relevance of Health Sector Reforms (HSR) engaged in the 1990s to better face

⁷ The black box is the space between the actual input and the expected output of a programme or a policy (Stame 2004).

numerous problems in health sector and ultimately to improve the health outcomes and health of the population. The aim was to evaluate and understand how the reforms supported by a SWAp have been implemented and if they were associated with an improvement in health system and a better health service delivery to the Tanzanian population. To fulfil that objective, we developed an analytical framework with functional links between the national political level and results observed at operational level. We intended to explore the conditions for success and/or failure of the national policy on health service delivery from the operational level rather than from policymakers' level. Taking the district as entry point in the analysis of the results and outcomes of the national policy, should give new perspectives about the determinants of "policy-implementation gap".

CHAPTER II – STUDY DESIGN: MULTIPLE-CASE STUDY

In a case study, “the researcher explores in depth a programme, an event, a process, or one or more individuals. The one or more cases are bounded by time and activity, and researchers collect detailed information using a variety of data collection procedures over a sustained period of time” (Creswell 2003 p 15).

1. Typology of our evaluation

Our research aims to employ valid scientific methods to analyze relationships between different components of a health policy and health interventions. To determine the type of intervention being evaluated, we used the typology described by Contandriopoulos et al in 2000 who define the "intervention as any organised system of action (a structure, actors and their practices, processes of action, one or many finalities and an environment) aiming to, in a given environment, during a given time period, modify the foreseeable course of a phenomenon to correct a problematic situation. An intervention can be a technique, a medication, a treatment, an organisation, a programme, a policy or even a complex system like the health care system” (Contandriopoulos et al 2000). The typology of Contandriopoulos specifies two criteria to classify an intervention susceptible to be evaluated: the complexity and the degree of dependence regarding its context. A complex intervention is characterized by: (i) multiple purposes, that are difficult to identify, (ii) an organisation with several levels, (iii) a large number of activities mobilizing numerous interdependent actors, (iv) multiple and sometimes contradictory dimensions, and (iv) a poorly defined temporal horizon. Then, an intervention highly dependent (or inseparable) of its context is characterized by: (i) specific resources linked to the context, (ii) an important sensitivity of the changes in the context, (iii) an important opening on its environment, and (iv) blurred limits with the context. Study designs with selection of methods to evaluate an intervention will differ regarding its complexity. For example, evaluating efficacy of drugs are targeted interventions that can be isolated from their environment; the causal chains between the agent and the outcome is a simple logical model than can benefit from an experimental like randomized controlled trials (Contandriopoulos et al 2000, Victora et al 2004). At the opposite, a complex intervention, context-dependent must be estimated in a holistic, comprehensive and contextualized approach by using other research methods (Contandriopoulos et al 2000, Ritchie and Lewis 2003, Hasson 2010). The evaluation of interventions on the health system, dictated by global, national and local policies, thus refers to a complex typology. In addition, the interventions are performed in complex health care environment at different levels and with several groups or actors (Hasson 2010, Pawson et al 2005).

2. Rationale for the choice of case study design

For different reasons, case study is a common design to investigate important practical and policy questions in health care (Keen and Packwood 1995). Indeed, a case study investigates events, facts, interventions in depth and within its real-life context especially when the limits between activities and context are not clear, when having many variables of interest that should be investigated, and when multiple sources of evidence are used (Fitzgerald 1999, Yin 2003, Yin 2009). Many complex organisational contexts have these characteristics and are therefore good targets for case studies (Fitzgerald 1999). The integration of different perspectives on the context or interaction means that case study designs can built-up very detailed in-depth understanding of intervention with processes and actors (Gagnon 2005). Moreover, case studies are also

appropriated for description and explanation of the processes inherent to diverse phenomena (Woodside and Wilson 2003).

Our research aims to evaluate and understand how the reforms supported by a SWAp have been implemented and if they are associated with an improved health system and better health service delivery at operational level. We intend also to explore the conditions for success and/or failure of the national policy on health service delivery to possibly detect the determinants of policy-implementation gap. To realize our research, the experimental design should fail for different reasons. First, as researchers we do not have any control on the way of policy are formulated and implemented (Pope et al 2000). Secondly, the theory of causality would be able to notify change from one status to another status or even an absence of change; but it will not explain, why and how it has changed and why it has eventually not changed; then confirming that changes can be attributed to the intervention is even more difficult (Pawson and Tilley 1997, Stame 2004). Thirdly, health policy and implementation depend of different actors from whom it is essential to understand priorities and interpretations of events; thus capturing their views is often better obtained by qualitative methods (Keen and Packwood 2000). Consequently, case study has its place in our evaluation research for at least four reasons: (i) to explain the presumed links in real-life interventions that are too complex for an experimental methods, (ii) to describe the implementation of policy and health sector reforms in its real-life context, (iii) to illustrate certain topics in a descriptive way, and (iv) to understand why interventions succeed or failed (Keen and Packwood 2000, Yin 2009).

3. Rationale for multiple-case study

Typically a single case study describing a single site provides in-depth description of a phenomenon but fails to provide a solid base for generalization to other places (Herriot and Firestone 1983). Already in the 1980s, new forms of qualitative research called, by Herriot and Firestone (1983), “multisite qualitative studies” appeared to build up its ability to generalize while preserving in-depth description. The multisite study addresses the same question research in different places with same data collection and analysis procedures allowing cross-site comparison. Yin (2009) also considered that multiple-case is not a different methodology from a single-case study: “single- and multiple-case designs to be variants within the same methodological framework”. The results produced by multiple-case study are usually more convincing and considered as more robust (Yin 2003). When using a multiple-case study design, an important question concerns the number of cases that will be sufficient. Of course, random sampling logic cannot be applied in such design⁸ but each case must be carefully selected following replication logic (Yin 2009). This means that several cases should be included within the same study especially if resulting similar results (“replication”); then if such replications are indeed found for several cases, it can be considered as robust findings (Noor 2008, Yin R.K. 2003, Yin 2009). However, resources in personnel and finance are usually limited; therefore samples for case study are more often selected on a purposive or even theoretical way taking into account that the case should be typical of the studied intervention and the main research objectives could be investigated (relevance of the field), “the case-study capacity to inform is more

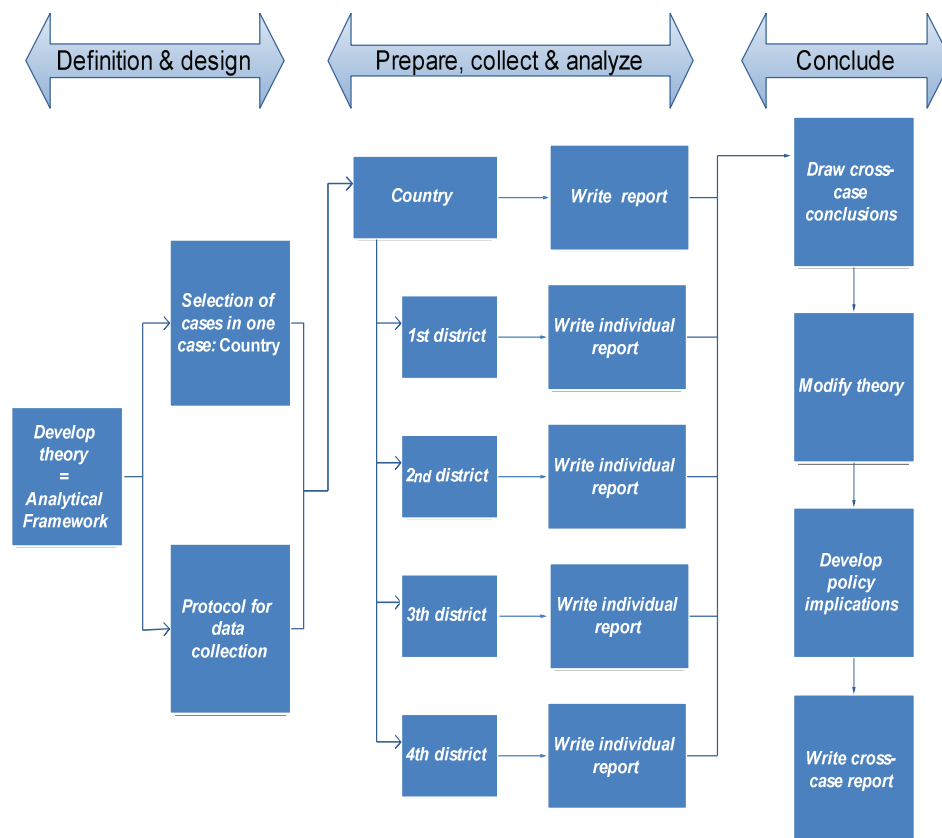
⁸The sampling logic requires an operational enumeration of the entire universe or pool of potential respondents and then a statistical procedure for selecting a representative subset of respondents allowing statistical inference: “Any application of this sampling logic to case studies would be misplaced” (Yin 2009 page 56).

important than its representativeness” (Gagnon 2005). For Gagnon (2008), 4 to 10 cases is a good option.

4. Multiple-case study steps and modalities

Figure 2 summarizes our approach for the multiple-case study in Tanzania with the use of the model described by Yin (2003 and 2009). The initial step consisted in developing a theory. “A theory is an interrelated set of constructs or variables formed into propositions that specify the relation-ship among variables” (Creswell 2003 page 120). In our case, an evaluation which refers to a complex organisation (the health system), we proposed an analytical framework that should be able to demonstrate functional links between the national health policies and results observed at operational level for better understanding the determinants of "policy-implementation gap". That initial stage was important for the selection of case and to determine the protocol research with data to be collected.

Figure 2: *Modality and realization of multiple-case study*



Source: Yin 2003 and 2009.

Our Figure differs somehow from Yin’s model because our research operated at two levels: the national one which can be considered as a single case study, and the operational level which is the multiple-case study. However, each individual case consists of a “whole” with individual report according to the information collected. Across cases, the report indicated the similar and the contrasting results. Then the last conclusions led to modify the analytical framework with appropriate conclusions.

5. Selection of Cases

5.1. Single case study: Tanzania

We operated our selection in two phases. First we had to look for a main site. The GRAP-SWAp research group had initially selected several countries of interest because they had relevant characteristics in relation with its different objectives. Countries were Benin, Mali, Uganda, Mozambique, and Rwanda. Later one, Tanzania appeared to be more interesting because important health sector reforms were introduced early in the 1990s and a functional health SWAp with all classical components was in place. In addition, one of the main researchers had a very good knowledge of the country, especially at operational level. A more extensive research into the application of SWAp-related reforms in Tanzania was subsequently planned.

5.2. Multiple-case study: four Tanzanian districts

In Tanzania, a “district” is the operational unit for health service delivery. Our selection concentrated on rural districts for two reasons. First, population is mostly rural: 80% of districts on Mainland Tanzania are classified as rural (The United Republic of Tanzania Ministry of Health and Social Welfare 2007). Second, the urban districts are more complex to analyze because of the important private practice component which is not (or less) concerned by reforms in the public sector. Tanzania mainland has a total of 21 administrative regions. However, to ensure effective health service delivery countrywide, the ministry of health and social welfare (MOHSW) has subdivided the country into eight zones (National Bureau of Statistics and ORC Macro 2005). Because of time and budgetary constraints, we decided to select four zones randomly and then one rural district per zone. Two districts were selected because of their extreme performance with child mortality rate, with the assistance and competence of MOHSW representatives and the two last districts were selected at random.

6. Other modalities

The other different steps of the multiple-case study modalities like analytical framework development, methods for data collection and analysis are described in the two next chapters.

CHAPTER III – CONCEPTS FOR ANALYTICAL FRAMEWORK DEVELOPMENT

1. Health sector reforms and SWAps in Tanzania

In Tanzania, health system reforms are implemented since 1993 (Brown 2000, WHO 2002). It included a process of decentralisation that has strengthened capacity at the district level to manage health services (WHO 2002). In June 1998, to increase coordination between main actors in health and to increase the impact of funds, the Ministry of Health and a group of donors agreed to pursue a sector-wide approach to health reform supporting one comprehensive and coherent health sector programme (Hutton 2000, Ronsholt 2002). Ultimately, the main aim of the health reform programme was to improve availability and quality of essential services through managerial, financial, and organisational reforms and strategies identified (Brown 2000).

2. Which logic for which evaluating framework in health sector?

In this section we explain how, by using different theories on transfer from national to operational level, we finally could develop our own analytical framework to evaluate and understand how national policies are implemented and for which results. The framework has also oriented the choice of data to be collected.

The link between the political decisions for a sector and the performances at the operational level can be presented by a simple and linear model as illustrated in Figure 3.

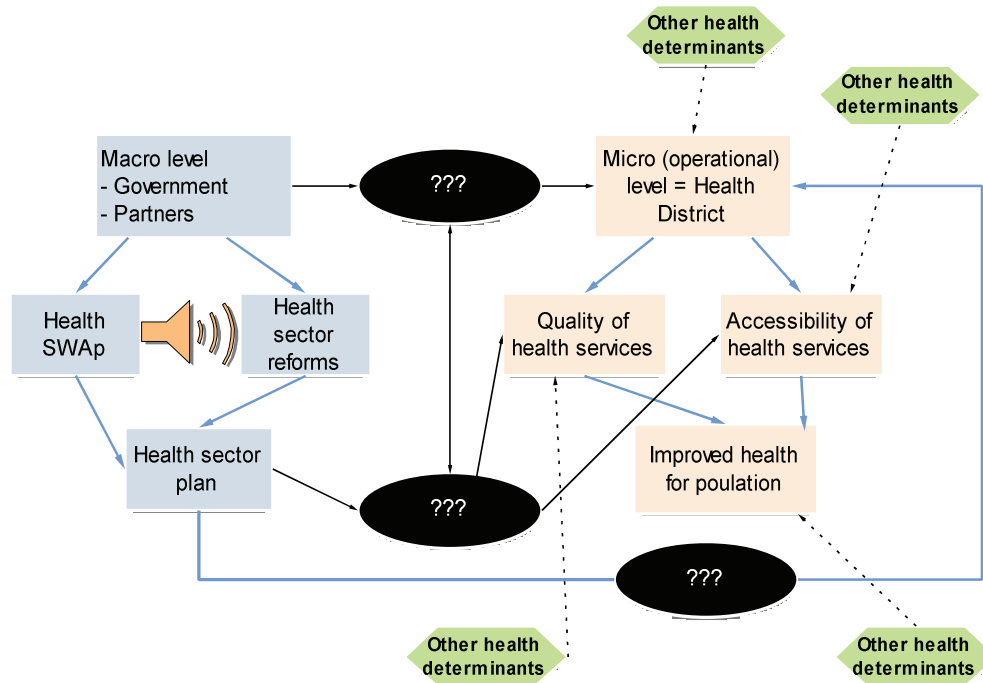
Figure 3: Linear transfer of policy from national to local level



This figure is obviously too simplistic, the link between policy, programme and implementation with finally visible performances at the local level and in the whole population is determined by an important number of known factors (e.g. resources availability, management skill, socio-economic determinants, etc.) and unknown factors. In fact, very often, governments elaborate policy and leave their agents to set out with a process that follows a clear, rational, linear progression; however, the transmission of policy into practice is complex and cyclical rather than linear, with an implementation being influenced by the nature and content of policy in all kinds of ways – some very visible, others less so (Hunter and Killoran 2004). Therefore, as the process of transfer is not as linear that suggested, the complexity of the situation in which policies are decided and implemented creates the needs to take into account other factors and their context. Figure 4 is just the opposite and extreme of the previous one

as it exposes the different levels of implementation with high number of potential determinants that can influence the interface between national policies and final outcomes.

Figure 4: *Transfer of policy and possible determinants affecting health outcomes*



As already said, the final objective of HSR supported by a SWAp is the improvement of health systems for the mental and physical well-being of the populations. To reveal the efficacy of the political decisions at operational level is, thus, a complex issue. We tried to develop a conceptual analytical framework that allows evaluation at different levels that is completed by contextual elements.

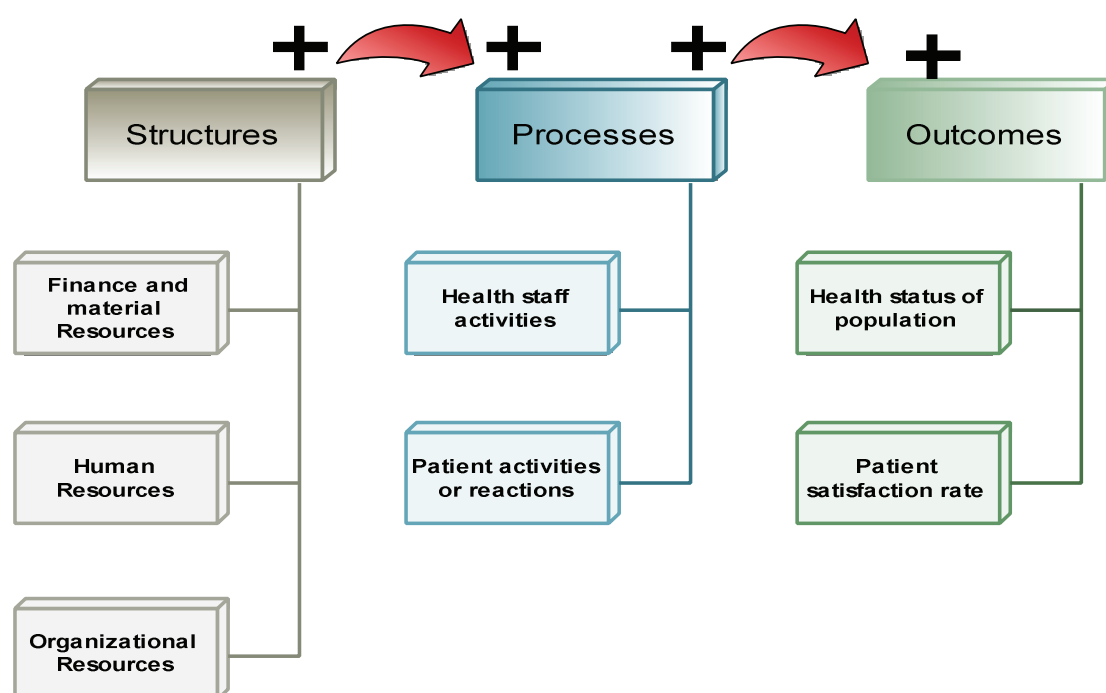
In our research we often refer to the concept of evaluation. Contandriopoulos et al (2000) distinguish two types of evaluation: (i) normative which tends to measure each intervention element through established norms and criteria, and (ii) evaluative which focus on relations between the different components of an intervention. It aims to measure what has been done and to understand how and why.

2.1. The model of Donabedian⁹

More than 30 years ago, Donabedian proposed a model for assessing a health care system. The evaluation approach was based on three categories: structures, processes and outcomes as illustrated in Figure 5. He defined structure as the environment in which health care is provided, process as the method by which health care is provided and outcome as the consequence of the health care provided plus patient satisfaction rate.

⁹ Source: Donabedian 1997 and 2005; the first publications date of 1966 and 1988, and then they were reedited in 1997 and in 2005.

Figure 5: *Evaluation of health services with Donabedian model*



Donabedian noted a distinction between two types of outcomes: (i) technical outcomes that encompass the physical and functional aspects of care, and (ii) interpersonal outcomes that cover dimensions of the "art" of medicine.

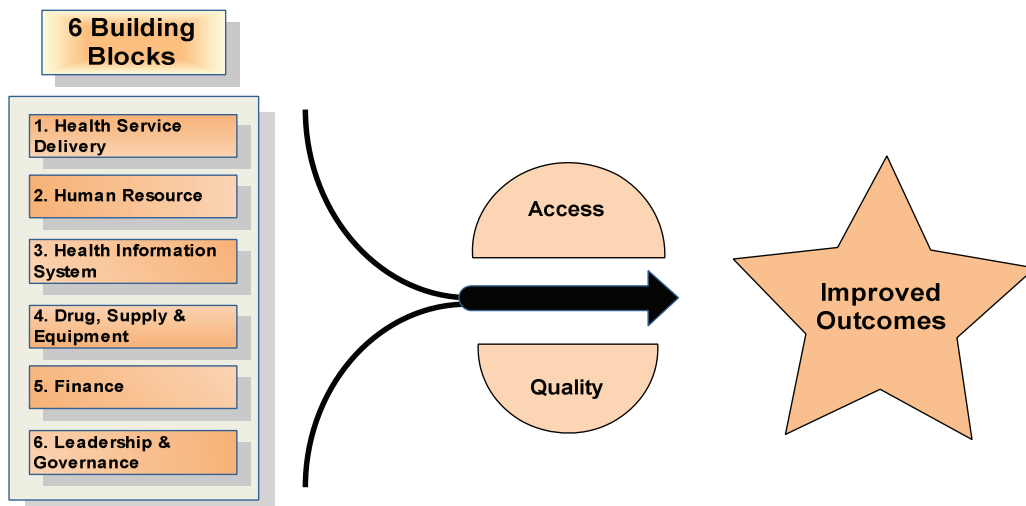
According to Donabedian's model, processes are constrained by the structures in which they operate. Thus, Donabedian asserts that these three categories of quality measures are not independent but are linked in an underlying framework: "this three-part approach is possible only because good structure increase the likelihood of good process, and good process increase the likelihood of good outcome". As already mentioned, a health system is not formed of separate elements that evolve in a linear and predictable (deterministically) way to produce health outcomes (Shepperd et al 2009). However, the relative importance of the different components of a health system will change according to different situations and the relations between those elements are not necessary linear (Campbell et al 2000).

2.2. The model of WHO¹⁰

Responding to the need of concept clarity, the WHO has recently redefined what a health system is: "it consists of all organisations, people and actions whose primary intent is to promote, restore or maintain health". This gives a broad spectrum of elements and it is more than the classical pyramid of health facilities delivering services. Indeed, it includes efforts to influence determinants of health as well as more direct health-improving activities and inter-sectoral actions.

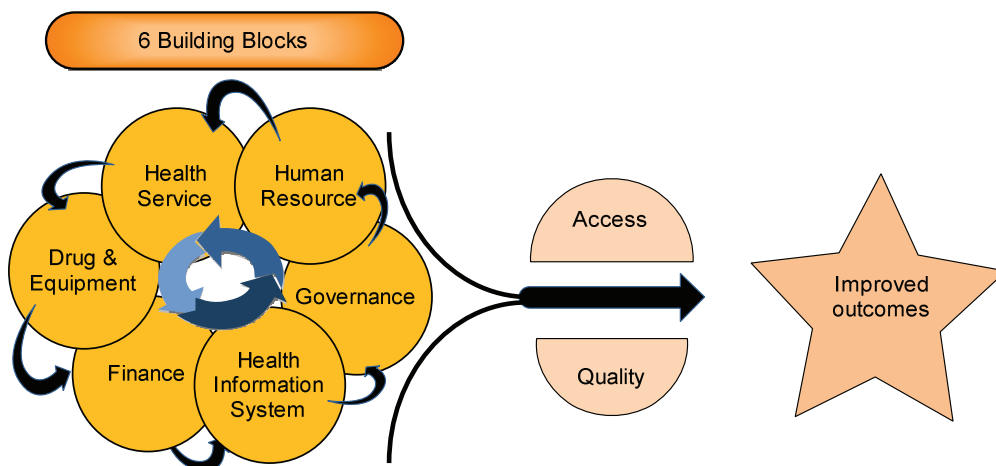
¹⁰ Source: World Health Organisation 2007.

Figure 6: *Building blocks framework from WHO (linear version)*



In the same way, WHO has specified the multiple goals of a health system which include: “improving health, health efficiency, health equity; greater access to and coverage for effective health interventions; and ensuring provider quality and safety”. According to the WHO, to achieve their goals, health systems are supposed to carry out basic functions which are the health pillars. The different pillars should provide health services, develop health workers and other key resources, mobilize and allocate finances, and ensure the health system leadership and governance. Those functions have been compiled in 6 building blocks which then constitute a health system. Figure 6 illustrates the 6 building blocks proposed by the WHO in linear version. All of them represent basic function and all of them are necessary to improve the health outcomes. The model in Figure 6 seems to be linear but in fact, WHO asserts “that the building blocks alone do not constitute a system, any more than a pile of bricks constitutes a functioning building. It is the multiple relationships and interactions among the blocks – how one affects and influences the others, and is in turn affected by them – that convert these blocks into a system. The health system building blocks are sub-systems of the health system that function – and therefore must be understood – together in a dynamic architecture of interactions and synergies” (World Health Organisation 2009). To better illustrate the dynamic and the interconnection between the building blocks, we have modified the model as illustrated in Figure 7.

Figure 7: *Building blocks framework from WHO (dynamic version)*

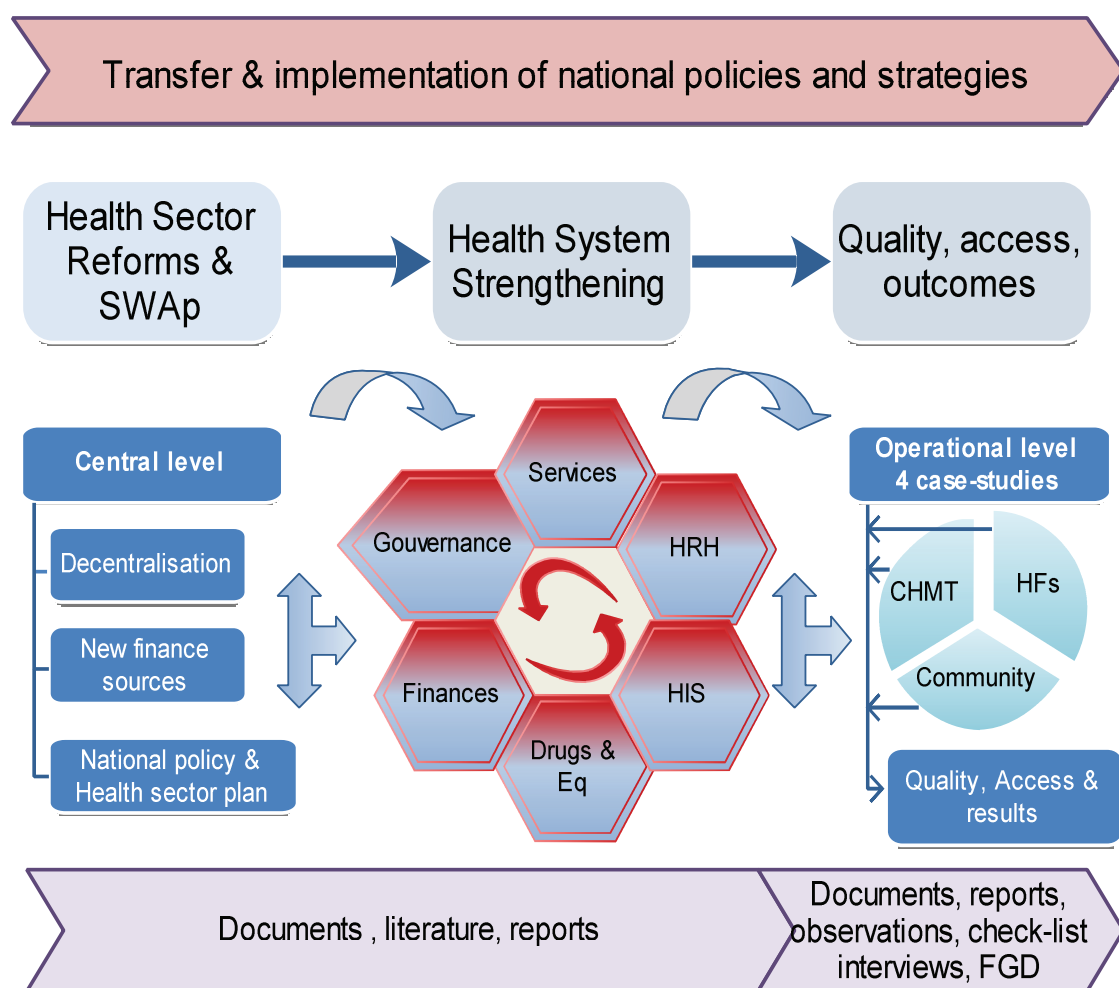


In summary, for WHO, a health system is a set of inter-connected parts that must function together to be effective. Changes in one area have repercussions elsewhere. Improvements in one area cannot be achieved without contributions from the others. Interaction between building blocks is essential for achieving better health outcomes.

2.3. Our analytical framework

In our framework (Figure 8), we tried to integrate the interesting elements of the previous models and to fit them in our research context to reach our objective. The study has been done at different levels of the health system in Tanzania: national level, health sector level, and operational level. With the first level, we evaluated the SWAp supporting the main national reforms that include decentralisation, new sources of finance and coherence with national policy and strategies (two first health sector strategic plans 1999-2003, and 2003-2008). Then we looked how those changes can be associated with health system strengthening; and in that optic, we have adapted and used the six building blocks from the WHO's model. Finally, our four case-studies evaluated in-depth the operational level with main actors to investigate the nature and dynamics of local systems within which strategies aimed at improving quality, accessibility, satisfaction, and health outcomes are being implemented with success. The main actors come from district health teams, health facilities (managers, workers and patients), and village communities.

Figure 8: *Proposed analytical framework*

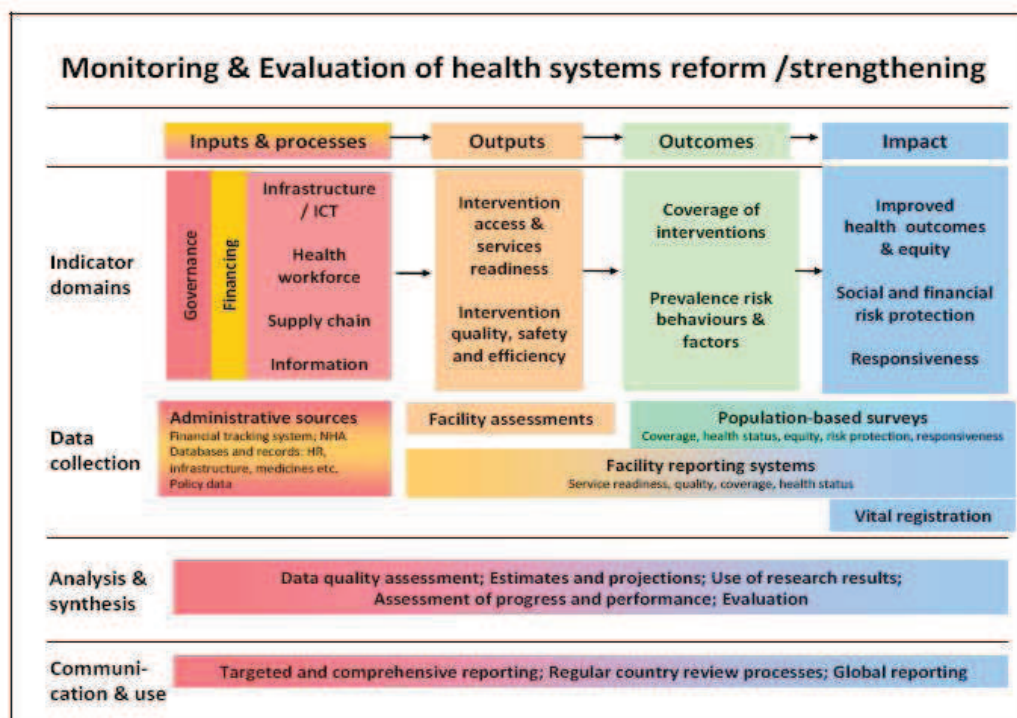


The analysis of the data and the different interactions between the levels of transfers should (i) validate and or adapt this analytical framework for further applications, and (ii) identify black-boxes contents to better understand the policy implementation gaps and ultimately reduce them.

2.4. Updated information from WHO: last framework for monitoring and evaluation of health system strengthening¹¹

In 2009, WHO, the Global Fund, GAVI and the World bank presented a new framework for monitoring and evaluation of health system strengthening (HSS) and discussed how it can be operationalized at the country level and how global partners can work together to support the implementation. This approach results in last international policies on aid effectiveness with Paris declaration and more recently the International Health Partnership (HIP+). “The core is the strengthening of one country platform for monitoring and evaluation (M&E) of HSS. The framework is intended to be relevant for countries and for global health partnerships, donors, and agencies. It will result in better alignment of country and global monitoring systems and can be used both for monitoring HSS joint programming as well as for tracking specific programmes”.

Figure 9: *Monitoring & evaluation of health systems strengthening*



Source: copy from Boerma, et al WHO 2009 page 6.

In this new framework (Figure 9), we find the “old” Donabedian structure with the processes (that include now the 6 building blocks of a health system) and the outcomes. However, health inputs are reflected in outputs, outcomes and impacts. The difference is that it brings together indicators and data sources across the results chain in its entirety. Monitoring of health system performance needs to show how inputs to the system (resources, infrastructure etc.) are reflected in outputs (such as availability of services and interventions) and eventual outcomes and impact including use of services and better health status. According to the authors “this results chain framework can be used to demonstrate performance of both disease specific and health systems interventions”.

¹¹ Source: Boerma et al WHO 2009.

This framework is very recent and it is too early to have feedbacks on its validity. Of course, this kind of model presents a comprehensible statement of the overall intent interventions (health sector reforms) with guidance for implementation and selection of variables for an evaluation (Rogers 2008). However, by leaving out the other important contributing components like the context in which interventions take place, like concurrent programmes, and like the different actors/stakeholders involved in the system at different levels, this model is likely to overweigh the causal contribution of the interventions (Rogers 2008, Shepperd et al 2009).

CHAPTER IV – METHODS

1. Data collection: mixed methods

We have combined quantitative and qualitative methods for data collection and analysis. We refer this as mixed methods.

1.1. Introduction to the concept of mixed methods

Recent development in research methodology advocates for a more integrated approach to the investigation of social phenomena. Although since many years, researchers have reported studies in which both quantitative and qualitative methods were employed, it is only in the recent years that the interest into formal mixed methods has increased. The concept of mixed method research has been defined in numerous ways and we opted for a more comprehensive definition proposed by Johnson et al (2007). The authors summarized and integrated different definitions and ideas: “Mixed methods research is an intellectual and practical synthesis based on qualitative and quantitative research; it is the third methodological or research paradigm (along with qualitative and quantitative research). It recognizes the importance of traditional quantitative and qualitative research but also offers a powerful third choice that often will provide the most informative, complete, balanced, and useful research results... Furthermore, the mixed methods research paradigm offers an important approach for generating important research questions and providing warranted answers to those questions. This type of research should be used when the nexus of contingencies in a situation, in relation to one’s research question(s), suggests that mixed methods research is likely to provide superior research findings and outcomes” (Johnson et al 2007, page 129).

1.2. Rationale for mixed methods in case study design

In a case study, evidence comes from multiple sources and uses different methods in order to increase the validity of the research (Keen and Packwood 2000, Yin 2003).

In fact, case study is sometimes strongly associated with qualitative research and even it can be used as a synonym of it (Lewis 2003). However, even if a qualitative approach is more often used in case study, other approaches are possible (Hartley 2004). For Hartley (2004), a case study is a heterogeneous activity which covers a range of methods and techniques of research, with one to many cases, which differs according to the level and the extent of an organization, and which uses both types of data. Moreover, other authors assert that there is no automatic correlation between the design of the study and the methods of collection of data (Green and Thorogood 2007). So, it is important not to mix up the methods of data collection and the study design.

The interest and the use of mixed methods in health research has increased noticeably over the past years (Johnstone 2004, Mays et al 2005, Moffatt et al 2006; Sale and Brazil 2004). It is commonly recognized that health sector are embedded within different contexts that necessitate different methods for research on these complex issues (Moffatt et al 2006). Our multiple-case study consisted of detailed investigations of a health system at different levels with different actors, different strategies within particular context. For that reason, mixed methods allow to address those complex issues by collecting a richer and stronger assortment of evidences than cannot be accomplished by any single method alone.

1.3. Strategies associated with mixed methods

We opted for **concurrent procedure design** in which quantitative and qualitative data converge in order to provide a comprehensive analysis of the research objective

(Creswell 2003). In that design, we collected both forms of data at the same time, or “concurrently”¹², during the study and then, we integrated the information in the overall results. So, in our case, the quantitative and qualitative data collections were concurrent, happening in one phase of the research study.

The triangulation, a powerful technique, integrates the results from the data collected and tests the consistency, integrity, or inferences of findings obtained through different instrument; thus, it increases chances to control, or at least to assess, some of the threats or multiple causes influencing the results (Creswell 2003, Keen and Packwood 2000, Pope et al 2007, Ritchie 2003, Yin 2003).

According to Creswell (2003), the place in the process for integration, or triangulation, depends if the data collection was done sequentially or concurrently. For our design, using concurrent procedure, we opted, for a **“concurrent triangulation strategy”** to attempt to confirm, cross-validate, or corroborate findings within a single study. With this strategy, we integrated the results of the two methods during the interpretation phase which could reveal the convergence of the findings to reach our objective and validate/invalidate our analytical framework. This method is recognized to be advantageous because it can result in well-validated and substantiated findings and it can be done in a shorter data collection time period as compared to sequential approaches (Creswell 2003).

Another factor has also to be considered to complete our strategy; that is the degree and sense of priority given to the quantitative or the qualitative approach. Again the comprehensive description made by Creswell (2003) assisted us to determine our choice for a **“concurrent nested strategy”**. Of course, in this approach, the data collection is also done in one phase but it has a predominant method of data collection to guide the research, the second one being “embedded” or “nested” within the first one. In fact, the advantages of “nested” procedure include the ones already described (ability to collect data in the same time with resource economy, mixed methods) but most important for our research, the nested approach (in this case qualitative method) could address different questions than the dominant method (quantitative) and could seek information from different levels. Indeed, we used this approach to gain broader perspectives by describing some aspects that cannot be quantified (like perceptions, understandings, reasons of changes, etc.) and from different groups of actors and from different levels of the health organisation. This approach is also called “multilevel design” (Tashakkori and Teddlie 1998).

2. Data collection and research levels

For our study research development, we have detailed our primary analytical framework presented in Figure 8 as it guided the choice of data to be collected.

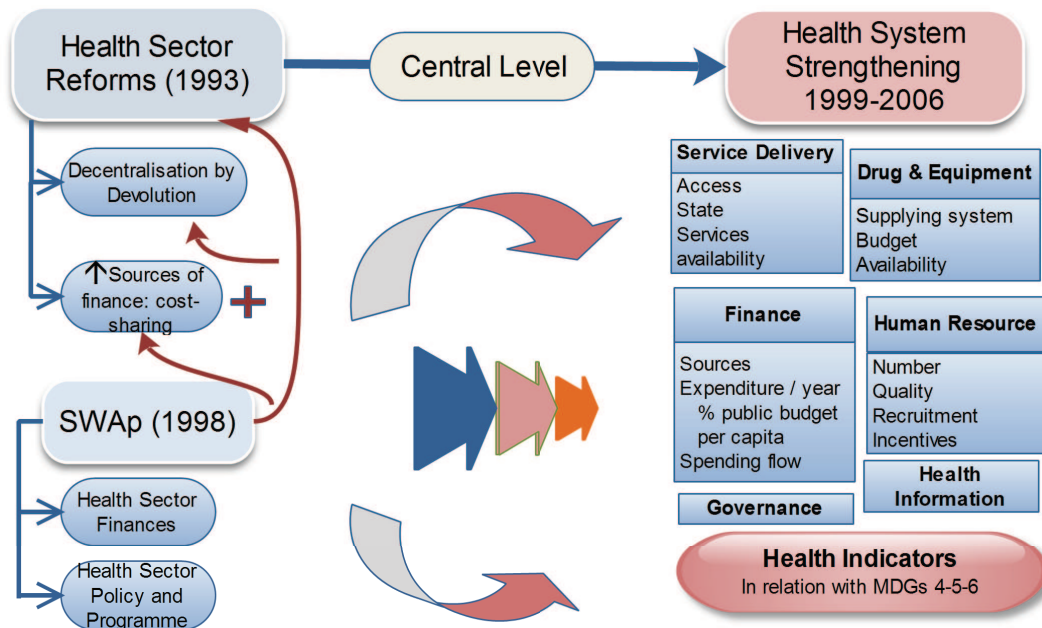
Data

The data evaluated from the national level with Tanzanian health system are presented in Figure 10; we evaluated: (i) the main health sector reforms (HSR) with the process of decentralisation and the development of new sources of finances (cost-sharing mechanisms), (ii) the SWAp implementation to strengthen the HSR engaged with its sectoral finance mechanism and its health sector strategic plans, (iii) the 6 building blocks applied to the Tanzanian health system in relation with the HSR supported by a SWAp. The governance is related to the SWAp process development. Wishing to be complete, we looked also for the trend of the main health indicators in

¹² By opposition to another strategy, the “sequential procedure” described by Creswell (2003) in which the data are collected in phases (sequentially); either the qualitative or the quantitative data come first.

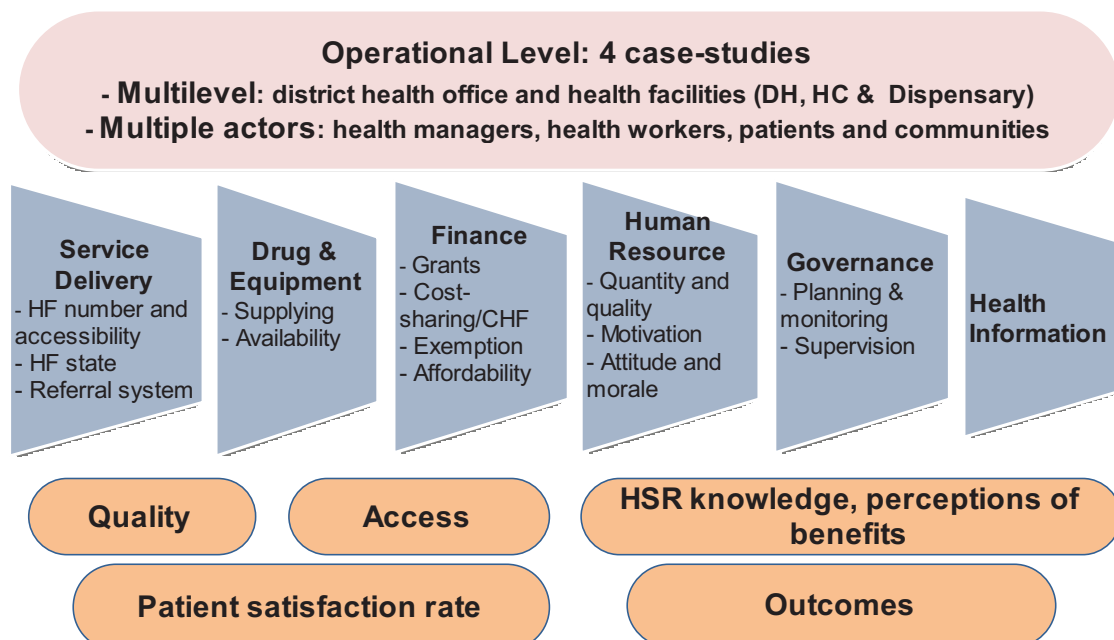
relation with the MDGs 4 (Reduce child mortality), 5 (Improve maternal health) and 6 (Combat HIV/AIDS, malaria and other diseases).

Figure 10: *Data collected at national level*



The data evaluated at the operational level (District) are the most important part of the research. They concerned the 4 case-studies at different levels with different actors, using mixed methods for collection and analysis. Figure 11 illustrates the main data collected at district level in relation with our analytical framework.

Figure 11: *Data collected at operational level*

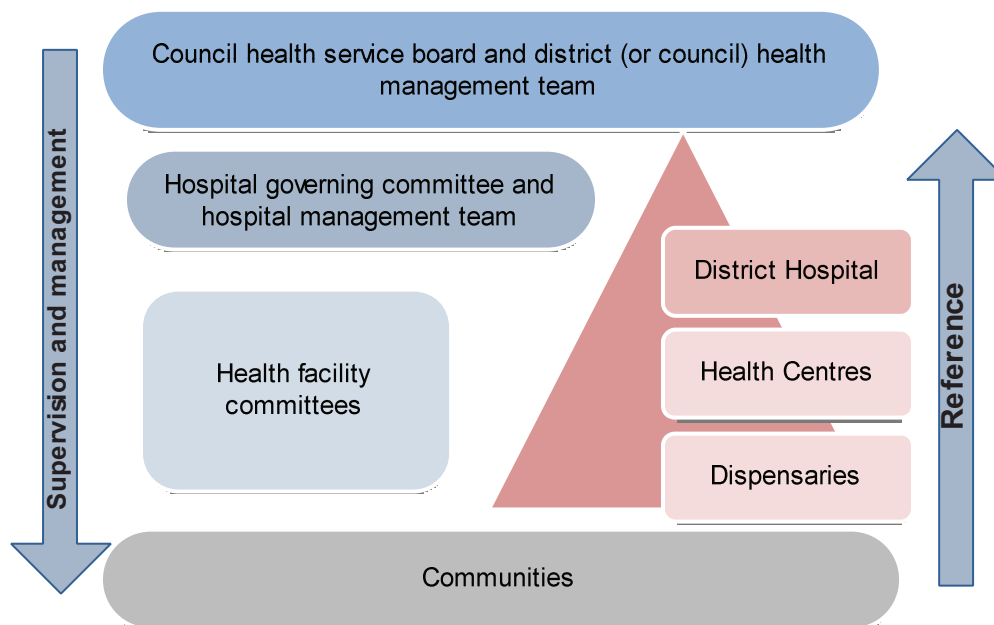


The different levels and actors in a health district

The operational context for the health delivery, the “district”, was evaluated through its different levels that include: the district (or council) health management team and the health facilities (HFs) with their pyramidal structure (district hospital, health centres and

dispensaries). The different actors investigated for the research come from those different levels and include health managers and in-charges of HFs (key informants), health workers, patients using the HFs, and the community. Figure 12 illustrates how a health district is organised in Tanzania with the different levels of interest.

Figure 12: *Organisation of a health district in Tanzania*



Source: Ministry of Health Tanzania 2006.

3. Procedures for data collection

We now relate the specific types of data we have collected and the different tools used for the collection.

3.1. Sources of evidence¹³

The sources of our data were numerous as recommended: “various data are highly complementary and a good case study uses as many sources as possible” (Yin 2003 p 101).

Documentation for national level

Documentation and literature review were the main tools to investigate our “single” case-study about the HSR and SWAp implementations in Tanzania with their influence on the six building blocks of the Tanzanian health system. We used relevant documents in relation with those topics and regular updates were done with latest publications. We have also corroborated the different information received across the documents from 1999 to 2009. In summary, we refer to the following sources:

- National and official documents and websites on: poverty reduction strategy, health policies, SWAp, health plans, reports in relation with health sector, finances, human resources for health, and health statistics.
- Joint external evaluations of the health sector in Tanzania.
- International documents and reports on Aid modalities, Tanzania, SWAp, health statistics, financing mechanisms for health, decentralization, and health system strengthening.

¹³ All tools listed in this section are available on the GRAP-PA research group website: <http://www.grap-pa.be/>.

- Scientific publications on the above topics.

Documentation for operational level

The documentation was not the most important tool at that level. However, it was indispensable to address some topics, especially to understand health system and authorities at district level, local health outcomes, district health plans, and district finances. We used:

- National and official documents and websites on district health services, autonomy and responsibilities.
- Joint external reviews on district health and other district assessments studies.
- District and health facility annual health planning and reports.

Most of the information collected from those documents was reported in a check-list tool, described here below.

Direct observation

Our case-studies took place in a real life-context, and a check-list tool with a specific section for direct observations was prepared and used during the field visits in the office of health management team and in the different health facilities.

Check-list tool

So, finally check-list tool contained information collected by direct observations in the field and by consulting documents and reports available in the district and in the HFs. Some information was available only from national reports, grey literature, or by questioning appropriate person in the fields. The check-list and observation sheet was designed to collect information about geographic accessibility and availability of health services, infrastructures (number and state), planning, management and participation of different actors, human resources, drugs, supplies and equipments, health information system, health indicators, supervision, and finances.

Interviews with structured questionnaires

Interviews are the main source of case study information. The structured interview approached the main questions of interest of our study with face-to-face interview in Swahili, the official language in Tanzania, with the patients and the health workers met in the different HFs. The structured questionnaire produces quantitative data and is on the line of a formal survey that has required sampling procedure accordingly¹⁴. In fact, in our questionnaires, most questions had a fixed choice of responses in structured manner (closed-ended questions), but we added some open questions defining areas to be explored, giving in this way, chance to interviewees to explain the choice of some answers.

- For health workers

The questionnaire was made to interview the health workers at their field work. The questions targeted the health workers perception of their working condition, their motivation, the incentives, salary and other income received. The workers' perception of possible changes in health service delivery in relation with the different reforms of the health sector for the evaluating period (1999-2007) was also investigated.

- For patients

The questionnaire was used to interview the patients met during the visits of the different HFs. We used open and close-ended questions to explore the physical access to

¹⁴ Procedure is developed in the Part 2 of the manuscript.

HFs, the time to get treatment, the availability of drugs and supplies, the financial accessibility with exemption and the community health funds, the attitude of staff, the quality of care received, and the degree of satisfaction for the received services. We investigated also if positive changes were perceived by patient on health service delivery between 1999 and 2007.

In-depth interview with a guide for key informants

In-depth interviews (IDI) are less structured but can cover the questions of interest with much more details and can address different issues (Pope and Mays 2000). This kind of interview can be seen as unstructured but in fact interview needs some kind of structure to guarantee that the data collected are in concordance with the research question (Pope and Mays 2000). Therefore, we prepared a guide to gather information of interest. Emphasis was put on the different reforms started several years ago with possible changes and the reasons of success and/or failure. In that case, the role of the person interviewed was more an “informant” than a respondent because that person could provide more insights into a specific matter (Creswell 2003, Yin 2003).

Focus group discussions with community representatives and discussion guide

Data from Focus Group Discussions (FGD) were generated by interaction between group participants. “The group interview capitalises on communication between research participants in order to generate data; using group interaction provides distinctive types of data” (Pope and Mays 2000, page 20). The interviewers encouraged the group to talk together, to exchange experiences, to comment on each other point of view. The rationale for using this approach rests on the assumption that, people get caught up in the spirit of group discussion and may reveal more than they would in the more formal interview (Finch and Lewis 2003). We had opportunity with the group situation to stimulate participants in making explicit their views, perceptions, motives and reasons. Our facilitators encouraged open discussions and facilitated the expression of perceptions of the research matters. A discussion guide was designed to reflect the situation of health service delivery perceived, as well as the possible changes in health delivery among the community perceived by its representatives.

3.2. Units selection at operational level

In the logic of mixed methods, the quantitative data collection involved a classical sampling calculation in order to permit statistical inference to every case study. The detailed procedures of selection of the different units for both types of data are reported in Part 2 of the present manuscript that focuses on case-studies. We present here a brief summary.

The choice of sampling methods depended on the studied variables and on the type of information to be collected. In order to cover the entire district, we selected at least **one HF per administrative division**. The district hospital was purposively selected. Two health centres were randomly selected, as well as several dispensaries. In total, we visited 33 HFs, the 4 district hospitals, 9 health centres and 20 dispensaries. **For structured interviews of health workers**, the sample size was computed according to random sampling with PASS 2004 software to ensure that if 50% of health workers report positive changes in health service delivery, the study would be able to detect this rate at the 0.05 level, with a precision of 10%, knowing that any other prevalence would lead to a lower sample size. For a total number of health care providers known in the different districts, we expected to have a sample of at least 70 to 78 workers per district to reach the objectives. All the health workers present and available during the visits were interviewed. The proportion of interviewed staff per professional category was

close to the corresponding proportion in the district. **For structured interviews of patients**, we used similar procedure but for an unlimited number of patients, and a target sample size of at least 92 patients per district was necessary. Patients, at the hospital, have been randomly selected. For the other HFs, a convenient sampling of patients present during the visit was selected. **The selection of key informants for IDI** was purposive as we have selected the most important representatives from district health management team and from hospital management team. For other HFs, there is only one person in charge and we interviewed that particular person in each centre/dispensary. **For the villages selection**, one village was selected by simple random sampling method from the list of all villages included in the service area of each health facility already selected. **At least one group of village representative** was recruited for FGD and if possible with 2 subgroups (male and female participants) from the target population.

4. Data analysis

4.1. Quantitative data

The answers from the closed-ended questionnaires (patients and workers) were encoded in Epi-info software, version 3-5 of June 2008. We have done the descriptive analysis for all variables. Data are presented as proportions or medians with 25th and 75th percentiles. Differences between groups were made respectively by Mann-Whitney and Fisher exact test. We have compared medians and proportions. Each time a parametric test such as student t or Chi-square could not be used, non-parametric tests were used. For specific variables, odds ratios (OR) with 95% confidence intervals were computed using multivariate unconditional logistic regression to control for confounding factors.

4.2. Qualitative data

IDI and FGD were tape recorded than translated in English. We followed the different steps well summarized by Creswell (2003). Thematic content analysis was used on the data in an iterative manner.

- **Step1:** All tape recorded information were transcribed and typed through Microsoft-word, as the first step towards analysis of the data.
- **Step2:** The data were slowly read to obtain a general sense of the information and to reflect on its overall meaning and to get general impression. That stage led to gain a holistic grasp of thematic structures from the respondent's descriptions so we could later develop a data coding system to be used in software.
- **Step3:** The word format documents were later changed into Rich Text Format (RTF) for recognition to the MAXQDA software – version 2007 in which the data were entered and analyzed according to the variables of interest with a coding process. We took the text data into categories and we labelled them.
- **Step4:** In using the coding process, we created themes and sub-themes that appeared as major findings according to the variable of interest by type of tool used. Themes that were identified were highlighted differently to reflect each person's perceptions. Next, the analyst extracted phrases, sentences and groups of expressions that reflected or directly captured as fully as possible the variables of interest. This allowed organizing clusters of themes together that had the same meanings and others which were different but of great interest to the study. Therefore, individual textural descriptions for each participant in the in-depth interviews and for the groups were constructed which provided vivid accounts of peoples experience about health services including the quality.

- **Step5 and 6:** The findings of the analysis were presented using a narrative procedure with detailed discussion of the different themes of interest to finally after triangulation brought the lessons learned.

4.3. Data presentation

As usual in a concurrent study, the quantitative and the qualitative data collection are presented in separate and detailed section in the Part 2. However, after analysis, we combined the two forms of data to seek convergence among results when data study the same questions and the overall results are presented in this part.

5. Research team

The team for the field research was multidisciplinary with two experienced public health medical officers, one public health nurse and three social scientists specialized in the medical field. All of them had good knowledge of the district health system in Tanzania, especially in rural and remote area. All team members were fluent in national language (Swahili) that was used for all types of interview. FGD and IDI, that require considerable skill from interviewers, were conducted by qualified and experienced qualitative researchers that usually worked for the National Institute of Medical research in Tanzania.

6. Ethical considerations

People eligible for interviews have been informed about the objectives, the methods and the relevance of the study. The research ethical principles of voluntary participation, the right of withdrawal with, the principles of anonymity and confidentiality were explained to all respondents before seeking for their verbal consent. Ethical clearance was granted by the Tanzania National Institute for Medical Research and MoHSW; an official research permit (2006/353/NA2006/88) was obtained from the Tanzania Commission for Science and Technology in 2006.

CHAPTER V – CASE STUDY CONTEXT

1. Tanzania

1.1. Overview

Tanzania is located in East Africa, a region that encompasses two other countries: Kenya and Uganda. The nation, presented on Map 1 has eight neighbour countries. The United Republic of Tanzania is composed of Tanzania Mainland (former Tanganyika) and the state (island) of Zanzibar; each has a separate Ministry of Health and Social Welfare (MOHSW). In Tanzania mainland, the health services follow the administrative organisation; thus, the state is divided into 21 regions (Map 1) and regions are then divided in districts. There are 121 districts in the mainland and each district has also separate units called division, then ward and finally village.

Map 1: Regions of Tanzania



With 947,300 km² (31-fold Belgium size), Tanzania is the world's 31st-largest country. Tanzania is mountainous in the northeast, where Mount Kilimanjaro, Africa's highest peak, is situated. To the north and west are the Great Lakes of Lake Victoria (Africa's largest lake) and Lake Tanganyika (Africa's deepest lake). Central Tanzania comprises a large plateau, with plains and arable land.

The last national census, conducted in 2002, gave an estimation of around 34 million people; and the projection for 2008-2009 estimated a total population close to 40

million (for an annual growth rate of 2.9% according to World Development Indicators Database, September 2009). The national population density per km² is 42 but the population is unequally distributed with density ranges from 1 to 51. The demographic profiles reflected the population pyramid seen in most developing countries with 44% of the population under 15 years of age, 25% on reproductive age (15-49), and 16% under 5 years of age (Ministry of Health and Social Welfare, The United Republic of Tanzania 2008a, World Health Organization 2009). The life expectancy at birth is 51.4 years for men and 53.6 for women. The population distribution is predominantly rural with only 23% living in urban area. Around 58% of the population is estimated to live under the poverty line of 1 US\$ per day (World Health Organization 2009). The agriculture sector plays a major role in the economy and employs nearly 80 percent of the workforce. The percentage of children aged 7-13 years who are enrolled in primary school increased from 89% in 2003 to 96% in 2009; but school attendance was around 84% in 2007; the completion rate was around 63% and the percentage passing primary school leaving examination was 53% in 2008 (Research and Analysis Working Group, United Republic of Tanzania 2009). The percentage of children enrolled in secondary school was 28% in 2009 and from 2008 exam results less than one-third of students (31%) passed with acceptable results (Research and Analysis Working Group, United Republic of Tanzania 2009).

1.2. Economic growth and poverty¹⁵

Tanzania remains one of the poorest countries of the world. In the last UNDP report, Tanzania was ranked at the 151st position of Human Development Index-HDI¹⁶ on a total of 182 countries for which the index was calculated; and at the 93rd rank by 135 for "Human poverty Index-HPI-1."¹⁷ However, between 1990 and 2007 Tanzania HDI rose by 1.15% annually and better scores were seen in all regions. The rate of economic growth per annum has risen strongly over the last decade from 4.1% in 1998 to 7.4% in 2008, which is historically high for Tanzania and comparable to the fastest growing economies in Sub-Saharan Africa. While the macro-economic outlook is favourable compared with many other developing countries, new data indicate that the strong growth rates over the last decade have not led to significant declines in poverty rates. The poverty rates changed little between 2000/01 and 2007, and nominal household consumption remains extremely low. Almost 98% of households spend less than 58,000 Tanzanian shillings (TzSh) per month and per adult (less than 50 US\$) equivalent on food and basic necessities (2007 prices), and approximately 80% spend less than 38,600 TzSh per month or 1,380 TzSh per day (around 1 dollar). Household expenditure patterns and rates of asset ownership are consistent with the finding that income poverty levels have barely changed. Overall, the proportion of Tanzanian households below the basic needs poverty line fell from 35.7% to 33.6%. Poverty remains an overwhelmingly agricultural phenomenon, and particularly among households whose major source of income is from crop production. The majority of Tanzanians are still smallholder

¹⁵ Sources: (Research and Analysis Working Group, United Republic of Tanzania 2009, <http://hdrstats.undp.org/en/countries/>, <http://web.worldbank.org/>, WHO 2009).

¹⁶ HDI provides a composite measure of three dimensions of human development: living a long and healthy life (measured by life expectancy), being educated (measured by adult literacy and gross enrolment in education) and having a decent standard of living (measured by purchasing power parity, PPP, income). The HDI measures the average progress of a country in human development.

¹⁷ HPI-1 measures severe deprivation in health by the proportion of people who are not expected to survive to age 40. The HPI-1 focuses on the proportion of people below certain threshold levels in each of the dimensions of the human development index. By looking beyond income deprivation, the HPI-1 represents a multi-dimensional alternative to the 1 US\$ a day poverty measure.

farmers, but agriculture is the least remunerative sector in the economy. The household poverty rate in rural areas is 38%, compared with 24% in other urban areas and 16% in Dar Es Salaam. The large proportion of the population enrolled in agriculture and high rural poverty rates combine to explain why three-quarters of the poor are dependent on agriculture. There is an apparent contradiction between robust growth on Gross Domestic Product (GDP) and small changes in household consumption and inequality on the other. While recent growth has not translated into immediate reductions in poverty, the increased capital investments and the expansion in public spending, in areas such as roads, education and healthcare services, may strengthen longer-term benefits for households and provide the foundation for future reductions. The agriculture sector plays a major role in the economy and employs nearly 80 percent of the workforce. Unfortunately, the large degree of dependency on this sector renders the economy particularly vulnerable to adverse weather conditions and unfavourable prices in international primary commodity markets. The low level of industrial development makes the negative economic impacts associated with agricultural dependency all the more severe. Table 1 illustrates trend of few economic indicators in Tanzania.

Table 1: *Economic indicator trend in Tanzania*

Indicators	2000	2005	2007	2008
GDP (current US\$) (billions)	9.08	14.14	16.83	20.49
GDP/GDP annual growth	5.1%	7.4%	7.1%	7.5%
GDP/Capita (current US\$)	275.7	338.5	369.7	400
Rate (mean):TzSh for 1 US\$ the 30 th of June for considered year	780	1127	1262	1181

GDP: Gross Domestic Product

TzSh: Tanzanian Shilling

Sources: UN Data (<http://data.un.org/CountryProfile>), Bank of Tanzania (<http://www.bot-tz.org>), World Development Indicators database, September 2009.

1.3. Foreign aid context¹⁸

Tanzania is one of the largest recipient's countries of foreign aid in Sub-Sahara Africa. Approximately 35% of government spending is dependent on foreign aid (Fiscal Year 2008/2009). For Fiscal Year (FY) 2007/2008 total Overseas Development Assistance (ODA) to Tanzania provided by 40 Development Partners amounted to approximately 2 billion of US\$. This includes assistance in the form of grants, concessional loans and debt relief. Since formally established in 2004 preceding the informal body of the local Development Assistance Committee (DAC), the Development Partners Group (DPG) has been created. The DPG in Tanzania comprises of 16 bilateral and 5 multilateral agencies (UN counted as one) that promote principles of Aid Effectiveness in development assistance. This involves structured dialogue and engagement between Development Partners (DPs) and the government in high-level forums, through different sector and thematic groups and core reform with a view of achieving harmonisation, promoting coordinated policy dialogue and reducing transaction costs in the management and administration of aid to Tanzania. Aid management in Tanzania is guided by the Joint Assistance Strategy (JAST) jointly developed by the government and development partners in order to enhance aid effectiveness at country level in order to achieve sustainable development goals laid out in the National Strategy for Growth and Reduction of Poverty, the Millennium Development Goals (MDGs) and other national policies and strategies. There are three modalities used to provide assistance to Tanzania: General Budget Support (GBS), Basket Funds (BFs) and direct project funds.

¹⁸ Source: Development Partners Group Tanzania Website (<http://www.tzdpg.or.tz/>).

The GBS is the most preferred mode since it is consistent with the government's legal framework and processes. Table 2 gives an overview of the type of aid modality and the amount received by Tanzania between 2003 and 2008. Despite GBS being the preferred mode, a large proportion of aid assistance to Tanzania continues to be delivered through project modality which in many instances remain off-budget and outside the government system. As a result more efforts are being taken to encourage more donors to shift away from the individual programmes and area based projects towards programme-based and to GBS, through the JAST framework.

Table 2: *Overseas Development Assistance by Aid Modality for last Fiscal Years*

Modality	2003/04	2004/5	2005/06	2006/07	2007/08
GBS (%)	33.5	56.7	29.8	42.6	51.3
BFs (%)	20.2	10.0	24.3	21.6	10.0
Project (%)	46.3	33.3	45.9	35.8	38.7
Total (million US\$)	833.34	808.62	1,318.49	1,176.58	1,362.46

GBS: General Budget Support

BFs: Basket Funds

Source: <http://www.tzdpq.or.tz/>

1.4. Health System¹⁹

The provision of health services is divided into 3 levels: national, regional and district.

- **At the National level**, the central Ministry of Health and Social Welfare (MOHSW) has the following roles:

- Formulating health-related policies and developing guidelines to facilitate the implementation of that policy
- Provisioning of different services

The MoHSW collaborates with donors and non-governmental organisations on the implementation of public health programmes such as the Expanded Programme on Immunisation (EPI), Reproductive and Child Health Services (RCHS), the National AIDS Control Programme (NACP), the National Malaria Control Programme (NMCP) and the National Tuberculosis and Leprosy Programme (NTLP). Programmes to eliminate specific communicable diseases are also in place.

- **At the Regional level**, the Regional Health Administration under the Regional Secretariat has the following roles:

- Interpreting policies into actions
- Providing technical support to the districts including supervision and inspection of district health services

Regional Health Management Team (RHMT) interprets these policies and monitors their implementation in the districts they supervise. It is headed by a Regional Medical Officer (RMO).

- **At the District level**, the District Health Administration under the respective Council Authorities has the following roles:

- Providing Health Service at level one which include the District Hospital (DH), other Hospitals, Health Centres (HC) and Dispensaries (Dp)
- Preparing Comprehensive District Health Plans and regular reporting on implementation
- Providing feedback to other levels including the community
- Coordinating, supporting, supervising, and monitoring all health facilities and activities in the district
- Mobilising resources and management

¹⁹ Sources: <http://www.moh.go.tz/organisation%20structure.php>, Mtei et al 2007.

- Ensuring communities are responsible for taking care of their own health and also the safety of medicine and equipment in their health facilities

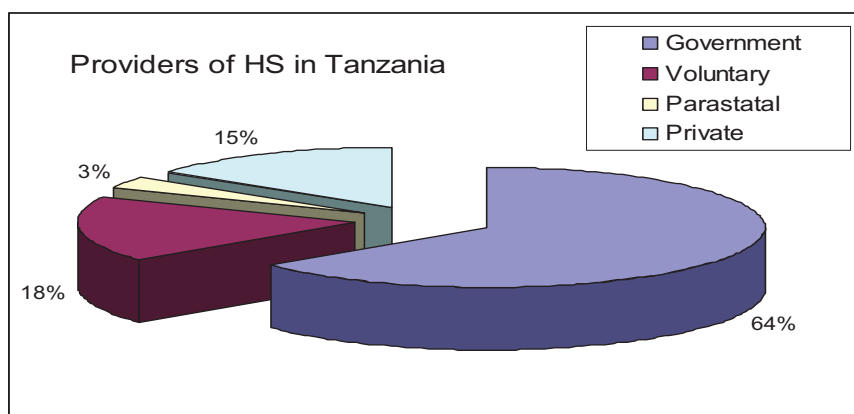
Council Health Management Teams (CHMTs) are responsible for health services at dispensaries, health centres, and district hospitals. CHMTs follow planning and management guidelines issued by the MOHSW. Each CHMT is headed by a District Medical Officer (DMO), who is in-charge of all district health services and is answerable to the local government authority (LGA).

1.5. Health facilities

• Ownership

Government remains the main provider of health services in Tanzania and owns about 64 % of all total health facilities as illustrated in Figure 13.

Figure 13: *Ownership Distribution of Health Services (HS)*



Source: Data from Annual Health Statistical Abstract, 2006 (MOHSW 2006).

The prohibition of private-for-profit practice in the health sector established in 1977 was banned in 1991 as part of a broader set of government policy reforms to encourage private activity. Private individuals were allowed to establish, own and manage health care facilities and services. Following this initiative, private health sector activity increased dramatically. Munishi estimates that between 1991 and 1996, there was a 36-fold increase in the number of private-for-profit dispensaries and that the number of for-profit hospitals increased five-fold (Munishi 2001). The private sector is now seen as a crucial partner in providing health services, complementing government provision and widening consumer choice. Non-government organisations and private-for-profit providers now own about 18 and 15 % of total health facilities, respectively (Figure 13).

• The health facilities and the referral system

The system assumes a pyramid pattern starting from (i) the village and ward level, where there are community **dispensaries** that cater for 6 to 10 thousand people, (ii) divisional level, where there are rural **health centres** that are expected to cater for 50 thousand people, (iii) district level, which is a very important level in the provision of health services in the country, where there are **district or district designated hospitals**,²⁰ (iv) regional level, where there are **regional hospitals** that offer similar services like those agreed at district level, however regional hospitals have specialists in various fields and offer additional services which are not provided at district hospitals, (v) zonal level, where there are **referral hospitals**, and (vi) national level, where there

²⁰ A designated district hospital (DDH) is owned by private religious not-for-profit organisations and is contracted by MoHSW with subventions to act as a district hospital.

are **national and specialised hospitals**. It has been the intention of the government to distribute health services equitably by developing a hierarchical health system, with at least one public dispensary for each village, a health centre for each division and a hospital for each district (Munishi 2003).

Using numbers from the last statistics report, there were 223 hospitals, 565 health centres, and 4,940 dispensaries. The total bed capacity was 43,099. In other words, it gives one health facility for 6,460 inhabitants and one available bed for 930 persons (Ministry of Health and Social Welfare, The United Republic of Tanzania 2008a).

The ways use by patient for seeking of cares do not necessarily follows that pyramidal HFs pathway. Several reasons contribute to bypass first levels of care (COWI et al 2007): (i) sometimes there is no clear distinction between levels of care, for instance some regional hospitals function as district hospital, sometimes private-not-for-profit structures offer higher level health services compared to close district hospital, and numerous health centres function exactly like dispensary, (ii) in usual, people go to the nearest HF without considering the level in order to save time and transport cost; (iii) sometimes patients go far away where they think to get better health cares and services, and (iv) people are almost free to bypass, as in general there is no constraint or fee (except for few national referral hospitals).

2. The four districts

The four selected districts are pointed with an arrow on Map 2.

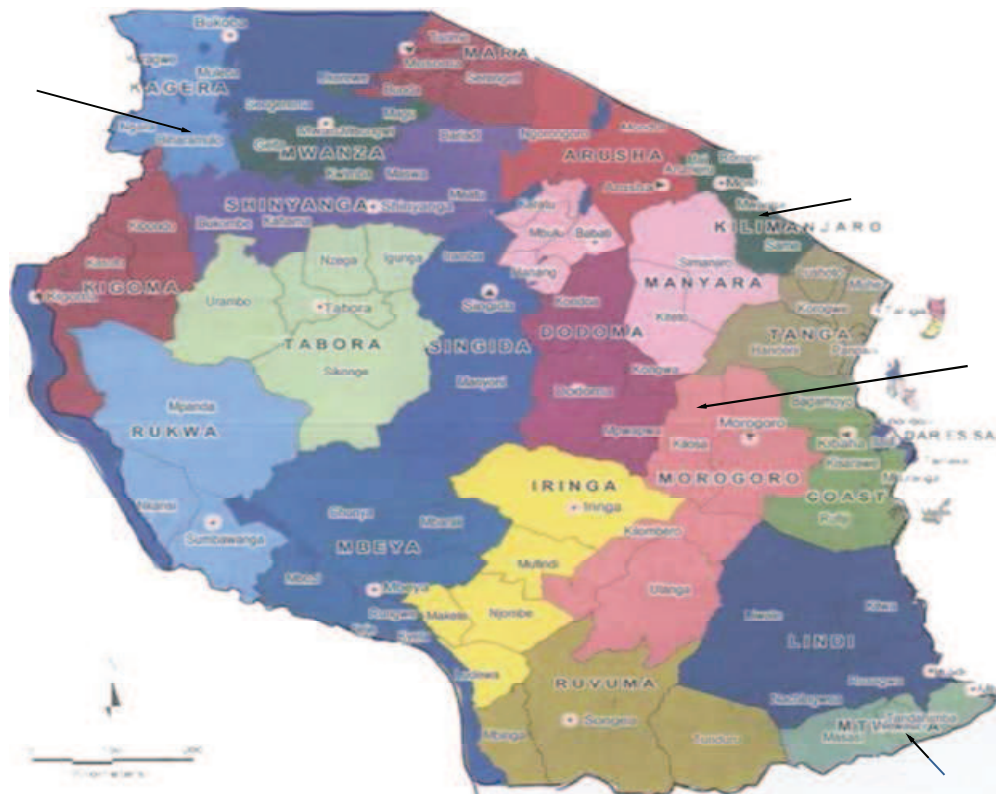
2.1. Main socio-economic characteristics

Biharamulo and Kilosa are vast districts with an important and scattered population. Some zones are inaccessible during rainy season. The district of Mwanga, with small area and limited population, raises also problems of accessibility due to its mountain relief. In those four rural districts, the population depends mainly on the agriculture for its subsistence, like most of the Tanzania population. The second employment sector (with 6%) is business-related activities (7 % in Biharamulo, 9 % in Kilosa, 3 % in Newala and 18 % in Mwanga). In fact for Mwanga, the proportion of people who depend on agriculture varies according sources from 60% (National Bureau of Statistics 2004) to 95% (District reports), probably because the coffee has led the local economy of this district and it could be difficult to differentiate agriculture and business activities in relation with coffee crops, livestock production and fishing (food and sale). The main characteristics are summarized in Table 4. We have added the national indicator to facilitate comparison. If we compare the level of poverty by using the percentage of people living below the line of 1 US\$ per day, the four districts are quite similar: 29 % for Biharamulo, 32% for Kilosa and Mwanga and 39% for Newala (<http://www.districthealthservice.com/developments>); however if we look to the Poverty incidence²¹, important differences are revealed between districts as indicated in Table 3. Biharamulo and Newala are in the poorest group in Tanzania with more than 50 % of population below the basic needs poverty line. Looking to other characteristics, several gender differences exist and include, for women, lower age at marriage, lower literacy rate (the proportion of the population people aged 15-24 that can read and write) and higher percentage of widows. The average of persons per household is close to

²¹ "Poverty Incidence" is defined as the percentage of people below the basic needs poverty line basket. For Tanzania the basic needs poverty line in 2000/01 was set to be 262 TzSh per adult equivalent per day (or 0.33 US\$) (Ministry of Planning, Economy and Empowerment, United Republic of Tanzania 2005). Exchange rate source: bank of Tanzania web site: <http://www.bot-tz.org/Archive/FinancialMarkets/>.

national level and varies from 4 to 6. The indicators that can be qualified as life comfort remain very low except for Mwanga.

Map 2: *Four selected districts in Tanzania*



The Service Available Mapping (SAM) 2006 reported 3 active donors in the districts of Biharamulo (these included bilateral and multilateral donors, NGOs, and individual donors) and 4 in the other districts; the average per district for Tanzania was 2.7 (Ministry of Health and Social Welfare Tanzania Mainland and Ministry of Health and Social Welfare, Zanzibar and World Health Organization 2007). Globally, and looking in Table 3, Mwanga appears to be quite different than the other 'cases'.

2.2. Some demographic and sanitary characteristics

We have listed district data that were available and they are dated 2002, year of the last national census. It is much more difficult to obtain recent updated data about district unit. However, the data given in Table 4 confirm the differences between Mwanga and the other districts. In spite of a lower area and population, Mwanga district has a higher number of HFs. Furthermore, the children mortality rate is among the lowest in Tanzania. The annual income per capita is from 80 to 150 US\$ and if Mwanga has the lowest poverty incidence among our 4 districts, it is the poorest of the Kilimanjaro Region. The literacy rate was around 85% (National Bureau of Statistics 2004).

Table 3: *Main socio-economics characteristics*

	Biharamulo	Kilosa	Newala	Mwanga	Tanzania
Zone	Lake	Eastern	Southern	Northern	8 zones
Region	Kagera	Morogoro	Mtwara	Kilimanjaro	21 regions
Population in 2002 (n)	409,389	488,191	183,344	115,145	34,443,603
in 2006	495,529	542,442	193,360	121,920	37,000,000
Area (km²)	9,199	14,245	2,220	2,641	947,300
Population Density (inhabitant/km²)	54	38	87	46	42
Villages n	117	168	155	61	11,764
Poverty Incidence (%)	47.7	31.2	43.4	26.6	35.7
Age at marriage (Yrs)	21	24	22	25	23
Male	23	26	25	27	26
Female	19	21	20	23	21
Widowhood (%)	3.1	4.2	4.1	5.0	4.2
Male	1.1	1.5	0.9	1.4	1.3
Female	5.2	6.9	6.7	8.2	7.6
Orphans (%)	0.80	0.89	0.79	1.03	1.1
Literacy rate (%) (M/F)	51 (58/44)	59 (64/55)	61 (67/56)	85 (86/83)	63 (68/59)
Employment in agriculture (%)	80.0	79.0	94.4	58.5	71.9
Persons per household (n)	5.8	5.0	3.6	4.5	4.7
Cement/baked bricks for wall (%)	4.8	21.3	2.6	36.4	29.4
Iron sheets/tiles for roofing (%)	35.0	37.2	29.1	85.3	47.4
Electricity (%)	0.1	4.9	2.4	23.2	10.1
Firewood/ charcoal for cooking (%)	99.4	97.4	99.3	94.7	94.0
Piped, protected water well/springs (%)	45.3	61.5	60.0	74.1	53.9
Traditional pit latrine (%)	87.4	89.9	97.2	93.1	85.7
Percent without toilet facility	10.0	7.3	2.0	2.6	9.2

Sources: National Bureau of Statistics 2004, Ministry of Planning, Economy and Empowerment, United Republic of Tanzania 2005, Comprehensive Council Health Plans and Reports available in the district for 2006.

Table 4: *Main demographic and sanitary indicators*

	Biharamulo	Kilosa	Newala	Mwanga	Tanzania
Sex Ratio (M / F) (%)	99	99	86	92	96
Intercensal (88-02) growth rate (%)	4.8	2.5	0.9	1.2	2.9
Age group 0-14 (%)	51	44	35	44	44
Age group 15-64 (%)	46	52	58	50	52
Age group ≥ 65 (%)	3	4	7	6	4
Population with disability (%)	2.4	2.3	2.8	1.9	2
Number of HFs (Public)	35 (30)	74 (54)	27 (1)	47 (40)	5,524 (3,565)
Density of HF per 10,000 population	0.78	1.38	1.37	3.69	1.5
Population per HF (2002)	1/14,621	1/10,387	1/8,731	1/2,678	1/7,177
Infant Mortality Rate/1000 (2002)	94	101	117	47	95 ²²
Under Five Mortality Rate (2002)	153	166	197	68	162 ²²

Sources: National Bureau of Statistics 2004 and 2006 (National census 2002), Ministry of Health and Social Welfare Tanzania Mainland and Ministry of Health and Social Welfare, Zanzibar & World Health Organization 2007, Ministry of Planning, Economy and Empowerment, United Republic of Tanzania 2005.

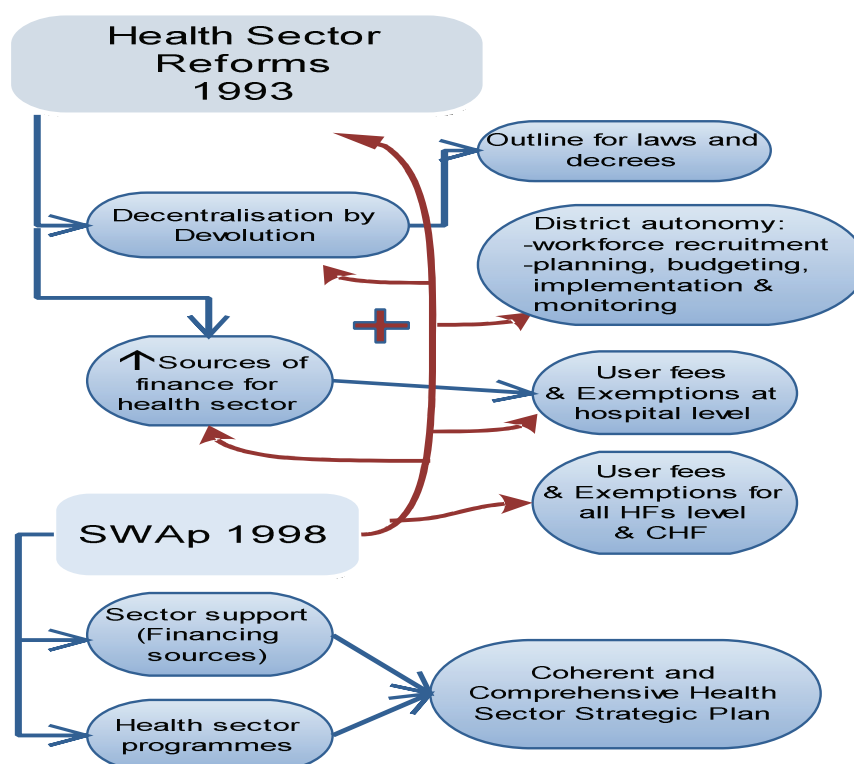
²² In the last World Health Statistics (WHO 2010), for Tanzania, the Infant Mortality Rate was 87/1000 live births in 2000 and 67 in 2008; the Under-Five Mortality Rate was 139/1000 live births in 2000 and 103 in 2008.

CHAPTER VI – MAIN RESULTS & LESSONS FROM TANZANIA CASE STUDY

1. Health Sector Reforms supported by a SWAp

Figure 14 summarizes how the adoption of a health SWAp in Tanzania played a major role to the overall success of the health sector reforms undertaken almost two decades ago; in particular for the decentralisation process and the application of new policy on health financing sources.

Figure 14: *Positive effects of a SWAp on HSR in Tanzania*



By the early 1990s, face to extensive problems and deterioration in the health sector, Central Government of Tanzania started the necessary health sector reform (HSR) process to better utilise scant health resources, improve quality of health services, increase user access, and cut rising costs. The HSR programme has focused on decentralisation by devolution of health services, financial reforms, including cost sharing, pre-payment and health insurance. The elaboration of HSR proposals gained support of major international and bilateral donors. A series of joint missions with the government attempted to cover the sector as a whole for coherent and better coordinating health sector programme. Finally in 1998, a group of 13 partners and the Ministry of Health (MOH) agreed to adopt a sector-wide approach (SWAp).

1.1. Decentralisation

Tanzania developed a strategy of decentralisation by devolution (DbyD) for strengthening local government authority (District Councils) especially in the health sector. It was accompanied by strong policy statement supported by the highest levels of government with the appropriate legislation and regulation to support the reforms. It has been a long process with early legislation (1990s) but with progressive and sequential implementation (2000-2004).

DbyD has established then strengthened district institutions responsible for planning, budgeting, implementation, and monitoring of health system.

DbyD strengthened district health services²³ through human resource for health management. In a first phase, districts had more autonomy to identify and fill staff vacancies; but then a second phase of reform operated a coming back leading to partial decentralisation only (districts could still identify needs but central level took back the recruitment role). Despite some results, many challenges remained including: limited autonomy of local government authority (LGA), long bureaucratic process, shortage of qualified staff for HRH management, and difficulty to attract and retain qualified workers in remote rural areas.

DbyD strengthened district health services through planning and budgeting autonomy, with the development and generalisation of a Comprehensive Council Health Plan (CCHP). The resources available for LGA have increased thanks to a new formula-based approach brought by the pool funding mechanism (Health Sector Basket Funds - HSBF) following adoption of a health SWAp. Indeed, the SWAp partners with the HSBF have pushed ahead the decentralisation of financing public health services in Tanzania. Despite such progress, only around 30 percent of health resources are actually provided to the local government level; fiscal autonomy in district councils is still limited and the central government remains the main source of funding to district health activities, especially in rural area.

1.2. New sources of finance for the health sector

In the 1990s, Central Government recognized that providing health services completely free of charge was not any more possible and resulted in poor quality and inequitable health service delivery. Consequently, a cost-sharing policy with different mechanisms was introduced progressively: user-fee, National Health Insurance Fund (NHIF) and Community Health Fund (CHF). Exemptions policy for priority groups (under-five children, pregnant women, patients with chronic diseases, with AIDS or Tuberculosis) and waivers (patients classified “unable to pay”) was a part of the cost-sharing legislation.

User fees were first introduced at hospital level (1993-1995) and funds collected are used to improve service delivery.

NHIF was operational in 2001 and covers all civil servants. Accredited health facilities (HFs) receive directly funds claimed for subscribers expenses.

CHF and user-fees at lower HFs were introduced later (2001-2008); funds collected are managed by the Council Health Board, the HFs and villages committees.

Different evaluations have demonstrated that: (i) cost-sharing is an essential mechanism for operating costs at hospital level and for supporting supplying system in some districts, (ii) the collection from different mechanisms has increased but remain very low and not significant in total health public expenditures (the contribution of user fees to overall total public health care spending represented less than 1 % in 2005), (iii) the exemptions are relatively well respected except for the waivers, (iv) the CHF has a very low enrolment rate and early drop outs in membership, (v) NHIF has a continuous increase in membership and contributes for around 5% of health sector budget but it concerns public servants and it is a compulsory mechanism, and (vi) there is significant amount of unused (idle) funds both at the NHIF and cost-sharing fund accounts.

²³ At the district level, management and administration of health services has been devolved to Local Government Authority (LGA). Its major role is formulating, carrying out and monitoring health intervention packages and quality-assurance programmes.

In fact, cost-sharing revenues objectives were review because it remained very small compared to the needs. For that reason, it should not necessarily be considered in terms of contributing to the overall sector, but more in terms of improving the availability of flexible funds at the HF level.

Concerning the very low enrolment of population to the CHF mechanism, the main reasons include the small user fees set in public HFs, poor ability to pay membership contributions, lack of trust in CHF managers mattered, wealthy community members, lack of information, introduction of NHIF which took out public servants, non-coverage of referral care, perceived poor quality of health care services at public facilities (drug stock-outs and inadequate service provision), poor staff attitudes, and broad exemption policy which leads to a limited number of people contributing to the CHF.

Exemptions²⁴

The system for exemptions and waivers was originally introduced to ensure that particular groups of the population had access to appropriate health care. The system of exemptions was introduced prior to the introduction of social insurance schemes. The costs of granting exemptions have to be recouped from other sources, as the government does not compensate for them. In fact, most public health facilities are not reimbursed for exemptions and waivers, but MOHSW points out that they are compensated somewhat through their drug allocations with Medical Store Department. That advantage was not available to faith-based and private health facilities. Those ones find very unfair to provide free services for pregnant women, infants, under fives and the recognised poor in order to comply with the public health policies without any compensations.

1.3. Sector Wide Approach in the health sector

The MOH and the Development partners (DPs) agreed to pursue a SWAp to HSR in 1998 to increase coordination and to support one comprehensive and coherent health sector programme.

The dynamic development of SWAp process in Tanzania is materialised by the presence of all core elements: comprehensive and coherent sector policy and programme, sector budget with “Medium Term Expenditure Framework” (MTEF) including all available resources for health, sector coordination framework with government leadership, sector performance and monitoring system (with the “Joint Annual Health Sector Review”- JAHSR), and Sector Policy Support Programme.

The Health Sector Strategic Plan (HSSP): the reform and SWAp adoption were converted initially into a three year Plan of Work (July 1999 – June 2002). Then it has been translated in two five-year Health Sector Strategic Plan (HSSP II for 2003 – 2008 and HSSP III for 2009 – 2015). The different strategic plans gained in comprehensiveness and coherence with priorities identified from in-depth situation analysis and were linked to national policies that include health sector, the Millennium Development Goals (MDGs), and the Poverty Reduction Strategic Plan (PRSP). Health SWAp and HSSP are intended to improve accessibility and quality of health services, and ultimately the health status of the Tanzanian population.

The MTEF captures different financing sources and has significantly improved budget management, accountability, and efficiency in the use of financial resources of the health sector.

A sector coordination framework under MOH’s leadership: since the start of the SWAp, the number of health partners has increased with strong coordination mechanism and high capacity of commitment and mutual trust. The Development

²⁴ Sources: Euro Health Group 2010, COWI et al 2007.

Partner Group (DPG) for Health that includes bi-lateral and multi-lateral agencies supporting the health sector in Tanzania counted 17 members in 2010. The leadership and the ownership of the government have also significantly increased. **The SWAp Committee** is the concretisation of health sector coordination framework and is formed by all partners committed to the SWAp in health: the Government (MOH and Ministry of Finance), the DPs and Civil Society Organisations. The committee assures coordination and monitoring of implementation of the HSSP, the Medium Term Expenditure Framework (MTEF) and the Comprehensive Council Health Plans (CCHPs).

Sector performance monitoring system: Joint Annual Health Sector Review (JAHSR): every year a joint review is undertaken to look at the health sector progress, constraints and future priorities. This process is led by the MOH with close collaboration of other parts of the government, DPs, other health sector stakeholders, private sector and civil society organisations.

Health Sector Policy Support contributes to the health sector programme funding and is financed by local and external sources. External funding is provided either by a joint pooled funding mechanism (the Health Sector Basket Funds - HSBF), or under a variety of project/programme modalities (mixed financing) and more recently under General Budget Support (GBS). There has been solid progress in the allocation of funds to the health sector since the start of the SWAp, with massive increase in external contributions, but also from local contributions.

The HSBF has started in 2000 with a pool of un-earmarked resources to support the HSR's implementation through the HSSP defined jointly by all stakeholders active in health within the SWAp. To date, there are 11 DPs (for 8 in the beginning) contributing to the HSBF. Thus, the HSBF became the main modality for external support to the health sector with provision of health services at all government levels across the country. In addition, the HSBF provides support to local health services and around its two thirds is disbursed directly to the local authorities. The priority setting and the allocation of HSBF is an integral part of the government planning and budgeting cycle. As a result, HSBF has facilitated the harmonization of administrative procedures and provided leadership to the government; it has strengthened the LGA, and it assures an increasing predictability of funding at national level and at local council level for plans and programmes. The other external financing modalities, within but sometimes outside the umbrella of the SWAp include: GBS, bilateral projects and programmes, and Global Health Initiatives (GHIs). The percentage of external support to the health sector provided "on-budget" and under the government process has increased significantly during evaluation period but the project approach did not decline and the recorded volume of non-basket disbursements from DPs increased almost two-fold between 2002 and 2005. GHI and large bilateral programmes have injected huge amount of resources into the fight against diseases but largely outside of sector system.

Overall, *"the Sector Wide Approach has largely been a success. It has strengthened national ownership and secured higher levels of both domestic and external financial resources for health. This in turn has delivered real improvements"*²⁵.

Table 5 summarizes the different phases and the implementation of the HSR, the SWAp, and the main national policies from 1993 to 2009.

²⁵ Development Partner statement for Launch of External Evaluation of the Health Sector, the 19th of March 2008, Dar Es Salaam, Tanzania.

Table 5: *Time-series chart for HSR, SWAp and national policies*

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Decentralisation																	
Laws, agreements																	
Local Government Reform Programme																	
Implementation																	
District Autonomy: CCHP																	
Phase I 37 district																	
Phase II 45 districts																	
Phase III remaining																	
District Autonomy: HRH																	
Recruitment back to MOH																	
New sources of finances																	
User-fees + exemption																	
Hospital higher level																	
District Hospital																	
HC & Disp 33% districts																	
HC & Disp others																	
NHIF civil servants																	
CHF + HF Committees																	
One district pilot																	
9 other pre-test districts																	
Implementation 50% of districts																	
Implementation in remaining districts																	
SWAp																	
Agreement and MoU																	
HSBF introduce to district																	
Phase I 33 districts																	
Phase II 49 districts																	
Phase III remaining																	
First Programme of Work																	
HSSP I																	
HSSP II																	
Joint Assistance Strategy																	
Other national policies																	
Poverty Reduction Strategy = priority																	
PRSP																	
NSGRP																	
National Health Policy																	
GFTAM																	
HRH = Priority																	
HRH Strategic Plan																	
PHSDP																	

2. Health System Strengthening in Tanzania

The adoption of a SWAp in health has increased coordination between donors and between donors and government. Different health actors support one comprehensive and coherent health sector plan and most available resources for health are utilized within the framework of the agreed programme. The next investigation reports on how this new approach is related to the health services delivery and health of the population through the evaluation of the six health system building blocks. Thus, all of them are needed to improve outcomes and they serve as a convenient tool for investigating the positive changes in the health system at national level.

2.1. Health Services

The availability of HFs with essential basic health services and time with which these services are offered, the presence of qualified staff, and the accessibility of HFs were part of our evaluation. Different reviews indicate that thanks to HSBF and more autonomy for planning and budgeting at local level, significant progress in increasing and rehabilitating the HFs was made; for instance, the proportion of HFs in a good state of repair augmented between 1999 and 2008 and there was an increase of HFs between 2005 and 2006 that was almost as much as important that between 2001 and 2005 with a rise of more than 300 HFs in one year. But, globally the density of HFs per 10,000 did not improve significantly as the population growth is also important. On the other hand, it is “believed” that majority of population is living within 5 km from a HF (for 72% in 1972) but with geographical differences. We could not find any evidence for real improvement in important issues hampering service delivery that include presence of qualified staff, water and electricity supply, communication equipment in place, enough basic working and diagnosis equipment, and staff housing availability. For the other aspects, we found that curative cares for sick patients are almost universally available in HFs; high proportion offer antenatal care, immunisation and growth monitoring services, and most hospitals provide 24 hours emergency services.

In the last strategic plan, it is stipulated that for the next coming years, every village must be covered by a dispensary and every division must have its health centre. However, in the light of available staff, equipment and communication in existing HFs, in the light of cost and finally considering the relative good coverage of the country by the existing HFs, the rationale of that policy is clearly questioned in our study.

2.2. Human Resources for Health

From 1994 to 2006 the number of health workers in Tanzania has almost been divided by 2; the higher proportion of reduction concerned unskilled and low qualified staff. Furthermore, the density of qualified staff/population is significantly below other comparable low income countries and geographical imbalances are significant. Another important problem concerns the general health workforce performance.

Fortunately, the Human Resource for Health (HRH) crisis has been recognized by high level authorities and is becoming an absolute priority since 2005. Comprehensive strategies were elaborated partially facilitated by increased health budget, HSBF, decentralization of employment and planning. Some quick wins were obtained that include increased output from training institutions, accelerated recruitment of workers since 2005, and significant increase of salary (almost three-fold in 4 years) for public health workers. Despite increased expenditure on human resources, budget is still too low to meet the needs identified in the last Human Resource for Health Strategic Plan.

2.3. Health Information system

In Tanzania, the Health Information System (HIS) is divided in 2 pillars: population-based information and the health-service-based information through the Health Management Information System (HMIS). In the HMIS, data flows from facilities to national level and should cover all HFs independently of ownership. The HMIS should have been strengthened in the sense that the decentralisation of planning and budgeting in health requires an intensive use of data collected locally in order to prepare comprehensive and efficient health sector planning oriented to local and context priorities identified. Unfortunately different evaluations noted several weaknesses: (i) poor data quality and accuracy, (ii) information not used enough to improve local services, and (iii) little feedback on the data reported between various levels. In addition, parallel programmes (e.g. HIV/AIDS and tuberculosis) and new policies (e.g. NHIS) have fragmented the system with staff overloading. However, a new initiative operating under WHO has been developed in order to improve the HIS in Tanzania.

2.4. Drug and equipment

In Tanzania, the Medical Store Department (MSD) is an autonomous section of the MOHSW that operates on a commercial basis and being financially independent. MSD has the monopole for provision of drugs, supplies and equipment to all public HFs and approved private institutions in the country. The MOHSW transfers the budget for essential drugs and supplies directly to MSD and all public HFs have an allocation with MSD specifying the budget they can use for drugs and supplies.

A better availability of drugs, supplies and equipment have been reported at all levels. The improvement was attributed to different factors: (i) new ordering systems (indent then integrated) progressively put in place, (ii) increased on spending for essential drugs during the evaluation period (e.g. almost 150% of augmentation between 2002 and 2005), implementation of new policy on health finance sources (cost-sharing), and decentralization. A larger autonomy authorised the use of funds collected through different cost sharing mechanisms to improve procurement of drugs and supply outside of the MSD. Nevertheless and despite some improvement, the problems and disruptions in drug and supply continue to hamper efforts to improve the quality of service in Tanzania.

2.5. Financing the health sector

The health sector budget tried then to reflect the sectors priorities and strategies elaborated taking in account all available resources for the health sector (government funds including external funds originating from general budget support, external funds, and other funds or “off-budget funds”) and to allocate more resources to LGA. Globally in Tanzania, allocations and expenditures in health have increased significantly with both internal and external sources. Despite the augmentation, the share of health in government budget stagnated around 11% and so, remains below the 15% recommended in Abuja Declaration. The spending in health per capita is also far from the international target of 40 US\$ per capita as it remains below 10²⁶. The share to LGA is consequent but only about 30 percent of health resources is actually provided to the local government level. The different cost sharing mechanisms, that is another aspect of financial reform, were implemented but the contribution to the entire health sector financing is very low (around 1%). Though, at hospital level, revenue generation from

²⁶ For comparison, in 2004, the health expenditure per capita in US\$ was 4,819 in USA and 2,922 in Belgium (Corens, D. 2007 - Belgium Health system review in European Observatory on Health Systems and Policies).

cost-sharing is essential to operating costs as it represents 30 to 60% of the non salary recurrent health expenditures. At lower HFs, the funds collected tend to be considerably lower and in some districts funds are not utilised.

On the other hand, it was difficult to capture complete and correct off-funding spending but the foreign off-budget resources remain important. External HIV/AIDS expenditure increased in very high proportion (more than double) between 2002 and 2005 being even more important than external on-budget. However, now much funds start to be captured on the government budget; for instance, Global Fund for Aids, Tuberculosis and Malaria has injected important funds in development budget for year 2007-2008.

2.6. Governance

All elements have already been developed and explained in the Section 1.3 about SWAp in health sector.

2.7. Health Outcomes/Impact Indicators (1999-2008)²⁷

Health service utilisation

The Household Budget Surveys in 2000 and 2007 collected data on healthcare consultations of survey participants and permitted a national estimate of recent changes in overall (curative) healthcare utilisation and the workload of the government healthcare system (Research and Analysis Working Group, United Republic of Tanzania 2009 page 71). Their results are presented below.

- The percentage of population that consulted any health care provider was 69% in 2000 and also 69% in 2007. However, government facilities accounted for a higher share of healthcare consultations in 2007 than in 2000, while consultations at mission facilities and with private doctors diminished. Findings indicate a modest (11%) increase in per capita (curative) healthcare consultations at government clinics with 1.31 in 2000 and 1.45 in 2007. The consultations per year per capita with any provider being 2.42 in 2000 and 2.31 in 2007. The absolute number of healthcare consultations at government clinics has increased by 27% from around 44 million per year to over 55 million per year between 2000 and 2007. It was attributed to the population growth.
- The overall use of health services remained more or less unchanged between 2000 and 2007. The shift away from private health providers to public providers between 2000 and 2007 is significant. In 2007, the use of private health services dropped by 30% relative to 2000, while the use of public providers increased by 19%. This shift occurred across all areas of residence.

Impact indicators in relation with the MDGs

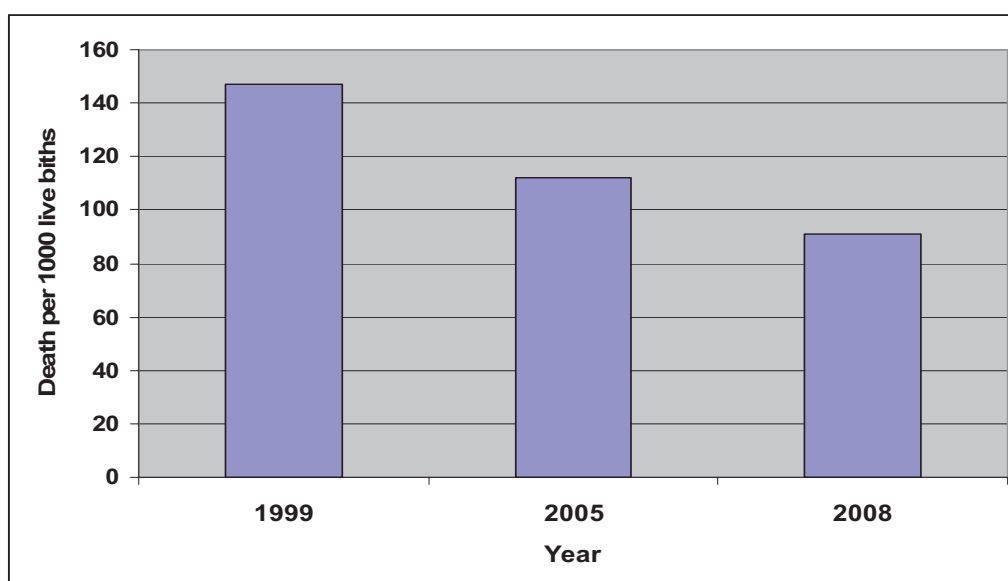
We present the trend of main health indicators during our evaluation period. However, it was not our objective to look for a direct relation cause-effect between HSR/SWAp and the results presented below. Indeed, measuring the impact of such policy on the health of the population seems too ambitious and too early; in fact, the impact indicators tend to respond slowly to health sector improvement (Foster, Brown, and Conway 2000), are infrequently measured and may be driven by non-health factors. Nevertheless, it appeared important to give a complete picture of the health sector for the case study in Tanzania, especially in relation with the MDGs 4, 5 and 6²⁸.

²⁷ Research and Analysis Working Group, United Republic of Tanzania 2009.

²⁸ MDG 4: Reduce child mortality; MDG 5: Improve maternal health; MDG 6: Combat HIV/AIDS, malaria and other diseases.

- The **under-five mortality rate (UFMR)** and the **infant mortality rate (IMR)** have decreased significantly between 1999 and 2008. Figure 15 illustrates the reduction of UFMR.

Figure 15: *Under-Five Mortality Rate in 1999, 2005 and 2008*



Source: Research and Analysis Working Group, United Republic of Tanzania 2009

- DPT3 (Diphtheria, Pertussis, Tetanus vaccine-3 doses) **immunisation coverage** did not improve (remained around 85%), contrary to measles which reached a 90% coverage.
- The **maternal mortality ratio** remained high over the past decade, with 529 deaths per 100,000 live births in 1996 to 578 in 2005 (Tanzania Demographic Health Survey 2005). The **proportion of births attended by skilled health personnel** has not shown significant improvement during the last decade and the indicator remains far from the target which is 90% to be reached by 2015. In 2004/05, skilled birth attendance was estimated at 46%, just 2% better than in 1999. Moreover, the access to skilled birth attendance varies between regions (with a range from 28% to 91%) and between type of region: more than 80% of urban women deliver in a health facility, compared with 39% of rural.
- The **HIV prevalence** in Tanzania was 7% in 2000 and 6% in 2007 (World Development Indicators database 2009). It has decreased for all groups but remained higher for women (7%) compare to men (5%). The detection and antiretroviral treatment have improved since their introduction in the country (2004).
- **Tuberculosis treatment** completion rate has improved, from 81% in 2003 to 87% in 2007. The tuberculosis treatment success results for 2006 and 2007 exceed the WHO target of 85% of all TB cases. This was accompanied by very low (<<1%) rates of treatment failure.
- **Malaria** (HIV/AIDS & Malaria Indicator Survey 2007-08) is a major public health concern for all Tanzanians, especially for pregnant women and children under age five. The disease is a leading cause of morbidity and mortality among outpatient and inpatient admissions. It accounts for up to 40 percent of all outpatient attendances. Malaria prevalence for under-five has been estimated and was around 5% for under-five (range from 3 to 30%). The proportion of children sleeping under insecticide-treated bednets (ITN) has increased: 26% in 2007 for 16% in 2004.

CHAPTER VII – MAIN RESULTS & LESSONS FROM MULTIPLE CASE-STUDY

1. Health Sector Reforms and organisation of the health care system at district level²⁹

During the period of HSR supported by a SWAp, efforts have been made to strengthen council health services in terms of governance, planning, budgeting, implementation and monitoring of local services. These can be examined in relation to the most important organizational units in the health system at local level. In order to achieve this goal, the MOH is committed to empowerment at the local level. This should be achieved through decentralisation by devolving powers of decision making to the Councils. Support should be given so they can prioritize and plan their health needs through the Comprehensive Council Health Plan (CCHP). The Local Authorities should mobilize, manage and account for health resources and implement health activities in line with their plans and budget allocations. An important achievement under the HSR was the introduction of the Health Basket Fund in 1999. From 2002 onwards the Councils started to receive funds from the HSBF.

1.1. Health Facilities and Essential Health Intervention Package

Dispensary is the first formal health unit that serves from 6,000 to 10,000 people and it supervises all the village health posts in its ward; it provides the first point of contact with patients. Dispensary should provide comprehensive Primary Health Care (PHC) and should be droved by Clinical Officer (CO) and Public Health Nurse.

Health Centre (HC) is the second formal health unit services for 50,000 people and it is supposed to provide a wider range of services that include: outpatient and in-patient services (with around 15 beds), maternity care, minor surgical services, and laboratory. In theory, HC acts as the first referral centre from dispensaries in its catchment's area and should have a communication facility including appropriate transport for referral of patients and supervision. HC is staffed by CO and nurses midwives or trained nurses (when it should be droved by Assistant Medical Officer and Nurse Officer).

District Hospital (DH) acts as the second referral level from lower level HF's of the district. DH should offer higher type of services with laboratory and blood transfusion, radiology, and general surgery, including obstetrical major interventions. It refers patients to the regional hospital.

Designated District Hospital (DDH): for district without public hospital, the Government has appointed faith-based organisation to play the role and functions of a DH and the MOH assumes its running cost.

Essential Health Intervention Package (EIPH) (The United Republic of Tanzania Ministry of Health 2000) is the national package of health interventions to assure that the highest priority services are fully supported. There are five major components with several sub-groups and/or disease-based groups. Because the list of all EIHP is quite long, the districts were lately authorized to establish a limited number of high priority interventions according to their context and situation analysis.

²⁹ Sources: COWI et al 2007, Joint Ministry of Health and Presidents Office Regional Administration and Local Government - The United Republic of Tanzania and D.S.Mmari 2004, Mukama 2003, National Bureau of Statistics - Tanzania and Macro International Inc.USA 2007; The United Republic of Tanzania Ministry of Health 2005, The United Republic of Tanzania Ministry of Health and Social Welfare 2009, The United Republic of Tanzania, Ministry of Health 2003).

1.2. Responsibility and management

During the implementation of the reforms, one important part of the effort to improve the governance dimension of health services at council level has been establishing Council Health Service Boards (CHSB) and Health Facility Committees. Those committees have a different number of members according to the level but all have representative from the community, from the council/village authority, from the HFs, and from the civil society including private health organisations. They should ensure that, health facilities and services provided are of acceptable quality, managed by qualified personnel in line with the Policy Guidelines and Standards (The United Republic of Tanzania, Ministry of Health 2003).

The Council Health Service Board (CHSB) is, in theory, an executive organ of the council for supervising and controlling all the health activities and resources and for ensuring that the population receives appropriate and affordable health care services. The CHSB is also responsible for implementing all policies given by the MOHSW together with improving the working environment as well as remuneration of the health workers. They should also discuss, amend health plans, budget and reports.

Council Health Management Team (CHMT) is responsible for health services delivery. The roles and functions are (i) to prepare comprehensive district health plans in line with the district health needs, (ii) to ensure that health activities are implemented at each level of care, (iii) to ensure the provision of transport, drugs, vaccines, medical supplies, equipment and reagents to HFs, (iv) to carry out supportive supervision to district health staff at all levels in the district, (v) to ensure that quality health services are provided in line with national standards, (vi) to ensure that data are collected and analysed, then used by health workers to plan and implement proper interventions, (vii) to identify priority areas, (viii) to compile and analyse quarterly and annually all technical and financial reports and submit them to the Council Health Service Board and Regional Health Management Team. The CHMT consists of District Medical Officer (DMO), District Health Secretary, District Nursing Officer, District Health Officer, District Pharmacist, District Medical Laboratory Technologist, District Dental surgeon plus other co-opted members. Each CHMT is headed by a DMO, who is in-charge of all district health services and is answerable to the LGA.

The Hospital Management Team (HMT) is composed of the Medical Officer (MO) in-charge, the Hospital Secretary, the Nurse Officer (NO) in-charge and the heads of different sections/departments. It is answerable to the Hospital Governing Committee. Its responsibility are to prepare hospital plans and budget (by using hospital data reports) with consolidation in the comprehensive council health plan, to manage funds and other resources for the running of the hospital, and to operate daily management.

Hospital Governing Committee (HGC) and Health Centre/Dispensary Committee should receive and discuss implementation reports prepared by the HF. Their role include: (i) to promote sustainable health infrastructure and reliable supply of drugs and logistic systems, (ii) advise and recommend to the CHSB on human resources development in terms of recruitment, training, deployment and motivation, (iii) to facilitate the management of HF in planning and managing, (iv) to promote availability of adequate infrastructure, (v) and to oversee the availability of essential supplies of drugs, reagents and equipment.

1.3. Health planning and Comprehensive Council Health Plans

To further bridge the performance gap among the Councils in the management of district health services, the decentralisation process enhanced the planning of activities by health actors at district level. The annual Comprehensive Council Health Plan (CCHP) was introduced to strengthen local health service planning, budgeting, implementation and reporting. It was phased plan (starting with 37 districts in 2000, 45 districts in 2001/2 and the remaining districts in 2003). In order to facilitate the CCHP, CHMT members received considerable training and different adapted procedure manuals. The CCHP is a key document whose elaboration is time consuming and requiring a lot of **commitment from all stakeholders**. The CCHP is the principal prerequisite for any well functioning district health system. A Plan is comprehensive if its activities reflect the priority areas of the Essential Health Package (EHP), if all sources of funding are taken into consideration and if the plan includes all health care providers regardless of the ownership. In summary, the CCHP brings together three elements: the Council Health Department recurrent budget, the Council Health Department development budget, and technical objectives, activities, and performance indicators. Where there is a Council Health Service Board (CHSB), it should be involved in the evaluation of the CCHP and the budget.

1.4. Health financing at district level

LGA receive resources for local health through a variety of budgetary mechanisms. In addition to the recurrent subvention to local authorities for health purposes, LGA also receive recurrent funding from the donor Health Basket Fund, resources from the Ministry of Health (including funding for drugs), own resources generated by the council, cost sharing (including user fees), and NGO/donor resources. The combination of increased funding with financial decentralisation has given the districts the possibility to selectively increase resources for key interventions.

1.4.1 Health Basket Funds (HBF)

In the context of the Local Government Reform Programme and implementation of CCHP, **HBF** was established as a key factor in providing a stable and predictable resource for local councils. This district basket grant contributes to the development budget of the district health plans, and comes as an addition **to the Government grant which covers mainly recurrent costs** (salaries, allowances). An allocation formula was developed in 2004 to give more funds to the more deprived districts³⁰. The application of the formula is in line with the Poverty Reduction Strategy and redirects resources towards poor and rural areas. It is based on four allocation factors: population (70 %), poverty count (10 %), district vehicle routes (10%), and under-five mortality (10%).

Basket grants have to be allocated to six different cost centres with a certain percentage allocation range: (i) Office of DMO (15 to 20%), (ii) Council Hospital (25 to 35%), (iii) Voluntary Agency Hospitals (VAH) if exist (10 to 15%), (iv) Health Centres (Public and VA) (15 to 20%), (v) Dispensaries (Public and VA) 15 to 20%), and (vi) Communities (5 to 10%).

There are restrictions applicable on the use of Council Health Basket Funds, like funds should not be used for long term and costly training; for construction of new buildings, for purchase of cars, and other technical equipment of which the price exceeds 2000 USD. The purchase of drugs is only allowed after the Council has a confirmation from the MSD that the respective drugs are out of stock.

³⁰ In the first approach it was the same for every district 0.50 US\$ per capita.

The Health Basket has played a crucial role in strengthening district level health services.

1.4.2 Block Grants (BG)

Beside the Block Grant (BG), the Local Government Authorities (LGA) received the **governmental BG**. The BG is divided in 2 parts; the first one is used only for “Personnel Emoluments” (PE) and the second one is a specific grant for “Other Charges” (OC). The BG is also subject to conditions like allocation per cost-centre (same as for BF) and per type of expenditure. In order to ensure that the available resources are shared equitably and efficiently, the Government of Tanzania developed a mechanism for allocation of local government grants as it has done for BF allocation.

In summary, the Council Basket Fund for Health and OC of the Block Grants are at present generally restricted to expenditure on recurrent costs. All recurrent activities can be financed, through which the quality of health service is likely to be improved. All activities however have to be in line with the EHP. This includes also short-term training of staff and cost for maintenance of medical equipment and cars. Repair measures, allowances, transport, training should not exceed a certain % of the allocated Funds.

1.4.3 Joint Rehabilitation Funds (JRF)

The rehabilitation strategy and funding mechanism for HF is a special plan elaborated in 2003 to support infrastructure at district level. A JRF for primary health care facilities was established with four steps in the distribution of the funds. First step is a priority list where all councils are ranked and the councils are then gradually included according to the list. Second step is determining the amount of funds going to each council. Third step is determining the HFs in the chosen councils to receive support. Fourth step is determining the amount of funds going from the district to HF.

1.4.4 Cost-sharing

User fees funds collected are used for operating costs for the procurement of drugs and medical supplies at hospital level. The process of implementation took longer for HC and Dispensaries. At hospital level, prices are different according to services provided and drugs prescribed. An official price list must be available. At lower public HFs level, there is a flat rate (1000 to 1500 TzSh or +/- one US\$) per visit and per person independently of drugs received or procedures made.

The Community Health Fund (CHF) operates as a voluntary pre-paid scheme for rural areas. The amount requested is 5,000 to 10,000 TzSh (4 to 8 US\$) per year and per household.

If hospitals can keep in their own accounts the incomes generated by cost-sharing and use it according to specific needs, primary HFs must deposit the collected amount into a special account held by the Council. The HF governing committee can propose how to use the money, and then proposal should be approved by CHSB.

The National Health Insurance Fund (NHIF) reimburses HFs after they claim for service expenses provided to subscribers.

1.4.5 Council own sources

The councils can use its own revenues (from taxes or dues) to finance the health sector, but the situation varies between district and remain very often not significant.

1.5. Drug supply

The government allocates funds for drugs directly to the MSD through a special account opened for every district. In each district the account per facility is easy to calculate: for each Financial Year, the maximum amount that a HF can spend at the MSD on drugs and medical supplies is made known. The fixed allocation for a dispensary is 4 million TzSh (3,000 to 3,500 US\$) per year and for a HC is 8 million. Therefore, this amount is not related to utilisation of the HF neither to the volume of activities (COWI et al 2007). A DMO or a HF (via the DMO) cannot utilise left-over funds for purchases outside the MSD; at the end of the FY, unspent funds in a district's account are either transferred back by the MSD to the MOH or can remain in the MSD until drugs are available. The kit system has been progressively replaced by the indent system allowing HFs in-charges to order requested drugs and supplies according to their needs. An order from HF requires the signature of the DMO before to forward it the MSD.

1.6. Health Management Information System³¹

Facility-based health records (Health Management Information System-HMIS or MTUHA in Swahili for Mfumo wa Taarifa za Uendeshaji wa Huduma za Afya) produce data that are used for the management of local health service delivery and district health management. For a selected number of indicators, it produces data for national statistics on morbidity, causes of death, health service coverage, and health infrastructures. Data collection from all HFs consists in 12 register books filled monthly (Mukama 2003). For hospitals, there are further sheets or registers. Moreover, there are additional systems created for special projects like HIV/AIDS, Tuberculosis and Leprosy, and Prevention of Mother to Child Transmission to track programme specific indicators. Changes in health provision like Health Insurance Programme and neonatal care has also created demand for new data tools.

Reporting process in theory (Mukama 2003): at the district level, reports from the health facilities are aggregated into an overall district report and sent to the Regional Medical Officer (RMO)'s office together with a copy of each health facility's annual report. The preparation of an overall district report involves a group of health workers who have to work together. The processing is done through the use of a District Processing File (DPF). The DPF contains tables whereby information from the individual reports from the health facilities are transcribed into these tables, and the district totals are compiled. The DPF is therefore the analysis and storage tool for the district. At the RMO office, most of the information from the district reports is stored into a computer software package then and the reports are sent to the national level.

2. Districts: dates of visits and implementation of main reforms

2.1. Biharamulo district

Dates of the visit: 12th to 24th April 2007.

Our survey took place in April 2006 and the district has been split into two new districts in July 2007 (Biharamulo and Chato). Therefore, some figures, like variable with population ratio, are not any more accurate. The district hospital in Biharamulo is a "designated" one and it is owned by the Catholic Diocese of the region.

The decentralisation process with the basket funding (BF) and elaboration of a comprehensive council health plan (CCHP) was implemented in 2002.

³¹ Sources: Ministry of Health and Social Welfare 2007, Ministry of Health and Social Welfare - The United Republic of Tanzania 2007, Mukama 2003.

The CHSB has official start in April 2004 which means that user fees and CHF systems were implemented at health centre and dispensary level after that period.

2.2. Kilosa district

Dates of the visit: 26th April to 8th May 2007.

During our visit, which coincided with the rainy season, two divisions among the 9 existing could not be reached.

The decentralisation process with the BF and elaboration of a CCHP was implemented in 2002.

The CHSB got a late official start in 2004.

2.3. Newala district

Dates of the visit: 10th to 19th October 2007.

The Region and the district are among the poorest of Tanzania with also poor performing district in health.

The decentralisation process with the BF and elaboration of a CCHP was implemented in 2002.

The CHSB had also a late official start, in November 2004, and cost-sharing activities in HC and dispensaries started only in 2005.

2.4. Mwanga district

Dates of the visit: 24th October to 3rd November 2007.

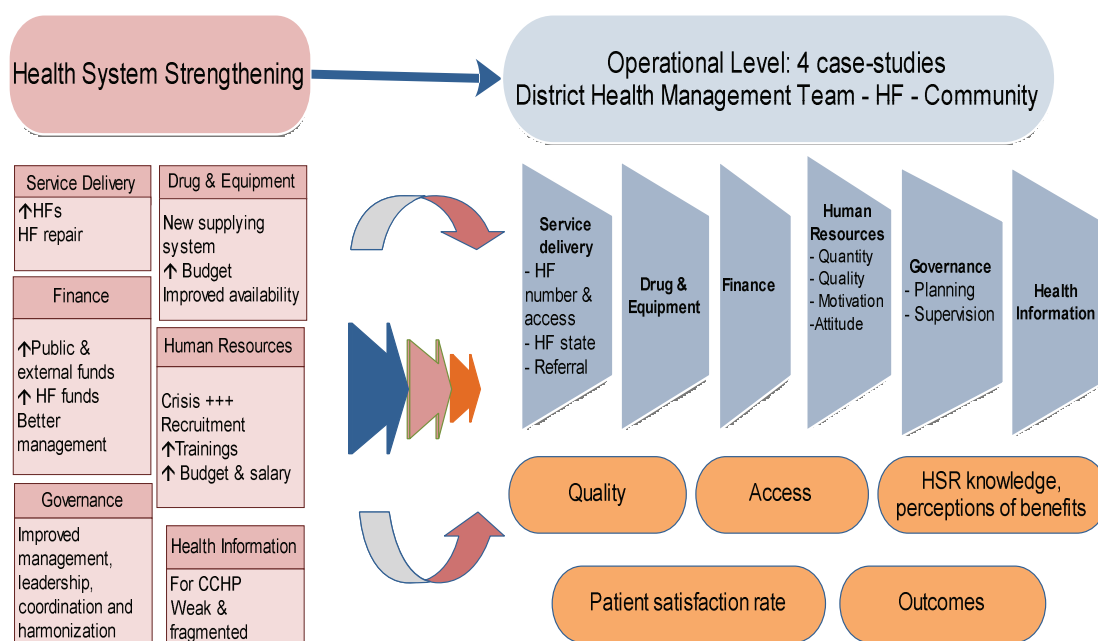
Mwanga district has smaller area but the access to some zones is complicated by high mountains. The district is divided into two different types of geographic area: the North Pare Mountain with 810 km² (altitude up to 2500 metres above the sea level) and the Eastern Plain (altitude of 550-700 metres). That makes the visits quite complicated and difficult as we had to skirt around the mountain and to move to the highland. It was never possible to visit two HF the same day. However, the district managed to construct roads that can reach almost all villages despite the mountains and the majority of them are passable throughout the year.

The decentralisation process with the BF and elaboration of a CCHP was implemented late comparing to other as it was in 2003.

The CHSB has official start the same year in 2003 allowing earlier implementation of the different cost-sharing mechanisms.

Figure 16 represents our initial analytical framework model that has been developed to illustrate the different elements of evaluation of the 4 case-studies at operational level. The main results are presented in the following sections.

Figure 16: *Analytical framework for operational level evaluation*



3. Health Sector Reforms knowledge and perceived benefits

The knowledge on HSR and their contributions to positive changes in health service delivery was evaluated through IDI and FGD at different district levels and most results are developed in the next sections about health facilities and quality of care. From the patients and health workers that have been interviewed in the different HFs visited, we assessed if positives changes were perceived during the past 6 years and which ones.

We found that CHMT members had a reasonable knowledge of HSR and generally they were strongly associated with positive changes on health service delivery. At lower HFs, respondents had incomplete knowledge and generally pointed only few specific aspects (most often perceived being the introduction of cost-sharing) rather than a comprehensive strategic package. On the other hand, they had strong perception of positive changes in health service delivery during the past years, some of them being related to reforms. Thus, 91% of hospital workers and 65% of patients agreed that positive changes occurred during the evaluation period. The main changes reported concerned participatory mechanism for health planning and decision making (HF committees), the health facility infrastructures, the availability of drugs and supply, and the human resource issue. Difference between districts occurred, especially with Newala (with 78% of workers and only 51% acknowledged positive changes) where infrastructure was almost the solely sector reported with improvement. No associated factor for admitting changes was found for health workers but for patients we found a significant higher level of improvement in public HFs.

4. Health Facilities

In that section, we report about the health facilities, especially the number, the distribution, and the physical state. The modality and the time to reach the health facility by the patient are also analysed.

4.1. Number of HFs and geographic accessibility

The total number of public dispensaries increased significantly during the evaluation period. The number of private dispensaries and parastatal institutions decreased and were often replaced by public ones. The decline in private institutions is in line with

national trend as incomes from dispensaries in the private sector, especially in rural areas, continue to fail to meet the running costs. Globally the number of hospital and HC did not change. In Mwanga, we found the highest and fastest increase of HF with almost one per village. The density of HF per 10,000 populations is very different between districts: from 0.7 in Biharamulo to 3.9 in Mwanga, Kilosa and Newala having the same, with 1.4. So, Biharamulo has the worst density and coverage and the decision to split the district into two will probably help to improve the situation.

The political slogan “one village one dispensary” became a strategy included in the the last health strategic plan. It does not necessarily mean increased people’s access to quality services as shortage of workers and essential equipment was commonly reported. In fact, the increase of HFs is more often perceived as hampering the existing health service delivery which is cut off from already scarce resources. A good indicator for distribution of HFs is the proportion of people residing within 5 km of a functional HF. Unfortunately the data is not available but because the number of HF did not increase that much, we assume that the coverage did not change significantly. Nevertheless, the median time to reach the HF was globally half an hour; logically, time to reach the DH is significantly higher, is also higher for Biharamulo. 71 % of the patients reached any HF in less than one hour (for 58% for Biharamulo), 81 % reached HC/Dispensary in less than one hour (for 66% in Biharamulo), and 80% of patients reached HF by foot or bicycle.

4.2. Physical state of HF structures

One of the most unanimously recognized and significant improvement in health services during the evaluation period concern repairs and rehabilitation of HF infrastructures. The proportion of HFs in a good state increased during the last few years, especially for HC and dispensaries where constructions, renovation and up-grading were visible and reported by all respondents. The improvement was related to different events that include: a special pool of funds for rehabilitation, higher autonomy for priority setting and planning with access to district basket funds, involvement of the community, and special project from NGO or private initiatives.

On the other hand, supply of electricity and water in lower HFs was still an important issue that has not been solved that impedes in a significant way health service delivery.

5. Quality of health services

The quality of health services was evaluated through different categories of variables: (i) district planning, (ii) the availability of drugs, supplies and equipment, (iii) the human resources for health (number, qualification, motivation, attitude and morale), (iv) the district health finances, (v) the referral system, (vi) the health information system, and (vii) the supervision. We also explored if positive changes in these categories occurred during the evaluation period.

5.1. District health plan and stakeholder participation

In the four districts, the increase of autonomy has improved health planning (with intensive use of specific internal data sensitive to local situation), budgeting, employment and decision making with the initiation of the CCHP. The CCHP were available (since 2002 and 2003) and were following the rules and official format. Globally, the last versions of plans were more comprehensive. That was due to better capability obtained with experiences and recommendations following mistakes done in the beginning of the process, but still remain an activity-budgeting tool rather than a dynamic process focused on the health system delivery. The principle of planning and budgeting with bottom-up consultation and use of local data was a reform highly

appreciated by all respondents at different levels. However there was no evidence that district planning activities involve the communities and the district health boards. In addition, poor communication between the lower level HF workers and the CHMT was reported; thus, information on plan contents and implementation do not reach lower levels.

5.2. Drug, supply and equipment

The hospitals were better equipped since the last few years (X-ray, ultrasound, laboratory, etc.) thanks to special projects and banded funds with district autonomy for buying needed items. That was not the case of lower HFs' level that misses essential equipment (BP machine, thermometers, etc.).

Concerning drug and supply, there was also unanimity to recognize improvement of availability; that was related to the new order system (Indent system versus kit system) and to new sources of finances available (user fees, CHF) and autonomy to use own funds collected. Despite improvement, the availability of all essential drugs and supplies remained a major problem; still most of respondents and reports showed drugs out of stock, especially at the end of the month. Globally, 72% of outpatients interviewed got all drugs prescribed; the proportion reached 93% for patients consulting the DDH of Biharamulo. In the other districts, there was no significant difference between DH and other HFs. The difference between the drugs out of stock observed/declared and the availability of drugs for patients is due to clinical officers who adapt their prescriptions according to the drugs available in their store, which can induce questioning on the quality of treatment. In Newala district, the situation was worse, funds collected being not used to support supplying system and many essential drugs were found out of stock for several months (only 49% of patients interviewed got drugs prescribed); community level even questioned the honesty of district/HFs managers. The MSD was often pointed to be responsible of shortage, delays in delivery, and poor quality of some supplies and equipment. The health managers advocated for introducing other national suppliers allowing more competitions and also requested to review the system of fixed allocation for HF at a given level.

On the other hand, drugs and supplies from vertical project like vaccination, global funds to fight AIDS, tuberculosis and malaria were better available than other drugs.

Another major weakness that has not received any attention during the evaluation period and causing important disappointment was the absence of diagnostic/laboratory facility at dispensary level and in numerous HC.

5.3. Human resources in number and qualification

The decentralisation shifted partly to district level the role of quantifying and identifying the HRH needs as well as autonomy to employ. But unclear procedures and organisational diversity guiding the process of recruitment and location of decision-making at the district and national levels pose unnecessary bureaucratic delays. It is noted that the total number of qualified health staff recruited has increased. Nevertheless, staff shortage remained severe and constituted a big challenge hampering the quality of health services. The community did not experience the change in HRH number. On the other hand, the increased number of HFs hampered or made worse the health workers shortage. The rural and remote areas had difficulties to attract new qualified staff and there was a high turnover in the private not for profit institutions where workers were leaving attracted by public sector.

We found that sponsored (public and private HFs) up-grading was offered to a significant number of health workers and it appeared to be the most efficient strategy to get and to retain qualified staff in rural areas.

5.4. Human resources motivation, attitude and morale

This section is developed in the following pages.

The motivation of human resources for health: A case study at district level in Tanzania

Véronique Zinnen¹, Aziza Mwisongo², Elisabeth Paul³, Daniel Nyato² and Annie Robert¹

¹Université catholique de Louvain, Ecole de Santé Publique, Unité d'épidémiologie et de biostatistique, Brussels, Belgium

²National Institute for Medical Research, Dar Es Salaam, Tanzania.

³Université de Liège, Liège, Belgium

Abstract

Background

An increasing number of studies explore the association between financial and non-financial incentives and the retention of health workers in developing countries. This study aims to contribute to empirical evidence on human resource for health (HRH) motivation factors in order to assist policy makers in promoting effective and realistic interventions.

Methods

We conducted a cross-sectional survey in four rural Tanzanian districts in 2007 to explore staff stability and health workers motivation. Data were collected using qualitative and quantitative techniques, covering all levels and types of health facilities districts; multiple sampling approaches were used based on targeted information.

Results

Stability of staff varied between districts but was quite high. Non-qualified staff was more likely to stay more than 10 years at its position, while workers from private not-for-profit facilities were more likely to have reasons for moving away. Public institutions remained very attractive with better job security, salary and retirement benefits. Nevertheless, most workers complained about the inadequacy between salary and living costs, and the absence of extra allowances. Satisfaction on working conditions was very low due to inadequate working equipment, work overload, lack of services, difficult environment, favouritism, and "empty promotions". Positive incentives mentioned were support for career development and supportive supervision. Attracting new staff in rural area was more difficult than retaining it.

Conclusions

Motivation strategies should focus on adequate remuneration, positive working and living environment, and supportive management. However, by multiplying health facilities, the latest Tanzanian HRH plan could jeopardize current positive results.

Background

Human resources for health (HRH) are a crucial determinant of health and development. However, many developing countries face a human resource crisis that translates into a shortage of health staff – the global shortage is estimated around 4.3 million workers [1] – and uneven distribution of existing resources between and within countries [2]. The crisis of workforce shortage has complex origins, involving various interrelated factors, including insufficient financing resources devoted to health system, inadequate management, unsatisfactory working conditions, the HIV/AIDS pandemics, and brain drain [2, 3, 4]. The performance of health service depends, besides other factors, on health care providers' knowledge, skills, motivation and willingness to properly carry out duties [5, 6, 7, 8]. Yet, low income countries suffer from inadequate health workforce performance and the current HRH crisis considerably harms the quality of health care services [9].

Low motivation was the second most important problem reported after staff shortage according to a survey conducted in 29 countries [10]. Motivation refers to all the reasons why people behave in a certain manner and maintain that behaviour over time, especially in the field of labour [11, 12, 13, 14, 15]. One important type of behaviour we interpret as being

influenced by motivation is stability at workplace versus mobility. Different reasons may influence workers' behaviour, ranging from "materialistic" self-interested motivation to "non-materialistic" motivations, including social, intrinsic and moral motivations [16]. The perceived insufficiency in salary levels in many African countries is often pointed as a factor explaining de-motivation and hence, justifying deviant behaviours or searching for complementary earnings [17, 18, 19]. Yet, financial incentives alone are not sufficient to motivate health workers and a growing number of studies explore the links between incentives, motivation and the retention of health workers in developing countries [20]. They point to non-financial incentives and human resource management as playing an important role in influencing health workers motivation [10, 21].

Tanzania, like most countries in the region, is affected by an HRH crisis [8]. Awareness has progressively risen among policy makers and the Ministry of Health and Social Welfare (MoHSW) issued an emergency strategy to address the problem in 2005 [22]. Tanzania faces a global shortage of qualified staff compared to international standards and national staffing norms – and a greater shortage is expected in the future because of increasing demand and attrition rates [8, 22]. Health workers in activity include a large proportion of unskilled staff (31% in 2003) with a medical officer per population ratio of 2.5 per 100,000 [23]. However, geographical imbalances are significant and total health worker to population ratio varies substantially across districts, ranging from 0.3 to 12.3 per 1000 [24]. Another important problem concerns the general health workforce performance; Mæstad [22] reports low skills level, low productivity, low motivation to comply with working standards (misdiagnosis and mistreatment of common illnesses), as well as an association between incentives and clinical performances. Some evidence therefore suggests that HRH policies should not only focus on staff shortage and geographical imbalances, but also on how to motivate and retain health workers.

The main objectives of our study are to contribute to empirical evidences on HRH motivation, expressed by stability at workplace, and to assess the role of financial and non-financial incentives in reinforcing the Tanzanian health system.

Methods

Tanzania has a total of 26 administrative regions. However, to ensure effective health service delivery countrywide, the MoHSW has sub-divided the country into eight zones [25]. The present study was performed in 4 rural districts selected with MoHSW after random selection of 4 zones. Their general characteristics are presented in Table 1. The population depends greatly on agriculture for subsistence, and the main differences between districts, besides mortality rates, deal with their size and population, as well as with the population covered by health facilities.

Table 1: Characteristics of districts visited between April and November 2007

	Biharamulo*	Kilosa	Newala	Mwanga
Zone	Lake	Eastern	Southern	Northern
Region	Kagera	Morogoro	Mtwara	Kilimanjaro
Population**	495,529	542,442	193,360	121,920
Area (km ²)	9,199	14,245	2,220	2,641
Villages	117	168	155	61
Number of health facilities in 2006 (Public institutions)	30 (25)	73 (56)	27 (27)	51 (41)
HF population ratio	1/16,500	1/7,700	1/7,000	1/2,400
Under-5 Mortality Rate*	153	166	197	68

Main source: comprehensive council health plans and reports from different districts

* Biharamulo district was split in two districts in the end of 2007

** Source: 2002 national census with annual growth rate

HF: Health Facility

* Per 1000 alive births. Source: National Bureau of Statistics, Tanzania, 2006 [27]

The present study rests on a cross-sectional survey analysing staff stability – through time spent at present position – and health workers motivation – via financial and non financial incentives, using a list edited by the Global Health Workforce Alliance [4]. The list differentiates between financial incentives (salary, allowances) and non-financial incentives (positive work

environment, support for career and professional development, access to services). Data were collected through qualitative and quantitative techniques, using a concurrent procedure strategy. Our tools were structured questionnaires with open and close-ended questions for health workers at different health facility levels (district hospital, health centre and dispensary), in-depth semi-structured interviews (IDIs) for key informants from district (or council) health management team (CHMT) and from different health facilities (HFs) supported by a guide stating questions and topics that should be covered, and documents and reports issued from visited structures.

Both types of data were collected at the same time. The information obtained from qualitative method was used for cross-checking quantitative data and it contributed to interpret the overall results.

The choice of sampling methods depended on the studied variables and on the type of information to be collected. In each district, at least one HF per administrative division was selected; the district hospital was purposively selected; two health centres were randomly selected, as well as several dispensaries (4 in Biharamulo, 6 in Kilosa, 5 in Newala, and 5 in Mwanza). The sampling fraction of HFs but hospitals varied within the district administrative divisions; the fraction of sampled health workers between hospitals and other HFs was also different from the actual proportion. Therefore, analyses were weighted to correct those two non constant sampling fractions. Tables with unweighted data are available on request. For structured interviews of health workers, the sample size was computed according to random sampling with PASS 2004 software to ensure that if 50% of health workers report satisfactory working conditions, the study would be able to detect this rate at the 0.05 level, with a precision of 10% knowing that any other prevalence would lead to a lower sample size. The selection of key informants was purposive as we have selected the most important representatives of CHMT (with at least the District Medical Officer, District Nurse Officer, District Health Officer), and of the hospital management team (Medical Officer in charge and Nurse Officer in charge). For HFs, there is only one person in charge and we interviewed that particular person in each centre/dispensary.

All the health workers present and available during the visits (see descriptive data in Table 2) were interviewed by the research team using open and close-ended questionnaires; once the objectives were explained and consent given, the workers were invited to answer the questions of interest respecting privacy of discussion. In Biharamulo, a lower percentage of workers were interviewed in public institutions, because we visited two not-for-profit facilities belonging to the Roman Catholic Church: one dispensary and the “designated” district hospital that is contracted by the MoHSW to act as a district hospital [26]. As we encountered more than 20 different qualifications/occupations, we pooled them into three categories according to their responsibility towards patients: medical staff directly responsible for patient consultation and treatment (medical officers, assistant medical officers, clinical officers, rural medical aids, dentists), nursing staff (all nurses and nurse assistants with a one-year course), and supportive staff (pharmacists, laboratory staff, radiographers, health officers, health assistants, medical attendants, administrative staff). The proportion of interviewed staff per professional category was close to the corresponding proportion in the district. To analyse particular issues (salary, up-grading and possibility to move), the workers’ qualification status was classified into two categories: qualified for workers having at least a two-year course certificate, and non-qualified for others.

The field research team was multidisciplinary with experienced public health medical officers and social scientists specialized in the medical field. All of them have been trained and were familiar with qualitative techniques and with Tanzanian health districts. IDIs were conducted by the social scientists of the team with 4 members of the council health management team (CHMT), 2 members of the district hospital management team, and the person in charge of other HFs.

All motivation variables were studied using both quantitative and qualitative methods, the latter being used as a way to cross-check and complete information gathered from the former. Quantitative data were analysed using EpiInfo version 3.5 – June 2008 and are presented as proportion or median with 25th and 75th percentiles. Data on financial and non-financial incentives were compared through owner of health facility, type of facility, worker age, sex, and qualification status using Fisher exact p-value or Mann-Whitney test. After this univariate analysis for each independent variable, we performed a multivariate unconditional logistic regression. This was done for time spent at present position (above 10 years or not) and reasons for moving in order to adjust for potential confounding factors. Adjusted odds ratios (OR) with 95% confidence intervals (CI) were computed on HF owner, type of facility, worker age, sex, qualification status, and district. For qualitative methods, all interviews were tape-recorded then transcribed and typed to develop a data coding system. MAXQDA software version 2007 was

used to analyse the data according to the financial and non-financial issues of interest. Financial incentives are expressed in Tanzanian shillings (TzSh); on June 30, 2007 the exchange rate was 1262 Tz Sh for one US Dollar (Bank of Tanzania <http://www.bot-tz.org>).

Table 2: Health workers sample design and sample description

DESIGN	Biharamulo		Kilosa		Newala		Mwanga	
Number of health care providers (N)	314		405		253		289	
Sample size required	74		78		70		73	
Number of interviews	70		81		81		53	
	UW	W	UW	W	UW	W	UW	W
Workers per type of HF n (%)								
District hospital	41 (59)	29 (41)	43 (53)	26 (32)	49 (61)	30 (37)	23 (43)	13 (25)
Health Centre	12 (17)	18 (25)	20 (25)	34 (42)	19 (24)	25 (31)	21 (40)	25 (46)
Dispensary	17 (24)	23 (34)	18 (22)	21 (26)	13 (16)	26 (32)	9 (17)	15 (29)
Workers per HF owner n (%)								
Governmental	24 (34)	nd	66 (82)	nd	81 (100)	nd	53 (100)	nd
Private not-for-profit	46 (66)		15 (19)		0		0	
Workers' position n (%)								
Medical staff	13 (19)	12 (18)	16 (20)	15 (19)	15 (19)	14 (18)	9 (17)	8 (16)
Nursing staff	39 (56)	38 (54)	41 (51)	40 (49)	49 (61)	47 (58)	26 (49)	25 (47)
Supportive staff	18 (26)	20 (28)	24 (30)	26 (33)	17 (21)	20 (25)	18 (34)	20 (37)
Workers' qualification								
Qualified n (%)	48 (69)	45 (65)	46 (56)	45 (56)	46 (57)	44 (54)	31 (59)	26 (49)
DESCRIPTION								
Sex: Men n (%)	39 (56)	38 (55)	26 (32)	27 (33)	27 (33)	27 (33)	15 (28)	12 (22)
Age (yrs)								
Median [®]	38 (31-47)	38 (31-47)	41 (34-47)	40 (35-47)	45 (40-50)	45 (40-50)	41 (33-50)	41 (31-49)
Range	26-59		26-64		26-59		24-59	
= 30 n (%)	17 (25)	16 (24)	8 (10)	5 (6)	11 (14)	7 (8)	12 (23)	13 (24)
31 - 50 n (%)	40 (58)	42 (61)	60 (74)	67 (82)	50 (62)	56 (70)	31 (59)	31 (58)
> 50 n (%)	12 (17)	11 (16)	13 (16)	9 (11)	20 (25)	18 (22)	10 (19)	9 (18)

UW: Unweighted values

W: Weighted values

HF: Health Facility

nd: Not done

[®] Median with quartiles (P25-P75)

People eligible for interviews were informed about the research objectives and relevance and their consent for free participation was requested. Confidentiality of interviews was completely respected. Ethical clearance was granted by the Tanzania National Institute for Medical Research and MoHSW; an official research permit (2006/353/NA2006/88) was obtained from the Tanzania Commission for Science and Technology in 2006.

Results

Staff stability

Time spent by interviewed workers at their present workplace is reported in Table 3. The median is pretty high and reached a peak of 23 years in Newala, where it was even higher in facilities other than the hospital. In Kilosa, it was significantly higher in governmental than in private not-for-profit facilities. Differences per category of workers showed a higher median for non-qualified staff compared to qualified staff, and it reached significance in Kilosa and Newala. Comparing HF types, differences remained significant only at the district hospital level in Kilosa, with a median of 27 years for non-qualified staff and 4 years for qualified staff ($p=0.005$). In Newala, the difference was significant at both levels: the median was 25 years for non-qualified

and 2 for qualified staff at district hospital ($p=0.012$); 26 years for non-qualified and 9 for other staff at other health facility levels ($p=0.021$).

Table 3: Univariate analysis - Time spent at present position according to HF, qualification and sex

	Biharamulo		Kilosa		Newala		Mwanga	
n	70		81		81		53	
Median [°] (yrs) W	6 (3-16)		14 (5-25)		23 (17-29)		13 (6-23)	
Range (year)	0.5 - 37		0.1 - 39		0.1 - 38		0.3 - 38	
Median [°] (yrs) per type of HF	n		n		n		n	
W District Hospital	29	7 (3-15)	26	21 (3-7)	30	19 (2-27)	13	8 (5-24)
W Other HF	41	4 (2-12)	55	13 (5-17)	51	25 (17-29)	40	13 (6-23)
W P-value [†]		0.38		0.18		0.06		0.97
Median [°] (yrs) per owner of HF	n		n		No private institution			
Governmental	24	6 (4-18)	66	22 (5-27)				
Private not-for-profit	46	7 (3-16)	15	5 (1-15)				
P-value [†]		0.73		0.001 [†]				
Median [°] (yrs) per qualification	n		n		n		n	
W Not qualified	25	8 (3-16)	36	17 (12-27)	37	25 (22-29)	27	9 (6-21)
W Qualified	45	6 (2-16)	45	8 (4-17)	44	18 (12-30)	26	13 (5-25)
W P-value [†]		0.69		0.016 [†]		0.002 [†]		0.51
Median [°] (yrs) per sex	n		n		n		n	
W Male	38	6 (3-15)	27	5 (1-16)	27	22 (13-25)	12	8 (1-23)
W Female	32	6 (1-16)	54	16 (8-26)	54	25 (11-29)	41	10 (6-235)
W P-value [†]		0.91		0.025 [†]		0.18		0.63

n: Number of respondents

W: Weighted data

[°] Median with quartiles (P25-P75)

[†] Mann-Whitney test

[†] Significant P-value

Logistic regression presented in Table 4 shows that older workers stay longer at their position. Within a district and at equal age, non-qualified staff has more chances to stay over 10 years; even if the results are not significant, staff working in public institutions were more likely to stay longer at position ($p=0.069$). Sex was not a factor affecting time spent at position ($p=0.22$).

Table 4: Multivariate logistic regression analysis

Factors associated with time spent at present position (> 10 years) for workers of 30 years old or more (n = 236/285)

	OR	95% CI	P-value
Governmental HF	2.20	[0.94 ; 5.15]	0.069
District Hospital	1.56	[0.70 ; 3.48]	0.280
Not qualified staff	4.41	[2.00 ; 9.70]	<0.001 [†]
Male workers	0.63	[0.30 ; 1.31]	0.217
Workers age (yrs)	1.17	[1.11 ; 1.22]	<0.001 [†]
Districts			
Biharamulo	1.00		
Kilosa	3.09	[1.27 ; 7.50]	0.013 [†]
Newala	22.68	[5.41 ; 95.16]	<0.001 [†]
Mwanga	1.30	[1.25 ; 3.73]	0.621

OR: Odds Ratio CI: Confidence Intervals

Table 5: Univariate analysis - Reasons for staff turnover

	Biharamulo		Kilosa		Newala		Mwanga	
	n = 70		n = 81		n = 81		n = 53	
Workers with reasons to move (%) W	49		37		20		11	
Per type of HF	n	%	n	%	n	%	n	%
W District Hospital	29	73	26	23	30	29	13	26
W Other HF	41	31	55	44	51	15	40	6
W P-value [†]	0.001 [†]		0.058		0.068		0.12	
Per owner of HF								
Governmental institutions	24	38	66	21				
Private not-for-profit HF	46	65	15	53				
P-value [†]	0.025 [†]		0.017 [†]					
Per qualification								
W Not qualified	25	21	36	54	37	18	27	6
W Qualified	45	64	45	23	44	21	26	16
W P-value [†]	<0.001 [†]		0.002 [†]		0.55		0.38	
Per sex								
W Male	38	51	27	30	27	25	12	35
W Female	32	46	54	41	54	17	41	4
W P-value [†]	0.27		0.24		0.24		0.012 [†]	
Reasons for moving*	n = 38		n = 23		n = 18		n = 9	
Better salary	90%		83%		72%		44%	
Better living condition	76%		83%		78%		56%	
Children education	32%		44%		56%		11%	
Job security	45%		48%		17%		11%	
Private practice opportunities	26%		17%		22%		22%	
Family reasons	8%		9%		39%		11%	
More incentives	16%		0		0		11%	
Up-grading-training	11%		0		6%		0	
Others	16%		9%		22%		44%	

[†]Fisher exact

* Several choices were possible; percentage calculated on respondent basis

Reasons for staff turnover are presented in Table 5. Most interviewed workers had reasons for staying at their present position (95% in Biharamulo, 93% in Kilosa, 87% in Newala, and 91% in Mwanga). The most often mentioned reason was job security, which means the guarantee of keeping one's employment contract as long as desired with, at the end, significant pension benefits; it was mentioned by 42% of workers in Biharamulo, 63% in Kilosa, 65% in Newala, and 98% in Mwanga. Other reasons advanced were training and upgrading opportunities (30% in Biharamulo, 36% in Kilosa, 32% in Newala, and 55% in Mwanga), and personal reasons (origins and family). Financial incentives were only cited by 21% of workers in Biharamulo, 12% in Kilosa, 29% in Newala, and 23% in Mwanga. However, at the same time, many respondents had reasons for looking for another position, especially in Biharamulo and Kilosa where a significantly high proportion were coming from not-for-profit HFs. Other differences are also shown in Table 5. The main reasons mentioned for leaving were firstly a better salary and better living conditions, and secondly children education opportunities and job security. Beyond these reasons, many workers looking for another job would preferably move to a governmental health facility when they were employed by mission institutions; otherwise, they would prefer to go to larger cities. Logistic regression presented in Table 6 shows that workers from Mwanga and older workers had less willing to move to another job. Working for public institutions obviously reduced the risk of looking for another position, and there was no more difference between qualified and not-qualified staff when adjusting for working in public institutions.

Table 6: Multivariate logistic regression analysis
Factors associated with workers having reasons to look for another job

	OR	95% CI	P-value
Governmental HF	0.38	[0.19 ; 0.76]	0.006 [†]
District Hospital	1.71	[0.95 ; 3.07]	0.08
Not qualified staff	1.00	[0.55 ; 1.82]	0.99
Male workers	1.39	[0.76 ; 2.52]	0.28
Workers age (yrs)	0.95	[0.92 ; 0.99]	0.005 [†]
Districts			
Biharamulo	1.00		
Kilosa	0.87	[0.43 ; 1.77]	0.69
Newala	0.56	[0.24 ; 1.32]	0.19
Mwanga	0.24	[0.08 ; 0.73]	0.012 [†]

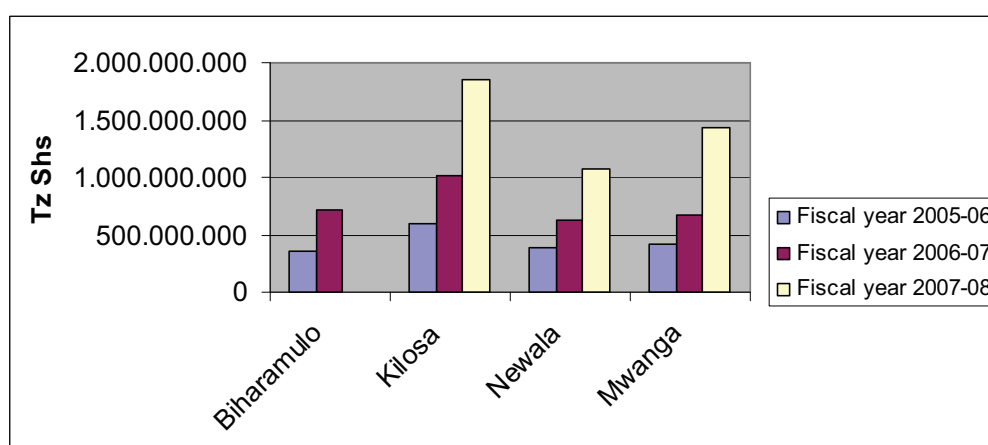
OR: Odds Ratio

CI: Confidence Intervals

Financial incentives

Turning to staff motivation and incentives, the first studied element was salary. Most respondents received their salary monthly and in time (85 % in Biharamulo, 100% in Kilosa, 99% in Newala, and 100% in Mwanga), except for private institution staff in Biharamulo (75% with $p=0.04$). Median salaries were different between districts, with the lowest median found in Biharamulo (P25-P75): 120,000 Tanzanian shillings (98-186,000 or 78-147 USD) and the highest median found in Mwanga: 175,000 (126- 300,000 or 100-238 USD). As a way of comparison the gross domestic product (GDP) per capita in Tanzania was 370 USD in 2007 (<http://data.un.org/CountryProfile>). The difference between public and private structures was significant in Kilosa only: 158,000 (130-204,000) versus 108,000 (75-184,000) with $p=0.001$. In the four districts, there was a significant difference in salaries between qualified and non qualified staff. The increment required by staff for being satisfied (in percentage of current salary) was quite similar in all districts with a median close to 100%. Note that the visit period coincided with the first substantial salary increment policy in public institutions during fiscal year 2006/2007 (in Tanzania, the fiscal year starts the 1st of July). Then a new salary scale was implemented again during the next fiscal year; that can partly explain the difference between the 2 extreme districts because we have visited them at different periods of time: April for Biharamulo and October for Mwanga (Table 1). Figure 1 shows the budget allocated to the districts over three fiscal years. Another cause could be the usual delay to adapt the new salary scale that has probably mostly affected Biharamulo.

Figure 1: Wage bill for the 4 health districts over 3 fiscal years



The question of salary was among the dominant concerns arising from IDIs in all districts. Predominant views from interviewed CHMT members suggested that monthly salaries had increased appreciably under the reforms led by the MoHSW. By contrast, workers from different health facilities expressed concerns over their income compared to cost of living; salary increase was not perceived as proportional to life realities, and not enough to sustain a monthly living. The situation was mentioned as one of many aspects that demoralized health workers leading to poor

motivation and commitment at working place.

"I can hardly meet expenses for 2 weeks from my salary. I have to live at a low standard compared to the status I held. This is degrading." (IDI/Dispensary Kilosa)

"Even if we get 200,000 TzSh (158 USD), this is not enough, it is finished too early in the month and then, we work just because we are employed and not because of commitment." (IDI/Dispensary Biharamulo)

Low salaries induce health workers into pursuing coping strategies. Except in Mwanga (10% of respondents), many workers (51% in Biharamulo, 41% in Kilosa, 38% in Newala) recognized having another income generating activity, especially non-qualified staff (but the difference vis-à-vis qualified staff was significant in Biharamulo only: 76% versus 37%, $p=0.001$). Activities outside official job include mostly agriculture, followed by small scale business and livestock – note that rural and poor environment does not encourage private medical business.

As for other financial incentives, low retirement benefits granted by private institutions discourage workers and push them into applying in public institutions. The question of allowances raised the higher number of complaints at all levels. 43% of workers in Biharamulo admitted getting extra-allowances, compared to only 21% in Kilosa, 10% in Newala, and 6% in Mwanga. The amounts of extra allowances received were low, with a median ranging from 3,000 (Newala) to 30,000 TzSh (Kilosa). In all districts, the fact that health workers at dispensary level should work on a twenty four hour basis without extra payment raised much concern.

"They told us to provide services twenty four hours a day; they should then provide us with allowances as a compensation for extra-duties, even if it is a small amount, instead of forcing us to do the job without any consideration..." (IDI/Dispensary Biharamulo)

Although health workers were aware of their entitlement to some forms of allowances (outreach, leave and extra-hours activities), complaints about the bureaucratic obstacles in accessing administrative services at district management level were also mentioned during interviews in Biharamulo. These included delays in allowance payments and bribes that workers feel obliged to pay to the managers for their allowances to be approved.

"There is an issue of ten percent...when some are nominated to attend a seminar, they give something to the bosses at the district, this puts them in a good position to be solicited next time..., and this situation prevails even with allowances" (IDI/Dispensary Biharamulo).

Non-financial incentives

Non financial incentives are summarized in Table 7. In the first category, working conditions deserved particular attention as workers seemed to be largely dissatisfied, especially in Newala. The main reason mentioned in all district was lack of basic working equipment. Other reasons were heavy workload associated with staff shortage, difficult working environment (no electricity, no water, tininess, security problem in some places, etc.), shortage of drugs, and poor or inadequate management (unfairness, disrespect for staff, harsh language, lack of communication/information). Concerning support for career development, quite many respondents have been sponsored by their current employer for upgrading, mainly to get diplomas/advance diplomas and one-year course. Workers less often benefited from training and/or short courses; in Biharamulo, workers from public institutions were the most frequent beneficiaries from such trainings. The main short courses were voluntary testing and counselling with home based HIV care (40%) and family planning (29%). Granting of promotions was subject to important differences between districts. In Tanzania, promotion is job rating advancement that should, in theory, be considered every 3 years with higher scale of salary and responsibility.

Table 7: Univariate analysis - Non-financial incentives received

	Biharamulo		Kilosa		Newala		Mwanga	
	n	%	n	%	n	%	n	%
1. Positive work environment								
Workers finding work conditions satisfactory (%) W	70	28	80	22	78	12	53	23
Associated reasons * (%)	68		70		71		50	
Shortage/lack of working equipment		50		54		82		66
Workload and staff shortage		44		49		27		42
Shortage/lack of water/electricity		22		6		20		16
Poor environment		24		10		7		12
Shortage/lack of drugs and supplies		2		4		24		12
Poor/inadequate management		12		17		7		2
2. Support for career/professional development								
Workers who benefited from upgrading (%) W	70	26	81	31	77	61	51	25
Workers per type of HF (%)								
W District Hospital	29	39	26	44	26	41	12	38
W Other HF	41	16	51	25	51	72	39	20
W P-value [†]		0.048 [†]		0.11		0.005 [†]		0.11
Workers per owner of HF (%)								
Governmental institutions	24	17	66	42				
Private not-for-profit HF	46	37	15	13				
P-value [†]		0.066		0.031 [†]				
Workers per qualification (%)								
W Not-qualified	25	30	36	44	37	45	27	18
W Qualified	45	24	45	21	40	80	24	32
W P-value [†]		0.45		0.018 [†]		0.003 [†]		0.24
Workers per type of up-grading (%)	21		31		43		14	
One year course		38		63		45		46
Two year course		14		13		28		8
Diploma-Advanced diploma		48		27		35		54
Workers who received training, short courses W	69	23	81	18	76	20	52	15
Workers per type of HF (%)								
W District Hospital	28	3	26	9	27	7	12	14
W Other HF	41	38	25	23	49	28	40	15
W P-value [†]		<0.001 [†]		0.077		0.032 [†]		0.58
Workers per owner of HF (%)								
Governmental institutions	24	46	66	18				
Private not-for-profit HF	45	2	15	7				
P value (Fisher Test)		<0.001 [†]		0.25				
Workers per qualification								
W Not-qualified	24	25	36	12	35	4	27	6
W Qualified	45	23	45	23	41	34	26	24
W P-value [†]		0.55		0.11		<0.001 [†]		0.14

* Several choices were possible; percentage calculated on respondent basis, n (%)

[†] Fisher exact

IDIs confirmed most of those results; especially in Newala where people were particularly dissatisfied; indeed, all persons in charge of a HF complained about staff shortage, chronic lack of equipment, drugs and supplies as well as water and electricity; observations also attested that the majority of HFs were out of essential drugs and poorly equipped. In the four districts, CHMT members agreed that measures such as the decentralization of employment and deployment roles to the district level were taken to reduce the problem of scarcity of human resources. However, the quantitative staff increase has been insignificant compared to needs. Observations confirmed that several dispensaries were solely staffed by medical attendants with no training in clinical skills. Similarly pessimistic views were held by the persons in charge of lower level facilities, such that the district has not been able to satisfactorily solve the problem.

"In fact there aren't enough health workers, for example I sometimes remain alone here, I leave this room (prescription room) and go to the outpatients department where I am expected to dispense drugs and attend patients in the injection room, from there I am expected to go and weigh children at the clinic, ... there is vaccination... yet I am expected to write reports which have become much more numerous than before." (IDI/Dispensary Mwanga)

Interviewed persons identified two main hindrances that compromised vested efforts. The first one was the inability of the district to attract qualified health personnel because of a lack of incentives.

"Life here is different; last year we had twenty vacancies advertised, but only six people applied because there are no strategies to attract them to live in rural areas where there are no houses, electricity and tarmac roads." (IDI/CHMT Kilosa)

The second one was that the increased number of dispensaries has reduced the number of health workers available per facility, as there were not enough potential workers to fill the available shortage, thus necessitating internal staff movements.

Staff shortage was subsequently aggravated, increasing the workload of available staff and affecting their performance.

"You know, politicians are pushing through the idea of establishing dispensaries at least in all villages, several facilities have been built but the problem has been translated to health staff, so what we do is moving the available workers despite the existing shortage." (IDI/CHMT Biharamulo)

As for promotions, there was a consensus in all districts to admit that a recent accelerated promotion process started which helped reducing what appears as a long term problem. On the other hand, health workers complained that the entitlements associated with promotions were delayed or not provided; they spoke about "empty promotions". In Biharamulo, workers thought it was just a strategy to calm down workers who have been struggling for their rights for a long time.

"I have been here for six years but I haven't been promoted, then I thought going to a clinical officer's course to be eligible for a promotion. However, even after graduating I had to wait one year before being promoted, and up to now I haven't received any payment for that... the problem is that they recognize me as a clinical officer in terms of duties and responsibilities, but not in terms of pay." (IDI/Dispensary Biharamulo)

As for management, some health workers mentioned favouritism in many areas such as who receives allowances, who attends further training or refresher courses, etc. Health workers in Newala and Biharamulo complained that trainings and courses were inequitably distributed. In Biharamulo, some even openly talked about favouritism leading to unequal incentives among health workers. Nevertheless, a positive point concerned the improvement of the supervision method, which has taken a more human face in Biharamulo and Newala. Compared to the former approach, more room for discussion and learning has been allowed, which was appreciated.

"Reforms have fostered better supervision of facilities by the district because they are now more human than before, when supervision was like a war, instead of being taken as a learning ground." (IDI/Dispensary Biharamulo)

The third category of non-financial incentives dealt with access to different services, which was pointed as an important source of dissatisfaction in all districts. The lack of decent staff houses, especially for low cadres at the hospital and for other staff at dispensary level, was one of the greatest challenges in attracting and retaining health workers, and was mentioned as another factor demoralizing them.

"Sometimes you may think as if you are being punished! I am coming from a decent home but the government forces me to stay in that hut (showing her house)." (IDI/Dispensary Mwanga)

Table 8 presents the incentives that were viewed by respondents as necessary to motivate health

workers. Non-financial incentives with adequate working equipment were the element most often mentioned in all districts, before salary or allowances. Other important motivating factors concerned children education, staff increase, better working environment, and access to services.

Table 8: Incentives requested to perform properly the work

Incentives mentioned* (%)	Biharamulo	Kilosa	Newala	Mwanga
Respondents n	69	79	81	50
Financial incentives				
Allowances	48	53	37	30
Better salary	41	46	32	28
Non financial incentives				
Adequate working equipment	50	62	77	46
Up-grading/Training/Seminars	35	44	28	40
Increased staff	33	42	19	22
Better working environment	25	27	27	24
Transport	13	11	20	20
Good house	17	11	11	20
Enough drugs and supplies	9	3	24	10
Better management	7	17	9	4
Others	6	5	1	8

* Several choices were possible; percentage calculated on respondent basis, n

Discussion

Although salary and extra allowances are considered as important incentives, this study globally confirms that non financial incentives such as working equipment and conditions, training, and supervision are also powerful motivators. Another encouraging result pointed by the survey is the stability of health staff in rural districts, coupled with low percentage of workers planning to move.

The study was done at grassroots level with people directly facing problems, which reflects real world experience. It covered the different district levels and the sample size generated significant results. The use of qualitative and quantitative methods with “concurrent procedures” provided a more comprehensive analysis of the problem [28]. However, despite consistent findings, the survey results cannot be extrapolated to other populations in Tanzania without caution because some types of districts such as urban ones were not considered in our study due to limited resources. The number of interviewed staff was lower than the projected number in Mwanga because of few workers at the district hospital. Projected figures (see Table 2) were based on a non-informative prevalence of 50%. Actually, our sample size for Mwanga (53) is sufficient because with an observed prevalence of 20%, the sample should have been at least 51. We cannot rule out bias for hospital staff, as we interviewed staff present the day of the visit and absent workers may have different views. But in rural areas, this possible bias is less likely than in urban areas. Moreover, it is not expected in other facilities because almost all staff was present and interviewed the day of the visit. Since we could not collect information from the workers who had already left their job, this might have introduced another bias. However, the qualitative part of our study, with in-depth interviews from key informants, gave us an insight of the reasons for staff moving as well as for the higher turn-over found in private institutions. The sample does not adequately represent the private not-for-profit HFs, except in Biharamulo; weighting was not possible because the number of workers in private HF was unknown in Kilosa and Mwanga, and there was no private HF in Newala. Despite these potential limitations, our results are robust enough and relevant with regard to current knowledge, as discussed hereunder.

Staff stability

Our study points out a quite high health staff stability in rural districts, especially for non-qualified staff that probably have fewer opportunities and do not want to loose seniority advantages. Except for the Biharamulo district hospital which experienced an important staff turn-over (attributed to recent opening of vacancies in public institutions that attracted many qualified workers), the proportion of public HF workers having reasons to look for another job was low because of the perception of a better status in public sector. This is consistent with

other surveys that indicate that governmental institutions remain very attractive for health workers in Tanzania with improvements in pay and benefits [29, 30]. That could become rapidly problematic because private not-for-profit HF's play a major role in several remote areas, especially where they act as the only hospital available in a district [2]. Evidence regarding the relative attractiveness of public HF's in other countries is mixed. McCoy et al [19] report higher salaries in private HF's in Ethiopia and Zambia; Ndeti et al [31] point to more attractiveness for private facilities in Kenya. Besides, despite the health workforce is unevenly distributed at the disadvantage of remote areas [23, 32], we found that most staff in place was not planning to leave. Hence, staff retention appears to be not so difficult once it is in place and paid; the difficult task is rather to recruit and have effective posting [29].

Financial incentives

Whereas most African countries have low salary levels that are perceived as inequitable [33], salary is usually the leading motivating factor reported in our study. In Tanzania, doubling or even tripling salaries was already advised in 2004 [34]; but the government raised health staff salary for the first time in 2006, with another significant increase in July 2007 [29]. The perception of increased salary was confirmed in all districts, but delays were reported and most workers complained that it was not yet enough to face real cost of living; these findings are similar to those of the joint external evaluation of the health sector in Tanzania for the period 1999-2006 [29]. Nevertheless, many interviewed workers report having other income-generating activities; the prevalence of such coping strategies, presented as to compensate for unsatisfactory salary, is increasing in other countries [17, 19]. The increment requested by interviewed workers should have been paid according to the 2007-2008 budget.

The absence, insufficiency, unfair attribution, and/or delay in receiving extra allowances are pointed as important demoralizing factors. But anyway, it is difficult to assess the total income perceived by health workers so as to be able to lead in-and inter-country comparisons, as well as to evaluate the fair requirements for staff motivation. The high complexity and diversity of revenues (salary, extra allowances, per-diem for attending seminars, unofficial payments, etc.) and disparity in living costs contribute to the difficulty of having standard and accurate data [19].

Non-financial incentives

The working environment brought the higher proportion of dissatisfaction among respondents, mainly due to a lack of basic working equipments, heavy workload associated with staff shortage, and difficult living environment. Yet, this seems to be a common trend across all types of HF's and not influencing turnover behaviour, which appears to be more linked to staff status (perceived as better in public HF's). Other studies find low morale and motivation among health workers for reasons such as poor working conditions, inadequate supply of drugs and equipment, staff shortage, favouritism, and promotion delays [30, 31, 32]. A recent survey shows that the Tanzanian health work environment is negatively perceived by 50% of workers [24].

As confirmed by another study in the Kilimanjaro region [35], understaffing is really a problem. Measures taken to reduce extra workload due to HRH scarcity were found insignificant compared to the needs – and the problem has been aggravated by the rising number of HF's and weak strategies to attract new workers. This is recognized by the MoHSW [36]. However, despite the abolition of the public sector employment freeze in 2003, thousands of non budgeted positions persist, and vacancies budgeted have not been completely filled, especially in rural areas [32]. The proposed vacancies are not accompanied by specific incentives to attract personnel in poor and remote areas. Nevertheless, some evidence suggests that many unemployed health professionals would like to be employed by Local Government Authorities [37]. Similarly, in Kenya, many unfilled positions in public HF's coexist with increasing unemployment levels among newly graduated health workers [31]. Nevertheless, some positive efforts to increase non financial incentives have been reported. Support to career development in the form of trainings and courses seems to have somehow improved in the past few years. They are strong motivators through improving knowledge and also getting allowances [30]. The MoHSW made significant efforts to upgrade thousands of health workers in the past years [32, 36], notably by investing in vocational training and establishing specific training centres in different zones in the country. Yet, some kind of favouritism in the choice of workers was also observed in our study, as reported by Munga and Mbilinyi [38]. Supportive supervision is another improvement pointed out. Supervision has indeed been shown to improve performance through improving workers motivation [9]. The change from a harsh and haughty relationship to more respect and learning discussions is perceived as a stimulating and encouraging factor enabling staff to

develop self-esteem. This is especially the case for workers in rural areas as supportive supervision enables to improve quality of care, by making them a part of the system and by reducing remoteness [38]. However, contrary to our results, a survey in the Kilimanjaro region reports that supervisions were irregular, not friendly and not supportive, so that they negatively affected workers' morale [35]. Finally, another quantitative study using multivariate models to estimate employment preferences of nurses from the public sector in Malawi showed that employment choices is not influenced by a single attribute, but that all proposed elements (including salary and improved working conditions) have a significant effect [39].

Conclusions – Policy implications

Our study is in line with a systematic literature review arguing that both kinds of incentives (financial and non-financial) are necessary to optimize the retention of health workers, so that reform programmes should not focus on financial incentives only, because they may not be the appropriate answer by themselves [20]. Yet, governments are often more concerned by the total workforce and wage bill, omitting other fundamental issues like organisation, personnel motivation, and individual performance [40] – while it is crucial to understand the whole picture of incentive environments [41].

Our study provides valuable results as for HRH motivation in Tanzania. The observed stability of health staff in rural districts, coupled with low percentage of workers planning to move, is somewhat encouraging and suggests that the major policy objective should be to attract staff to disadvantaged regions through a right mix of incentives. Findings from recruitment and turn-over studies among African health staff report that around 50% of turn-over can be attributed to financial incentives [42]. In Tanzania, salary increases with qualification and seniority, which can be a factor for improving staff retention; but recent salary increases have not been perceived as sufficient to compensate for the cost of living. Considering the latter is uneven among the country, an incentive tool could be to offer differentiated allowances to compensate for the difficulty of working in remote areas. However, financial incentives are probably not the most needed for HRH in Tanzania. Our study shows that the working environment is probably the factor that should be tackled as a priority to satisfy health workers and increase their motivation and performance. Indeed, expecting that health staff will perform well without adequate equipment does not make sense – but improving working conditions involves further aspects such as equipment supply, career perspectives, training, and social environment without favouritism [17].

Finally, recent developments in the Tanzanian health policy may jeopardize recent progress. In particular, the current objective of having one dispensary in each village and one health centre in each ward means that, between 2007 and 2017, the existing number of dispensaries should be doubled, and the number of health centres multiplied by 7. That would require recruiting 144,000 new health staff over the period [26], whereas previsions show that the health workforce in Tanzania is declining and should follow that trend [8, 22, 32]. Besides, the government also needs to invest in facilities by upgrading them, ensuring regular medical supplies, and improving working conditions in rural and poor areas. Therefore, financial and human resource availability will probably limit the extent of implementation and force the government to revisit and adjust its optimistic objectives for the ten coming years – hoping that it will privilege the quality of health care through appropriate HRH management and motivation, rather than the quantity of HFs.

Competing interests

The authors declare that they have no competing interest.

Authors' contributions

VZ conceived the study, participated in its design, coordinated data collection and analyses; she interpreted the data and drafted the paper. AM participated, in analyses and interpretation of data and in writing the manuscript. EP participated in the interpretation of data and critically revised the manuscript for substantial intellectual content. DN participated in writing the manuscript, in analyses and interpretation of qualitative data. AR collaborated to study design and participated in interpreting data, and in writing the paper.

All authors read and approved the final manuscript.

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5.5. Health financing at district level

It was difficult to obtain clear and complete data on sources of finances and expenditures (except in Mwanga); so it was not possible to evaluate properly the budget performance. Globally, grants from governments (OC) and HSBF have increased during the period of evaluation as well as the amount of health expenditures. The HSBF represented 5 to 17% of the health district budget.

It was reported that since reforms, districts have been more autonomous deciding on procurements and allocation of funds from various sources and that contributed to improving health service delivery at different levels. However, CHMT complained of delay of money transfer from central government to Council authorities that hampered quality and timely implementation and reporting on the activities.

Concerning the new sources of finances, the amount of funds collected from cost-sharing remained limited and varied between districts, from 1.5 to 5% of total incomes. When reported at lower HFs level, it became much less. Nevertheless, in three districts, the funds collected contributed to improve supplying system to face MSD failures. Though, managers reported that the number of categories of exempted people targeting the most frequent attendants to the facilities compromised efforts to collect funds and contributed to failure of the CHF's initiative.

Looking at user-fee system, only one third of patients interviewed had to pay for services. Exemption system was well known at all levels and reported to be quite respected. Exemption for under-five children was respected in 95% of all cases reported. That percentage was significantly higher in public HFs. The proportion of paying patients who could afford was very high, 94% for all interviewees. There was some confusion on how to get back and use the money collected at HFs especially at lower level; sometimes lack of transparency was also reported by communities.

About CHF, it was not functional at all in three districts with early drop-out from the system (at visit time we found that $\leq 1\%$ of households subscribed for almost 10% in Mwanga). Most reasons mentioned were in relation with broad exemption system, shortage of drugs, absence of laboratory facility, limited coverage in term of services (transport not cover) and in terms of place to be treated (district, public HFs), unfair workers attitude for subscribers, misinformation or absence of information (Biharamulo), no trained and specific personnel attached to the task. The poverty of communities was not pointed as a reason, except in few villages (Newala).

Finally, few cases of bribes were reported and observed (Kilosa and Newala).

5.6. Referral system

There was no real improvement observed and reported by health workers and community. Poor communication system and lack of transport were the most common complaints especially at lower HFs level where most of patients must arrange transfer by themselves. In fact, referrals for severe cases remain a struggle and a challenge in those areas.

5.7. Health Information System

In theory, there were changes in term of computerization and appointment of specific personnel responsible of health data. Practically, we faced misuses of computer and corrupted/damaged data files. Really at district and at HFs level, getting proper and accurate data is "parcours du combattant" with delays, incomplete, loss and obvious mistaken reports. On the other hand, health workers complained that reporting tasks cost too much time with all 12 MTUHA books plus numerous other report sheets from various vertical projects.

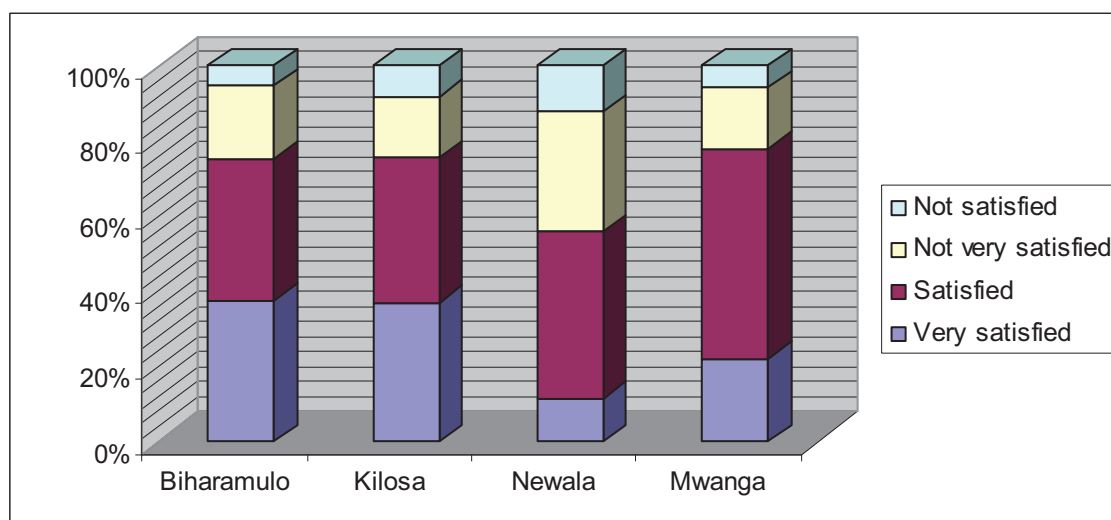
In summary, we estimated that district health data were not really trustable.

5.8. Supervision

Increased funds and planning autonomy helped in improving frequency and quality of supervision of HFs. It was reported a change in attitude, from controlling to supportive supervision with more discussions and learning that help to improve health service provision to the community. Increased funds and planning autonomy helped in improving frequency and quality of supervision of HFs.

6. Patient satisfaction rate

Figure 17: *Proportion of patients per degree of satisfaction for health services received*



We evaluated the general satisfaction level of the patients met at different HFs. Unfortunately it gives a unique transversal result as we missed previous data. However, it makes sense when connected with preceding sections. Around 70% of patients were satisfied with health service delivery except in Newala (55% only). Figure 17 illustrates the result per district. Satisfaction rate was significantly higher for patients treated in private not for profit HFs.

The only existing tool to measure patient/community satisfaction at HF level is a suggestion box that does not work.

7. Community participation and ownership

The reform with development of different participatory boards and committees was accepted positively by all respondents. Council Health Service Board and Health Facility Committees were in place and majority was functional with regular meetings. The main activities of those committees are to discuss the problems of drugs, staff, funds, buildings and other routines issues. However, planning and management activities were never found in their agenda. In fact, monitoring, controlling resources and management remained in the hand of CHMT and hospital management team.

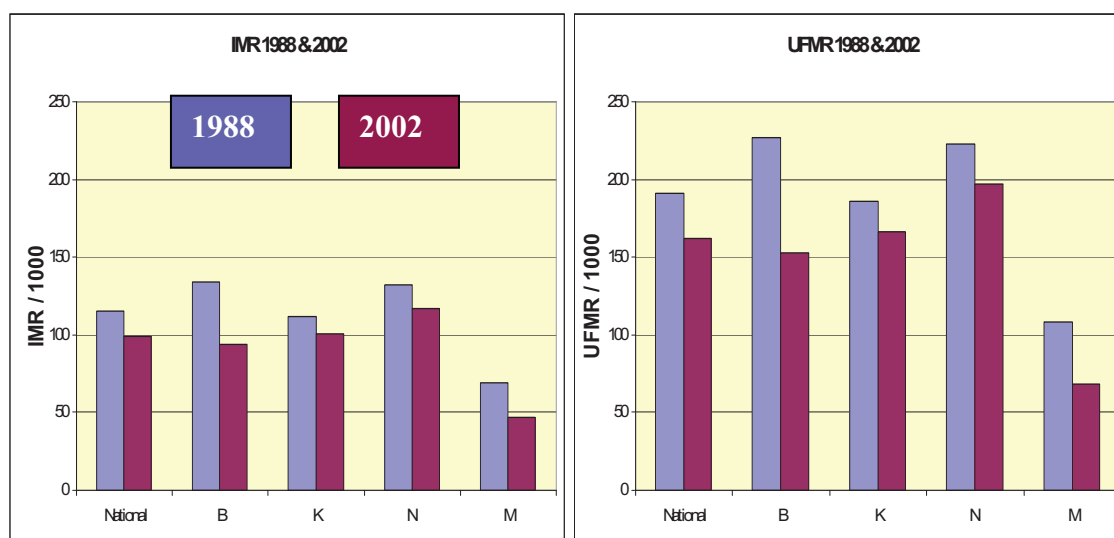
On the other hand, the sense of HFs ownership in the communities has increased mainly because of cost-sharing mechanisms and active participation in technical activities in the facilities.

8. Health outcomes and impact indicators

Under-Five Mortality Rate and Infant Mortality Rate

The national trend of reduction in children mortality is confirmed in the four districts as illustrated in Figure 18.

Figure 18: *Trend of Under-Five Mortality Rate (UFMR) and Infant Mortality Rate (IMR) (1988 and 2002)*



Sources: National Bureau of Statistics, Tanzania 2006.

Other indicators

All available information and data extracted on the field can be found in the second part of the manuscript (Chapter X). We have already mentioned in the previous section (HIS) the difficulties met to obtain trustable information and we reiterate the necessary caution when looking to the presented data.

Some indicators were not calculated in routine. For instance, to calculate the bed occupancy rate we had to search in numerous files and required information was only available at the hospital level. In addition, the data presented at district level were not always complete because the information from private institutions was not taken into account. We also noted important variations in some numbers from one year to another. These changes could be explained by different ways of filling the registers. For instance, estimate of outpatient cases included sometimes old cases and sometimes not, or patients seen at the preventive clinic (mother and child) were sometimes included in numbers and sometimes not. On the other hand, some indicators were not calculated using recommended standards. For example, when calculating percentage of delivery by trained personnel, local staff included deliveries done par Traditional Birth Attendants; also, deliveries occurring at HF were sometimes done by non qualified attendants. Therefore, results were overestimated.

For all those reasons, we decided to not present results that could be inaccurate.

CHAPTER VIII – DISCUSSIONS

1. Quality assurance with methods used

1.1. Development and testing of our instruments

The researchers' team discussed the major objectives of the study while linking the research questions and the tools designed to the wider spectrum of the objectives of the study. All tools were pre-tested in a pilot study done in Kwimba District, Mwanza Region in June 2006, to examine their potentiality on accumulating the required information (Zinnen et al 2007). Few questions were corrected to suit the context in which the data were expected to be gathered and few questions were added to cover the gaps identified during the pilot study. The selection criteria for site selection, apart from rural situation, were convenience, access and knowledge to the different levels of health in that particular district. This allowed a better relationship within the case to explore, try and detail protocol on different approaches.

1.2. Validity and reliability

A large number of different schemas exist for assessing quality of qualitative studies (Pope et al 2007). We opted for the concept of validity and reliability because they are commonly used to establish the strength of a social research and they can also be used to judge the quality of a case study with mixed methods approach (Gagnon 2005, Lewis and Ritchie 2003, Pope et al 2003, Yin 2003, Yin 2009).

The internal validity

The internal validity makes sure that the disclosed and described phenomena are authentic representations of the observed reality (Gagnon 2005). For Gagnon (2005), the internal validity is the main strength of a case study.

To assure a maximum of internal validity, we used multiple sources of evidence (mixed methods: documentation, report, literature, structured interviews, in-depth interview, focus group discussion, and observations) with triangulation of data to corroborate and augment evidence. Moreover, our sample design fit to our objective and used appropriate methods according the issues to be studied. We made sure that all levels of health system have been explored with all categories of actors represented in a health district. Within each case, representativeness was assured and bias selection avoided as much as possible. Thus, we proceeded to a computerized sample calculation when the potential number of participants (workers and patients) was too important; the selection of sites (HFs and villages) was sampled randomly to cover all districts and the selection of key informants was purposive with most important health manager representatives per level being interviewed. The in-depth analysis of the health sector field at operational level was optimized because of good knowledge and long experience of the district at different levels with the different actors by the main researchers. Regular peer debriefing to enhance the accuracy of the findings with more experienced social scientists have also contributed to validate our results.

The external validity

The external validity concerns the extent to which the study's findings are applicable to other groups within the population or to other context or settings (Gagnon 2005, Lewis and Ritchie 2003, Yin 200, Yin 2009). The external validity is usually presented as the main weakness in doing case study (Gagnon 2005, Yin 2009).

First, we opted for a multiple-case study that contributes *de facto* to increase the external validity of the results. The evidence from multiple-cases is more convincing and the overall study is therefore more robust (Gagnon 2005, Herriot and Firestone 1983, Yin 2009). Then, size computation and random sampling based on our research objective are the strongest tools to assure external validity.

The reliability

The reliability demonstrates that the different stages of a study can be repeated with the same results. So if another researcher follows the same procedure and uses the same protocol, he/she would arrive to the same findings and conclusions (Gagnon 2005, Yin 2009).

In our study, we have secured the reliability by defining: (i) clear and complete protocol, (ii) precise description for the selection of target population, (iii) characteristics and context of the various sites of study with clear units of analysis, and (iv) relevant tools (questionnaires and guide discussions) in local language. We kept all recorded interviews and discussions with their transcription in native language, and raw collected data from questionnaires, observations, and records are preserved and accessible.

2. Limits of the study

The study was conceived in order to have valid results for the selected districts such that the extrapolation can be done for the whole district. However, results cannot be extrapolated to other population in Tanzania without caution because some types of districts, such as urban ones, were not considered in our study due to limited resources. Also, the sample does not adequately represent the private not-for-profit HFs, except in Biharamulo, and weighting was not possible because the number of workers in private HF was unknown in Kilosa and Mwanga, and there was no private HF in Newala. On the other hand, rather than to select districts by randomization, we could have decided for purposive choice to have more heterogeneity (urban versus rural, public versus private, riche and poor, etc.). However, the ministry of health recommended two districts corresponding to extremes in under-five mortality rate and corresponding also to extremes in socio-economic terms. In addition, the two other selected districts were vast with scattered population, and one of them has significant number of private not-for-profit institutions. As a whole, the four districts were quite representative of Tanzania rural areas.

Considering the selection of health workers for structured interviews, we cannot rule out selection bias for hospital staff, as we interviewed workers present the day of the visit and absent workers may have different views. But in rural areas, this possible bias is less likely than in urban areas. Moreover, it is not expected in lower health facilities because almost all staff was present and interviewed the day of the visit. From the patients' interviews side, we acknowledge that we missed an unknown fraction of the population that does not use the classical health facilities and consequently could have quite different opinions. The visits and discussions in different villages with the community tried to compensate that weakness.

Obviously, there are limitations in attributing the observed results/outcomes to a specific strategy, especially when different strategies are implemented in the same time (e.g. vertical projects), or in sequential phases with timing that differs from one place to another, or are too recent to have affected the output.

Some data from previous years were missing and therefore, only immediate or short-term effects could be observed during field visits (transversal data).

At operational level, many health data were lost, not trustable or not existing in routine. In addition, some indicators were calculated with hospital data only, or with public institutions only, and sometimes with non-standard denominators. Those elements made difficult to investigate accurately changes in terms of health indicators and workload for a whole district.

We have collected huge number of data coming from various sources and we have not been enough selective about the information being reported; in fact, when drawing-up the outlines of protocol, we did not consider what should be realistically covered. Finally, to avoid that readers are swamped with details, we divided the research report in two parts, making available more complete results coming from all methods in the second part.

Some discrepancies appeared between districts but our design could not explore in-depth the reasons of such differences. We partially assumed that known socio-economics factors explained most of them. However, global results had the same trend across districts in different degree of importance, and without interfering with our final conclusions.

3. Main results

Our research, through its analytical framework, brings evidence that the adoption of a SWAp has stimulated and made possible the implementation of the main Health Sector Reforms. Also, the adoption of a SWAp in health has increased coordination between donors and between donors and government. It has been translated by development of a comprehensive and coherent health sector plan that is implemented with available resources for health utilized within the framework of the agreed programme.

Figure 19, developed from our framework model, summarizes how the SWAp supported the main HSR in Tanzania and how together they have contributed to the National Health System Strengthening in improving some elements of the different building blocks.

The multiple-case study could also demonstrate modest improvement in health service delivery at operational level that could be linked in somehow with the national HSR supported by a SWAp and the HSS. Different components of quality health service and outcome did not improve at all. The main results are illustrated in Figure 20.

Figure 19: *SWAp & HSR and health system strengthening*

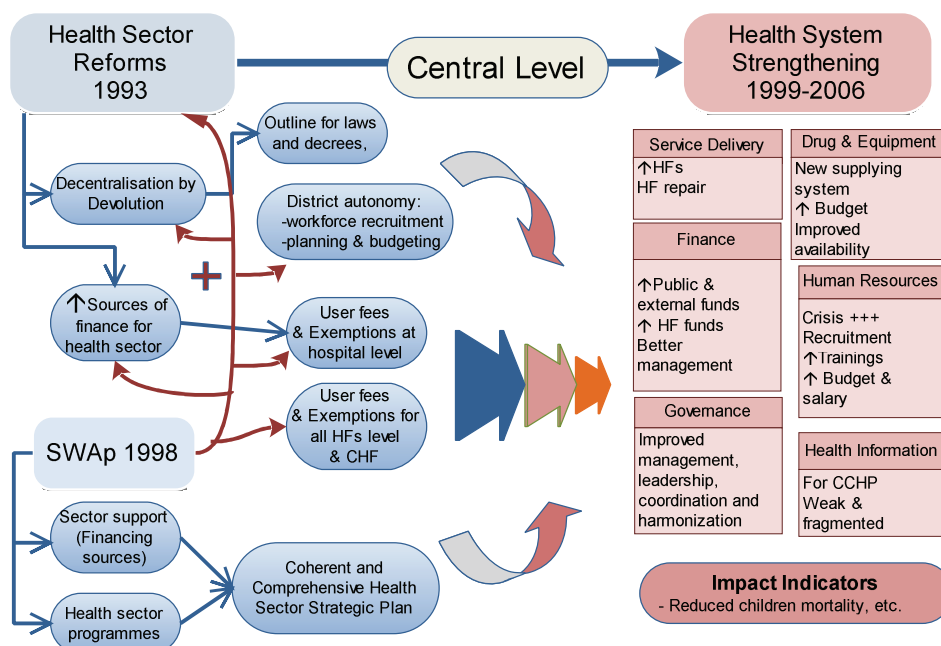
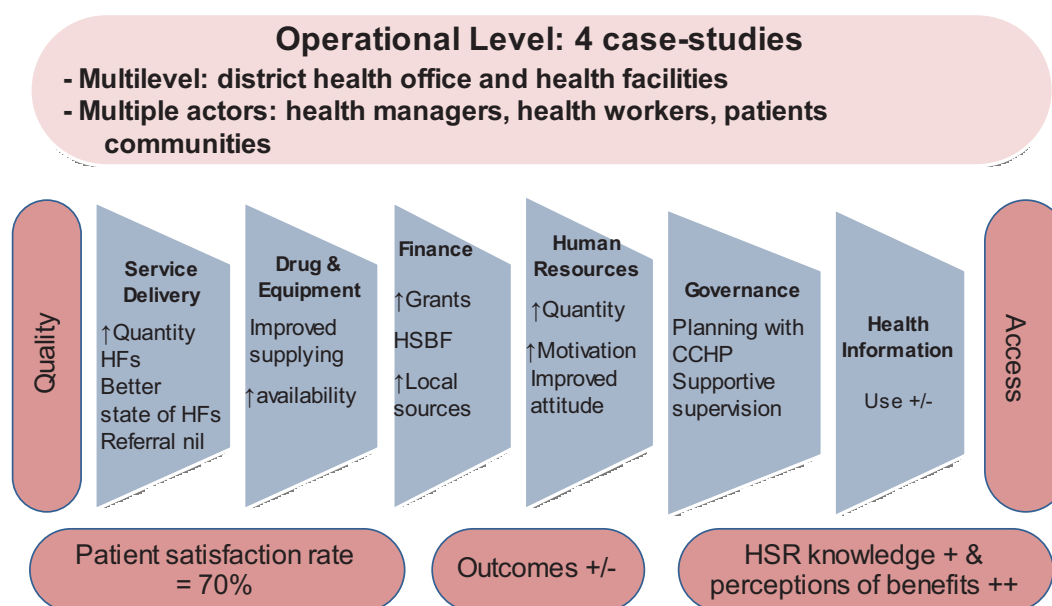


Figure 20: *Main findings at operational level*



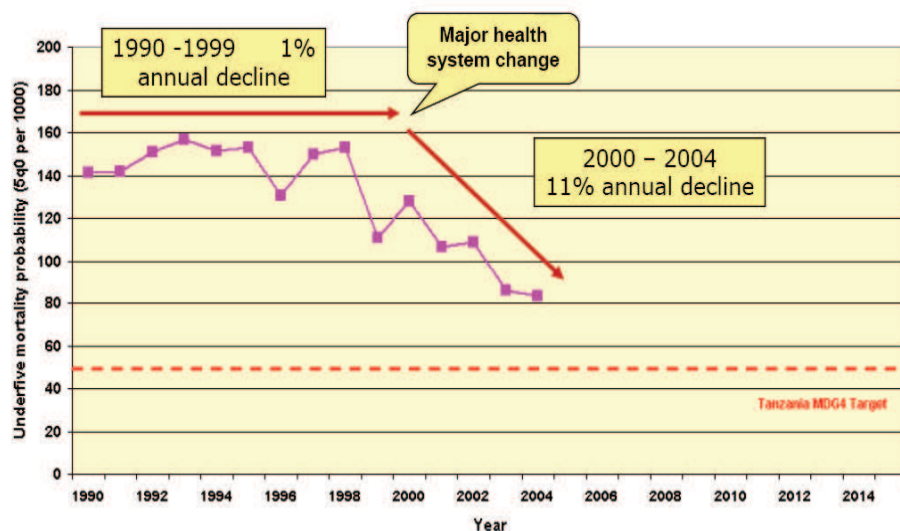
The success of SWAp approach demonstrated by our evaluation in Tanzania contradicts a recent literature review done in main health policy journals between 1990 and 2007 about SWAp or development partners' coordination. The authors found only 14 articles. Among them 6 were about Uganda or Bangladesh with limited pool of experiences and the others focussed mainly on difficulties meet for SWAp implementation (Dodd and Hill 2007). Of course, SWAp is not a blueprint strategy or "magic bullet" able to solve all health problems and countries have different contexts requiring an adapted way of working. On the other hand, the scarcity of scientific publications and the lack of empirical evidence illustrated well the complexity of analysing the interface between operational evidence and policymaking.

4. Impact indicators

To give a comprehensive report on health in Tanzania for the period evaluated, we presented the trend of the main impact indicators relating to health MDGs. The main results reported concerned the spectacular decrease of under-five mortality rate. Our objective was not to look for a direct relation cause-effect between HSR/SWAp and outcome indicators. Thus, measuring the impact of such policy on the health of the population is too ambitious and too early because the changes may be determined by numerous other factors. Besides, we have argued that experimental studies for research of strong linear chain linking cause with effect cannot be applied to complex organisations like a national health system.

However, in literature review, we found reports that attribute the success to different policies and interventions.

Figure 21: *Under-five mortality decline in Tanzania*



Source data: Tanzania DHS 2004, Tanzania National Bureau of Statistics & ORC Macro.
Masanja et al. Lancet 2008; 371: 1276–1283.

Figure 21 comes from a study done by Masanja et al (2008) showing the acceleration in the reduction of under-five mortality rate between 2000 and 2004 in Tanzania.³² The authors associate the result with the change in health policy that occurred during the same period. They noted that HSR and SWAp were implemented in 2000 with increase of health expenditure, decentralisation of pool funding funds and of planning activities, and new health policies (Masanja et al 2008). They partially based their assertion on the fact that increased health expenditure was strongly correlated with reduction of child mortality in one study done in 43 developing countries (Houweling et al 2005). In addition, they reported that, during the same period, other major interventions on child survival like vaccination coverage did not change and that the development of HIV/AIDS interventions were developed later in Tanzania.

For other authors, the reduction can be associated in a large part to specific preventive health interventions, such as malaria preventive strategies (sleeping in bed nets) and being immunized (Houweling et al 2005, Janson 2007, Lomøy 2008). For UNICEF (2010), “much of the progress reflected in the new child mortality figures is the result of widespread adoption of basic health interventions such as early and exclusive

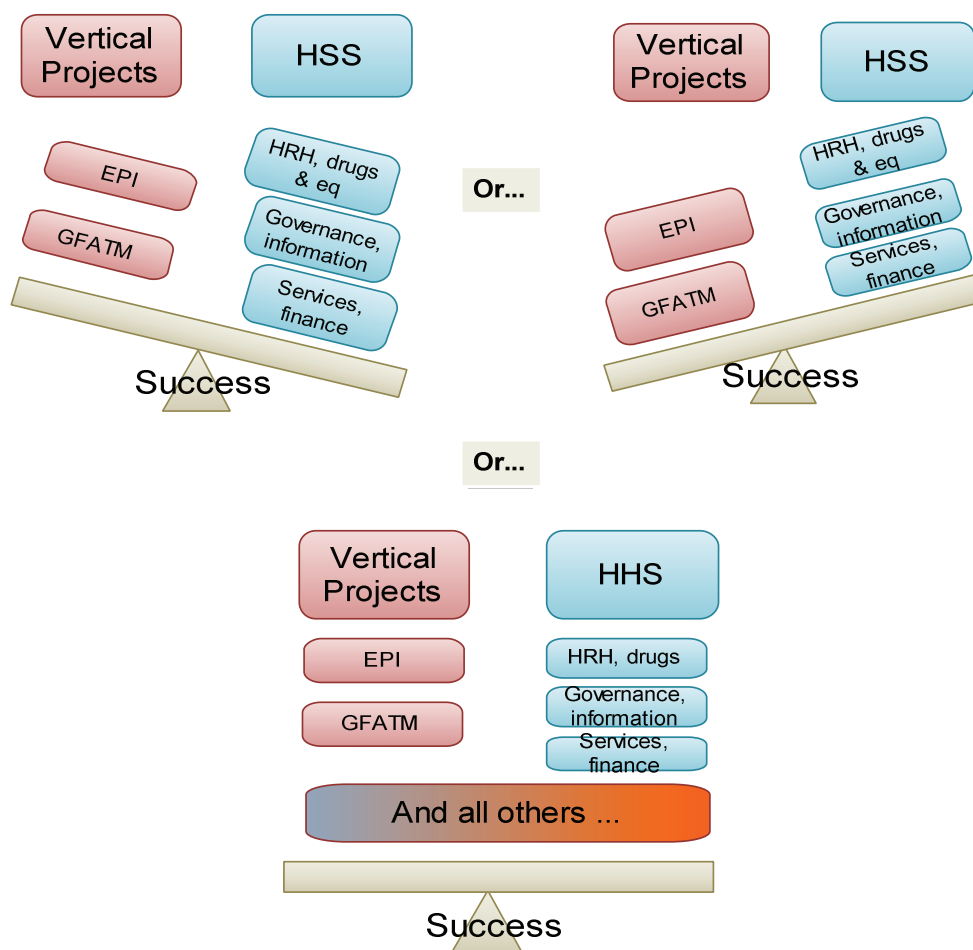
³² Copy from author’s presentation: INDEPTH Annual General and Scientific Meeting: “From knowledge generation to improved health policy and practice”, de Savigny; Dar Es Salaam, Tanzania September 22-26, 2008.

breastfeeding, measles immunization, vitamin A supplementation to boost children's immune systems, and the use of insecticide-treated bednets to prevent malaria (<http://www.unicef.org/childsurvival/>). In Tanzania, the last Poverty and Human Development Report (2009) stipulates that “the extraordinary improvement in child survival since 1999 is most likely explained by gains in malaria control”.

We have illustrated by Figure 22, the summary on how the success can be attributed to different strategies with different weights of influence. No study design is really able to demonstrate which strategy is the most effective. Usually, strategies involve several elements that are not specified, nor studied in a way that would indicate which component is essential, or where there are synergies between them (Peters et al 2009). So “it is unrealistic to claim probabilistic statements about the magnitude of change attributable to particular strategies” (Edward et al 2009 p 70).

However, we think that the most important aspect is finally the improvement of the health status in the population. Thus, the high complexity of the health system and the challenges of MDGs push forward general consensus for alignment and harmonization defended by PD and AAA. Stronger national health systems should be associated with higher commitment of major vertical projects institutions (GAVI, GFTAM, UNAIDS, PEPFAR, etc.) to support and implement coherent and comprehensive health sector strategies. Synergies between all contributing factors and strategies are welcome to improve well-being of the population.

Figure 22: *Success contributories*



5. Incoherence between health policies

One objective of our research intended to explore the conditions for success and/or failure of the national policy on health service delivery to possibly detect the determinants of policy-implementation gap. In fact, our multiple-case study has revealed incoherence between different health policies and reforms leading to contradictory effect at operational level.

5.1. Cost-sharing mechanisms and exemption policy

The different cost-sharing mechanisms were put in place to increase the sources of health funding and to increase access and equity to services (particularly with CHF). Result from our evaluation showed that: (i) the total amount of funds collected remain very low compare to the total of the health budget expenditure, and (ii) the CHF mechanism covers a very small percentage of Tanzanian households. **Concerning the total amount of funds collected**, the authorities have already agreed to revise their objective³³ and to not consider the measure in terms of contributing to the overall sector, but more in terms of improving the availability of flexible funds at the HF level (The United Republic of Tanzania, Ministry of Health & Social Welfare 2005). Bennett and Gilson (2001) already suggested that user-fee and community-based health insurance are unlikely to be equitable or sustainable if they are the prime source of health finance but should be seen as “top-up” to other financing mechanisms (Bennett and Gilson 2001). The fact that user fees’ contribution to the total health sector funding is marginal is even an argument developed in the literature by supporters of user fees abolition (Vogel 2006). Finally, we admit that strategy is somehow consistent when considering that: (i) reports indicate fee revenues are retained at district level and contributed to improve supplying essential items in hospitals and in other HFs, (ii) fees requested are low with high affordability rate, and (iii) exemptions are quite well respected.

The CHF issue is more subject to discussions. The process have started with very expensive pilot study in Igunga District in 1996 and by 2002, the scheme have gradually extended to other districts. Preparation included extensive marketing strategies, hundred of meetings, multiple trainings, pilot evaluations, etc, with the expectation that approximately 30% of households would join at the beginning to reach later 70% (Shaw 2002). Despite such investment, the membership rate remains very low in all districts. An evaluation on health sector user fees in Tanzania confirms that the CHF enrolment was far from the expected target with the majority of districts reporting 5% of contributing households (Laterveer et al 2004). More recent studies indicate that enrolment was further reduced (Mtei and Mulligan 2007). From our survey, we have noted two parallel policies that seem partly responsible of this failure. First, in lower HFs (HC and Dispensaries), the user-fee mechanism has started in the same time but with a very low flat rate (around five-fold cheaper than membership CHF contribution), so people are not very encouraged to contribute. Second, the policy of exemption includes the majority of people susceptible to utilise the health services. Shaw (2002) made an important evaluation in Tanzania on CHF and shared the view that the user-fee was not high enough to motivate household for joining the risk pool. He listed the conditions needed for CHF success and he ranked them according to their importance, and he found that “user fees sufficiently high to motivate prepayment” was the 3rd in importance among a total of 8 identified (Shaw 2002). Similarly, it is reported that in

³³“To reduce the existing financing gap in order to improve the capacity of the sector to deliver its goals in the face of increasing costs and persistent poverty” (The United Republic of Tanzania, Ministry of Health & Social Welfare 2005).

some districts, people can pay low-fee rather than pay a higher CHF premium (Mhina 2005). In another literature review on CHF in Tanzania, Mtei and Mulligan (2007) confirmed that the broad exemption policies contributed to have limited numbers of CHF subscribers. On the other hand, most of the exemptions (under-five, pregnant women, and patients with chronic diseases) represent the highest cost item as they are the majority to use health services. Moreover, many of exempted people would be able to afford cost-sharing mechanisms (Euro Health Group 2010).

5.2. Policy of increasing the number of HFs

The 2006 Health Policy decrees the importance of accessible and sustainable Primary Health Care services for all citizens through provision of **dispensary in every village, a health centre in every ward and, a hospital in every district** (The United Republic of Tanzania Ministry of Health and Social Welfare 2007). Table 6 summarizes the number of new HFs planned between 2007 and 2017 with the projection of the total health workers required to fulfil national staffing standard.

Table 6: *Number of planned HFs and required staff for 2017*

Public Sector	Number in 2006	New for 2007-2017	Staff shortage 2006	Required staff
Ref Hospitals	29	0	56%	8,854
District Hospital	95	19	67%	18,837
Health Centre	331	2,074	59%	56,784
Dispensary	3,038	3,108	69%	52,076
Training Institution	72	4	74%	1,262
Total Public	3,565	5,205	65%	137,813
Private sector				
Hospitals	132	-	88%	
Health Centre	150	-	86%	
Dispensary	1,641	-	84%	
Training institution	36	-	62%	
Total Private	1,959	-	86%	

Source: (Ministry of Health and Social Welfare, The United Republic of Tanzania 2008b)

So, clearly, the plan expects to multiply by 6 the number of HC and almost by 2 the number of dispensaries without taking into accounts the private sector. According to the national staffing level, the projection of number of staff requirement in public sector, to fill the existing gap and to fill the posts for new HFs is close to 140,000 health workers (almost five-fold the current number), the number to fill the gap in private sector being around 40,000 in 2006.

Tanzania faces a severe HRH crisis that negatively affects the quality of health services provided. The severity of the problem has been recognized few years ago and policy of recruitment and training has been initiated. However, actual shortage and realistic observations questioned the feasibility of such policy. On the other hand and in another section, we showed how the current HFs visited were poorly equipped with basic working equipment and poorly supplied in water and electricity. Both elements, staff shortage and insufficient equipment, are the most important sources of staff dissatisfaction and are major factors hampering quality of health services.

Figure 23: *Policy on health facility quantity versus quality*

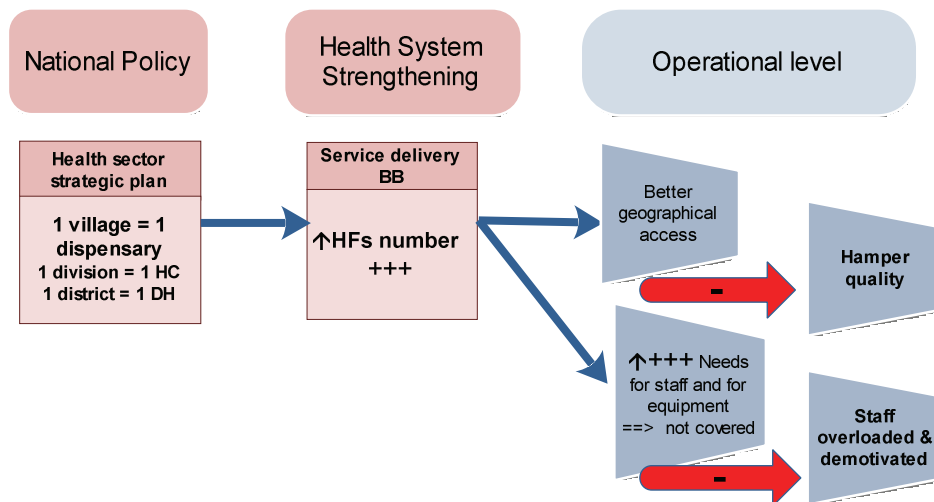


Figure 23 illustrates how unrealistic policy can have opposite effect at operational level. In addition, we could not found clear evidence of existing concrete action plans with necessary investment to realize those strategies.

The attribute of unrealistic policy is attested by a recent evaluating study (2009). The authors evaluated the capacity of Tanzania scaling up training programmes. They have established that it is only 10 years after the implementation that the output of skilled personnel per year could be doubled (from 3,850 in 2009 to 7,500), keeping in mind that the length of health workers training programmes (from 3 to 6 years) affects further the delay to get skill personnel (O'Shea and Bryan 2009). In addition, with the current attrition rate, they observed that 75% of new graduated workers are being used to replace existing ones, and training institutions face different constraints that could also hamper the success of the programme. The correct figure of total cost for implementing the strategies that include training programme implementations, additional salaries, constructions of new facilities, equipment and supplying could not be clearly obtained but according to current public health budget is implausible to be sufficient.

Finally and considering the current acceptable health facility coverage (majority of people living within 5 km), we highly questioned that strategy in having real impact on health outcome; rather it cancels effects of other policies and aggravates existing deficiencies. The priority should be to strengthen and sustain the existing health facilities with recruitment and retention of qualified staff, necessary working equipment, acceptable working and living condition, reliable supplying system and effective referral system. In short, quality should be preferred to quantity.

5.3. The “Joint Annual Health Sector Review” as “sentinel”

The information received from the field and from evaluation processes should be used and guide the health sector evaluation system. Professionals of the sector should be able to interpellate politicians on decisions or “slogans” (like “one village = one dispensary”) that are proved to be unproductive or threatening the quality of health services. An effective “sentinel” mechanism in place could prevent laxity and counterproductive decisions leading to poor results in terms of health outcomes. The JAHSR seems to be the best place for operating this essential role.

6. *Different performances in supplying system*

During our visits in the different districts and health facilities, we noted that the supplying system for vertical projects was better than for the essential health services.

Thus, we commonly found regular out of stock for essential drugs and supplies when the ones for HIV/AIDS, tuberculosis, malaria and vaccination were mostly available. In fact, those products are excluded for the formulas being used for drug allocations within the MOH but they pass through the same national MSD warehouses and the same distribution network (trucks) as those used for essential drugs (vertical programme items are cleared, stored and distributed but not owned by MSD). The last Drug Tracking Study (2007) confirms that performance of suppliers for vertical programmes was significantly better than the performance of suppliers of essential drugs, and it was attributed to the stronger, more dedicated follow-up mechanisms devoted to vertical programmes than essential drugs (Euro Health Group 2007). Authors also emphasise that finances intended for essential drugs have to be spent on the handling of vertical projects items at MSD and therefore, the costs of maintaining and developing the infrastructure for the classical distribution is being compromised. On the other hand, most vertical projects are “integrated” in the sense that their service provisions are given within the district health services and number of such programmes operate locally with own staff.

Those different findings should sustain the debate for better aid coordination and harmonization. Accordingly, the increasing resources available from global funds and other recent initiatives could stimulate and strengthen the existing health system rather than threaten it. Practically and at short-term: (i) staffs under the vertical programmes can spread out their role in the districts that face shortage of trained staff for drug management, (ii) vertical programmes can fund staff within MSD particularly in procurement and in other areas such as logistics, management support and planning, and (iii) MOHSW should make sure that such programmes cover the actual costs of the services of MSD (Euro Health Group 2007). Further on, concerns about how Global Health Initiatives (GHI) are coordinated and aligned with health systems and if they have amplified problem of weak systems should be raised. The proliferation, almost exponential, of global health actors³⁴ makes the coordination and harmonization with national system more challenging than ever (Dodd et al 2007, Dodd and Hill 2007, Greene 2004, Spicer et al 2010, Sundewall et al 2009, Walt et al 1999). It is recognized that Global Health Partnerships (GHPs) have activated huge resources for specific health threats. However, it has gone with fast creation of new institutions in health that are sometimes difficult to be managed by the local governments and with further complicates donor harmonization efforts at the global level (Dodd et al 2007). The better aid effectiveness aims to achieve better health results by mobilising donor countries and all other development partners around a single country-led national health strategy.

7. Policy and capacity building for implementation

During our evaluation, lack of skill personnel and incomplete knowledge on reform issues and objectives were commonly reported as being a brake to strategies implementations and success. That can be seen as a lack of adequate preparation, especially with the decentralisation process (Munga et al 2009). It was reported that for design and implementation of decentralisation and other reforms, the attention was too much centred on financial and structural measures, neglecting implications for new responsibilities and roles for human resources (Kolehmainen-Aitken 2004). Already in 1995, WHO analysed why the strengthening of human and institutional capabilities was critical to the success of policy reforms and aid projects in developing countries and reported that “most recent attention has focused on the possibility that development

³⁴ WHO (2007) estimates that there are between 75 and 100 Global Health Partnerships (GHPs).

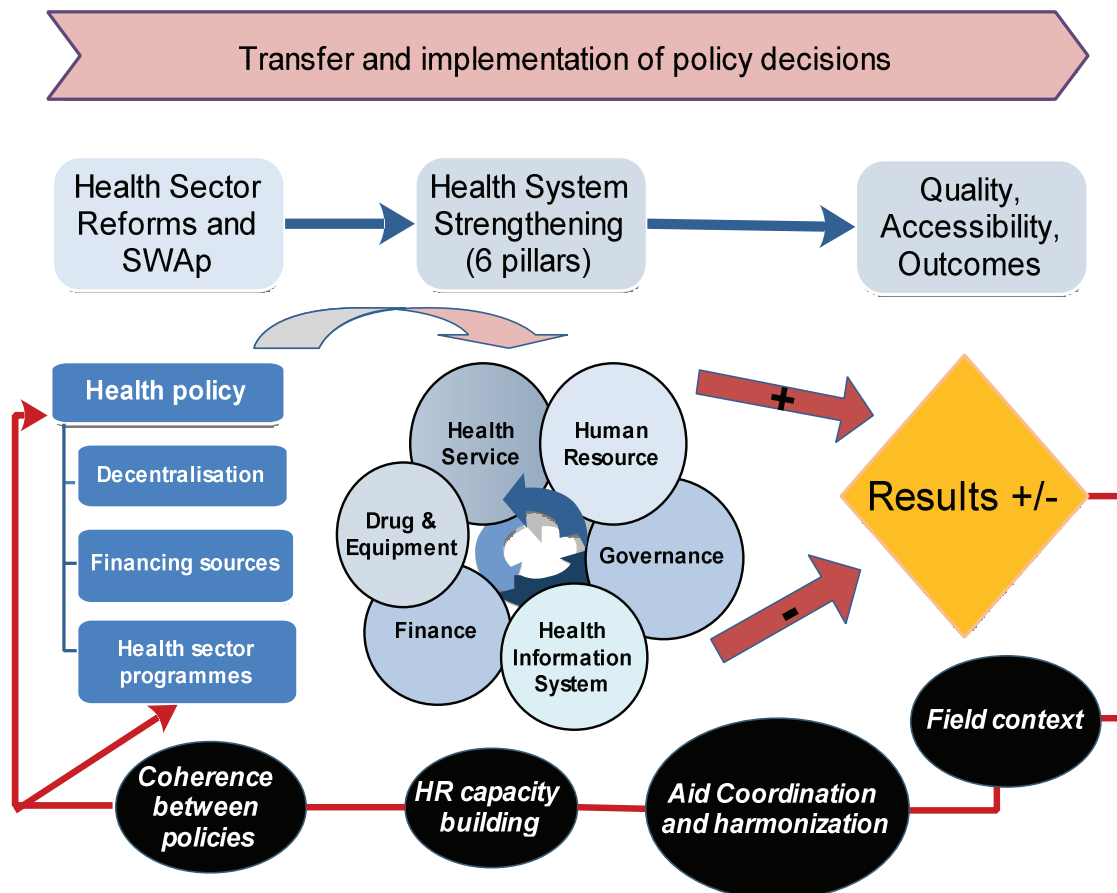
efforts failed because of their lack of attention to the human and institutional capabilities of the countries involved”. Literature on low- and middle-income countries provides little evidence that decentralisation has resulted in creation of new posts, job re-profiling, or an improved staff mix; mostly managers who were supposed to implement decentralisation reforms were not enough trained and prepared, and have to work in weak personnel context (Munga et al 2009, Wang et al 2002). Consequently, it seems natural and mostly essential to define human resource expertises needed by new reforms and then to develop appropriate trainings in order to get enough skilled workforce to support and succeed in strategies implementation. Beside this background, the concept of capacity building is defined “as the creation, expansion or upgrading of a stock of desired qualities and features called capabilities that could be continually drawn upon over time; it is further defined as concentrating on improving the human and institutional stock rather than merely managing whatever is available” (Paul 1995).

CHAPTER IX – CONCLUSIONS

Our case study has successfully demonstrated that in Tanzania, the SWAp supported and made possible the implementation of health sector reforms engaged in the 1990s. The better coordination among the health DPs and between DPs and the government strengthened in somehow the health system. At operational level, despite some improvements in term of planning, supervision, finance, training, salary, and infrastructures, the overall results appeared modest. So, despite strong evidence of well policies' implementation, more effective results were expected.

Our analytical framework with functional links between the different levels allowed exploring some conditions for success and/or failure of the national policy on health service delivery. Taking the district as entry point, the analysis of the data and the different interactions between the levels of transfers have validated and, further on, adapted our analytical framework. Furthermore, the design identified few black-boxes contents (presented in Discussion chapter) that permit better understanding on the policy implementation gaps. Figure 24 is our final output represented by a modified and validated analytical framework. The success and failure of strategy implementation is associated with the match between policy and operational level. The policy makers should not work independently of these interactions and could better use real-life context reality to make policies more than well implemented but mostly effective with results and successes for the benefit of the population.

Figure 24: *Modified analytical framework*



CHAPTER X – PERSPECTIVES

1. Feedback to Tanzania: using evidence for policy-and-decision-making

At operational level, the study pointed out that several components essential to quality health services did not really improve. Several implementation gaps inhibiting the success of strategies implementation and threatening the slight progresses were identified. Among them, the incoherence between some policies was recognized. The observed failures are not irreversible and the evidence-based results should be the starting point to adapt the policies, the health sector strategic plan, and the targets in order to reverse the trends.

2. Health SWAp and aid effectiveness

In Tanzania, the foreign aid context is strongly committed towards international advocacy on aid effectiveness following the Paris Declaration (PD) and the Accra Agenda for Aid (AAA). This involves structured dialogue and engagement between DPs with different sectors, thematic groups³⁵ and core reforms with a view of achieving harmonisation, promoting coordinated policy dialogue and reducing transaction costs in the management and administration of aid to Tanzania. In that context, a SWAp serves as instrument for organising sector dialogue around strategic issues and overall policy directions when ministries take a leading role in putting in place a comprehensive and operational plan and programme as well as a coordination framework allowing various stakeholders to focus on commonly agreed goals and targets (<http://www.tzdpd.or.tz/>). Thus, the health SWAp is perfectly integrated at sectoral level (Tanzania Health SWAp 2007).

Globally, the health was at the forefront of the new paradigm on aid effectiveness when policy-makers initiated and designed SWAp. It introduced those concepts of local ownership, harmonization, coordination, and alignment for coherent policy. At a country level, SWAp offers a real opportunity to better achieve the PD and AAA declaration principles when it is well developed and functional. Moreover, the commitment of numerous DPs towards those principles could influence GHI to operate within the SWAp arrangement.

3. Current GRAPPA research group

Fast changes in global health are reflected in evolutions in the aid effectiveness agenda with multiplication of actors, especially in the health sector. The PD and AAA represent a conceptual shift in aid effectiveness thinking in global level agreements to be implemented at country level. In 2007, the health aid community proposed a further specific development on the Paris Declaration: the International Health Partnership (IHP)³⁶ to improve health services and health outcomes, particularly for the poor and vulnerable. IHP has engaged the major new health players: the Global Alliance for Vaccines and Immunization, the Global Fund to Fight AIDS, Tuberculosis and Malaria,

³⁵ The Sector and Thematic Areas Working Groups represent the lowest level in the new dialogue structure. All sectors and thematic areas follow the clusters of the PRSP, based on policies and strategies for a particular sector/thematic area. Sectors include: Agriculture, education, water, health, industry and trade, infrastructure, energy and minerals, whilst Thematic Areas covers Governance, Domestic accountability, Public Service Reform, HIV/AIDS, Anti-corruption reform, and Gender.

³⁶ IHP is a global agreement to be implemented at country level. Launched in 2007 by the UK government with support from eight developing countries, eight international health organizations and five bilateral donors, as well as the World Bank and the African Development Bank (Dodd and Hill 2007).

and the Gates' Foundation. It aims to better harmonise donor funding commitments, and improve the way international agencies, donors and developing countries work together to develop and implement national health plans. Except the fact that GHIs are integrated in the process (which represents an important step forward due to importance of aid and link with global influence), it is in perfect concordance with a SWAp: coherence between partners and alignment behind country plans for addressing local problems.

Enriched of experiences on health sector policy and aid modalities acquired during the GRAP-SWAp project, the follow on research group (GRAP-PA) intends to explore in-depth the new aid effectiveness policies implementation, including PD, AAA and IHP and their effect on the health system in different Sub-Saharan countries. Consequently, the study design, the methods and the analytical framework used in our current study will be repeated to guide future research and analysis at different interface levels (global, national, and operational).

*SECOND PART:
CASE STUDIES*

CHAPTER I – TANZANIA: HSR AND SWAp

1. Overview on Health Sector Reforms

Just after the independence in 1961, the government recognised the importance of health sector. Tanzania adopted free health care provision in the public health facilities. In 1967, several health sector reforms were announced for ensuring universal access to the poor and those living in rural areas. In 1977, private-for-profit medical practice was banned.³⁷ Providing health services free of charge to all individuals attending public health facilities was funded through public taxation. Implementation of the related policies (primary health care approach with increased number of HF and staff) improved social services and indicators until the late 1970s (Brown 2000, Burki 2001). Health sector (and other social services) was centrally managed (Munga et al 2009). During that period, most donors selected areas for selective support with numerous vertical programmes (vaccination campaign, specific disease control, etc.) using habitually existing infrastructures (Paul 2005). This approach had in fact very little integration as each programme had its own procurement and disbursement mechanisms, and reporting requirements. Early in the 1980s, Tanzania experienced a severe economic decline and in the mid-1980s the country had to initiate its structural adjustment process, with the priority objective of restoring economic stability and restart growth (Brown 2000, Burki 2001). Severe budget restrictions were imposed in the context of a long and painful process of structural adjustment, which notably led to a serious deterioration of the extensive health and education infrastructure developed before (de Savigny et al 2004, Paul 2005). The repercussions on the health system of Tanzania were considerable and prolonged: freeze of employment, drying-up of funding for staff training, for infrastructure maintenance, and for HFs supplying; the inflation, the devaluation of the local currency, and the constant austerity measures eroded salaries (de Savigny et al 2004). By the early 1990s, facing to extensive problems and deteriorations in the health sector, Central Government started the necessary health sector reform (HSR) process to better use scant health resources, improve quality of health services, increase user access, and cut rising costs (Hill 2002, Mtei et al 2007). Also, the strain of providing free health care for all became apparent in the face of rising health care costs and a struggling economy. *HSR was defined as a “sustained process of fundamental change in policy and institution arrangements guided by government, designed to improve the functioning and performance of the health sector and ultimately the health status of the population” (The United Republic of Tanzania, Ministry of Health 2003).* The main reforms represented significant organisational, managerial, and financial changes to health care planning and services (Gilson and Mills 1995, Mtei et al 2007). In Tanzania, the health sector reform programme has focused on decentralisation of health services by devolution, financial reforms, including cost sharing, pre-payment and health insurance, and public/private partnership (World Health Organization 2009).

The elaboration of HSR proposals gained support of majors international and bilateral donors. Following a series of joint missions between government and donors, it was attempted to cover the sector as a whole with a need for coherent and better coordinated

³⁷ After changes in government in 1985, more liberal policies were adopted and private for-profit practice was authorized again in 1991.

health sector programme; in 1998 a group of 13 partners³⁸ and the MOH agreed to adopt a sector-wide approach (SWAp) (Burki 2001).

2. Decentralisation

Summary

- Tanzania developed a strategy of decentralisation by devolution (DbyD) to strengthening local government authority (LGA) especially in the health sector.
- There is strong policy statement supported by the highest levels of government with the appropriate legislation and regulation to support the reforms.
- It is a long process with early legislation (1980s) but progressive and sequentially implementation (2000-2004).
- Establishing and/or strengthening of district institutions responsible for planning, budgeting, implementation, and monitoring of health system were done.
- DbyD for district health services strengthening: Human Resources for Health (HRH)
 - HRH first reform phase: districts identified and filled staff vacancies.
 - HRH second phase: partial decentralisation where district identifies needs and central level recruits.
 - Positive results but existing challenges:
 - Limited autonomy of LGA, long bureaucratic process.
 - Shortage of qualified staff for HRH management.
 - Difficulty to attract and retain qualified workers in remote rural areas.
- DbyD for district health services strengthening: Planning and budgeting.
 - Comprehensive Council Health Plan (CCHP) as main tool for district planning and budgeting autonomy.
 - Increasing of resources available for LGA on formula-based approach (Health Sector Basket Funding); but only 30 percent of health resources are actually provided to the local government level.
 - Fiscal autonomy in district councils is still limited and the central government remained the main source of funding to district health activities, especially in rural area.
- In spite of the wide coverage of decentralisation programmes and extensive institutional support, it has not fulfilled its all stated objectives and challenges include:
 - Councils remain highly dependent on central government for financial resources and central ministries continue to control LGA.
 - Needs to clarify roles and responsibilities at different levels.
 - Needs to increase fiscal autonomy and local sources of finance.
 - Needs to increase leadership and skill at local level.
- The Health Sector Basket Funding and the SWAp partners have pushed ahead the decentralisation of financing public health services in Tanzania.

Decentralisation has become an increasingly important component of health sector reform efforts in developing countries (Bossert 1998, Hutchinson and LaFond 2004). Decentralisation in Tanzania is still an ongoing process. Already in the 1980s, Tanzania prepared important pieces of legislations for major decentralisation (parliamentary acts aimed to institute the local government with democratic structures and institutions) and local governments were given some responsibility for delivering basic health services at the district hospital level and below (Gilson et al 1994, Munga et al 2009).

³⁸ Switzerland, Denmark, Germany, Ireland, Netherlands, Norway, United Kingdom, United States, African Development Bank, World Bank, World Health Organisation, UNICEF, Christian Social Sector Commission, and Tanzania Association of Private Hospitals.

2.1. Justification

Tanzania has seen decentralisation as an ideal approach because it encourages local initiatives in the development process by giving the people more power in decision making and involving them in the planning, implementation, and evaluation process (Massoi and Norman 2009). Usually health sector decentralisation includes the following goals: (i) to increase effectiveness and efficiency of service delivery by adaptation and targeting local needs with involvement of local citizens (planning and evaluation), (ii) to improve staff motivation with local supervision and performance assessment, (iii) to improve equity and accessibility, and (iv) to increase the accountability and the transparency with local administration system. (Hutchinson and LaFond 2004, Partners for Health Reformplus (PHRplus) 2005). In the health sector, better recruitment and allocation of workers was a major issue that was expected to be addressed by the decentralisation process (Munga et al 2009).

2.2. Policy implementation and “devolution”³⁹

The most recent wave of decentralisation was associated with the Local Government Reform (LGR) and the Local Government Reform Programme (LGRP) that was launched in 1997 to improve the effectiveness of government interventions and the management of programmes at the local level (Braathen et al 2005). However, the implementation set-up took place in 2000. It was implemented in three phases and was completed in 2004 (Paul 2005). The LGRP was also responsible to make sure that councils would be able to manage decentralised sectors (Munga et al 2009). The essential aim of LGRP was to transfer duties and financial resources from the central to the local government levels. The government responsibility for local government is under Prime Minister's Office of Regional Administration and Local Government (PMO-RALG). The overall objective of the process is to improve the delivery of services to the public with **decentralisation by devolution (DbyD)**, a strategy which involves the transfer of planning, management and financial competences to local governments. The Government's vision was to have a local government system in which Local Government Authorities (LGA) should be autonomous (free to make policy and operational decisions consistent with Tanzanian laws), should be solid enough (with resources and authority) to realize their plans in relation with local needs. It should be lead by elected persons, should facilitate community and stakeholders participation (planning and monitoring), and should act in transparent way (Mmari 2005). Thus, LGA have been given power to participate and to involve the people in the planning and implementation of development programmes. Local governments are multi-sectoral with a legal status (body corporate) operating on the basis of specific and discretionary powers under the legal framework constituted by the national legislation. LGA have a responsibility for social development and public service provision within their jurisdiction. They have to facilitate maintenance of law and order issues and promote local development through participatory processes. The elected local councils are not independent governments. They are required to operate within the national policy and legal framework while retaining their status as the highest political authorities within their areas of jurisdiction. The most powerful tools of councils are their annual budgets, work plans and the control exercised by the standing committees

³⁹ The different type of decentralisation are **deconcentration** (transfer of authority & responsibility from central government level to field offices), **delegation** (transfer to organizations not directly under the central control like NGO, parastatal, etc.), and **devolution** (transfer to lower level autonomous units of central government that have been empowered by constitutional provision) (Brinkerhoff 2003, Hutchinson and LaFond 2004, Hutton 2002, Partners for Health Reformplus (PHRplus) 2005).

(Mmari 2005). The existing Regional Administration has been restructured following the enactment of the new Regional Administration. In the wake of this, small Regional Secretariats have been established to take the place of the Regional development directorates which tended to duplicate the functions and responsibilities of the local government authorities. The Regional Secretariats have been given a redefined back-stopping role to the local government authorities within their area of jurisdiction.

2.3. Health sector and institutions under decentralisation process

The Ministry of Health and Social Welfare (MOHSW) has shifted his role from service delivery provider to more supportive functions to decentralised LGA. The central ministry has kept the lead in the technical responsibility for the quality of health service provision at every level (COWI et al 2007). Therefore, the MOHSW formulates policy and standards with guideline for policy implementation. It assures quality assurance, monitoring and evaluation (Ministry of Health and Social Welfare - The United Republic of Tanzania 2007a). Other significant roles of the MOHSW in the new structure are to provide adequate sector financing, budgeting and the equitable allocation of resources (overall budget), sector coordination, health research, and the continuing education of health workers, through the management of Zonal Training Centres (Paul 2005). The central MOHSW remains responsible in service provision for regional and referral hospital, and for supplying HFs via the Medical Store Department (MSD) (COWI et al 2007).

The Prime Minister's Office – Regional Administration and Local Government (PMO-RALG) has administrative and financial responsibilities for implementing health services at district level (COWI et al 2007). They include: (i) a contribution to sector financing, (ii) the provision of guidelines for local governments and regional secretariats (to ensure that the policy and strategy are translated into actions at decentralised levels), (iii) the supervision of their health-related activities, (iv) the preparation of consolidated reports of district health plans (annually) and district quarterly/annual reports, and (iv) human resource management in close coordination with the MOHSW (Paul 2005).

Regional Medical Office is a typical example of a deconcentration variety of decentralisation process, as acting like an extension of central government and operating under the supervision of PMO-RALG. The regional office is lead by The Regional Health Management Team (RHMT), designated by the MOHSW. The RHMT, headed by Regional Medical Officer (RMO), is supposed to interpret and adapt national policies to local context, to provide support to the Council (or district) Health Management Team (CHMT), to evaluate comprehensive council health plan and progress reports before to forward to PMO-RALG/MOHSW (COWI et al 2007).

At the district level, management and administration of health services has been devolved to the **Local Government Authority (LGA)**. Its major role is formulating, carrying out and monitoring health intervention packages and quality-assurance programmes. Under this arrangement, the health units including the District Hospitals will provide services under the supervision of the Council Health Service Boards and Health Facility Committees.⁴⁰ It is the duty of these democratic organs to own health resources and, to ensure that, health facilities and services provided are of acceptable quality, managed by qualified personnel according to staffing level in line with the policy guidelines and standards (The United Republic of Tanzania, Ministry of Health 2003).

⁴⁰ The different boards/committees will be developed and explained in the next chapter on Districts case report.

2.4. Decentralisation process evaluation

According to a World Bank research (2001) on the decentralisation experience in 30 African countries, few of them had undertaken a comprehensive devolution of powers and resources to the local level. The report presented a ranking per country based on a score index⁴¹ measuring the degree of decentralisation reached. The score ranged from 0 (no decentralisation) to 4 (maximum score in decentralisation process). In the majority of the countries reviewed, the decentralisation process was at its first stages and resembles de-concentration, rather than real devolution. South Africa and Uganda ranked respectively 1 and 2 among the 30 countries with score between 3 and 3.5. Tanzania was in rank 10 (by 30) with an index around 2.5 that showed moderate degree of decentralisation (Jütting et al 2005, Ndegwa 2002).

Different recent evaluations done in Tanzania (Braathen et al 2005, COWI et al 2007, Economic and Social Research Foundation 2005, Land and Hauck 2003; Mmari 2005, Paul 2005) reported that in spite of the wide coverage of decentralisation programmes and extensive institutional support, with recognized achievement, decentralisation has not fulfilled all its stated objectives. Among major recognised achievement, we found policy statement on reform, supported by the highest levels of government with the appropriate legislation and regulation to support the reforms. In contrary we noted that councils remain dependent on resources from the central government and central ministries continue to control LGA. In fact, there was no clear fiscal decentralisation strategy. Moreover, at the district level, due to unsatisfactory local capacities, planning activities were found weak without comprehensive analysis. So, Tanzania faces several challenges to maintain its ambitious decentralisation programmes ahead; it includes: (i) to clarify roles and responsibilities at different levels and especially at regional one, (ii) to increased fiscal autonomy and human resource autonomy for LGAs, (iii) to facilitate local revenue sources, and more important, (iv) to strengthen local leadership and to develop abilities and skills of managers or teams of managers within local organisations to carry out their functions.

In a paper presented by the Permanent Secretary of PMO-RALG at the conference on Building Capacity for the Education Sector in Africa at Oslo, Norway in October 2005, it was stated: “Decentralisation is a journey rather than a destination, and we have embarked on that journey. In general it can be said that the change process involved in implementation is difficult and complex. This was expected, and is the case internationally. However, it should also be noted that momentum for change is gathering, and more importantly, government support at the highest level for the process is unwavering without turning back from this decentralisation journey” (Mmari 2005) .

2.5. Decentralisation process and health sector

Decentralisation does not guarantee automatically improved health sector efficiency or improved health system outcomes. In fact several conditions could influence the success of reforms that include local skill in management and planning, clear and transparent legal division of responsibilities, and of course sufficient financial resources to perform all activities in relation with local priorities (Hutchinson and LaFond 2004).

Decentralisation for HRH recruitment

In the health sector, one of the main challenges was soon experienced to be the recruitment and distribution of health workers. Therefore, the inequality between local needs for human resources and the actual health workers posted by the central government was a priority that would be addressed by decentralisation in Tanzania

⁴¹ Index was calculated with different structural and performance factors for a country's progress.

(Munga et al 2009). Positively, the Tanzania Government policy on administrative decentralisation involved the LGA to be fully responsible for planning, recruiting, rewarding, promoting, disciplining, development and firing their personnel. The councils should have been the appointing authorities and employers for all local government personnel (Mmari 2005). In the past, districts got staff whatever was decided by the central government. With the new system, law provided the mandate to LGA to identify and fill existing vacancies. The procedures under decentralised system, well described by Munga et al (2009), look quite complicated and requiring many actors from different level and clearly, several central government departments still play major role. First, local managers in district health board and CHMT should estimate the number and the types of needed workers with the costs (in term of personnel emoluments) for a specific financial year. Secondly, the request should be approved by the District Council when the budget should be endorsed (or adjust) by the Civil Service Department at central level (depending on budget that was approved by the Ministry of Finance for the actual financial year). Thirdly, an employment permit should be given to LGA. Fourthly, the District Executive Director (DED) should inform other local authorities (human resources office) to advertise the vacant posts. It should be noted that LGA must act in the three months following permit issue otherwise it expires. After advertisement, the list of qualified applicants should be sent to employment board for interviews. Finally the list of selected candidates should be given to the District Planning and Finance Committee for approval. Numerous difficulties and barriers dampened efficiency of such policy. Especially, councils do not always have good knowledge of complicated procedures for recruitment, and when combined to remoteness of some districts (poor communication system, difficult accessibility, etc.) it can result in delay to fill the post or even expiration of permits for advertised posts (COWI et al 2007, Dominick and Kurowski 2004, Munga et al 2009). Another problem was the difficulty to attract and maintain qualified staff in remote and less attractive areas when in the past, central government should have just post and sent them (COWI et al 2007, Dominick and Kurowski 2004).

Finally and because of those serious problems reported, it was decided, at the end of 2006, to recentralise again the recruitment of professional staff. This current system is called partial centralisation (COWI et al 2007, Munga et al 2009). In that most recent system, district authorities still prepare plans with the requiring number and type of health workers needed and then submit to the central government. From those needs, the MOHSW and other central departments collaborate with different training institutions to find appropriate candidates. Other simplifications for LGA are that advertisements of vacancy (for health workers already available on the market) are made by central government as well as interviews of best selected candidates before posting them to districts. The objective of this partial centralisation is to improve the distribution of health workers. Munga et al (2009) emphasise that this return to 'centralised' recruitment procedures was not a complete return to centralisation mechanism as districts should identify their needs and have the final decision to accept or not a candidate.

Despite those last adaptations, several challenges remain unsolved (Munga et al 2009, COWI et al 2007): (i) persistent difficulty to attract and retain qualified workers in remote rural areas, (ii) limited power in LGA hands “responsibility without authority”, (iii) lack of skill personnel for human resource management, and (iv) bureaucratic constraints (Munga et al 2009).

Decentralisation in financing and more autonomous district health planning

In theory, the objective of decentralisation at the health district level should improve the allocation of resources according to local priorities identified through health information

collected and analyse locally (Hutchinson and LaFond 2004). The annual “**Comprehensive Council Health Plan**” (CCHP), initiated with the Local Government Reform Programme (LGRP) in 2000, is the principal tool prepared at district level with district actors to assure local health care delivery. It includes situation analysis, priorities and objectives, activities with action plan, indicators for monitoring and evaluation and also it should contain all financial resources available and how those resources will be allocated according to the different priorities and activities planned. Intensive training and guideline were provided to the health and council actors. Content and quality of those plans have changed over time and according to last joint evaluation still remained mostly a budgeting tools rather than a dynamic one (COWI et al 2007). About the financing issue, key elements of LGRP were (i) an increasing of available resource available for LGA, (ii) clarifying the framework for delivery of health services with clear set of national minimum standards for services delivery and with predictable flows to finance the health services, and (iii) strengthening capacity building with training in planning, budgeting and finance management (Ngwilizi 2001). With decentralisation process, the government stipulated that LGA were assured to have increase autonomy on how to allocate financial resource. Of course, there are still some special funds (from Government, vertical projects, NGO, etc.) well earmarked to specific programmes or projects (Hutchinson 2002). With the decentralisation, the majority of services should be provided at the district level. However, only about 30 percent of health resources are actually provided to the local government level.

Local Government Level Health Funding (Boex 2008)

The council depends on government grants. In 2004, central government has endorsed the introduction of a formula-based recurrent grant system as well as a formula-based local government capital development grant (LGCDG) system.⁴² LGA also receive substantial funding through the Health Sector Basket Fund (HSBF). The new formula-based approach⁴³ should use objective indicators of councils’ needs, and ensure transparent, stable, and equitable allocations across local government councils.

The Health Block Grant: Personnel Emolument (PE) and Other Charge (OC)

Block grants provide funds to pay health personnel salaries and other emoluments (PE) and to finance operational cost for health care services at the council level (OC), including district hospitals, health centres, and dispensaries, and to provide community health programs. Those funds are sent directly to local government accounts without passing by other intermediate levels promoting better autonomy and efficiency. It has been recognised that the new formula based-approach has improved the allocation of financial resources to the districts.

The Local Government Capital Development Grant (LGCDG)

LGCDG should be considered as the main funding source for local development expenditures. Practically, the LGCDG system comprises different components: a Capital Development Grant (CDG), a Capacity Building Grant (CBG),⁴⁴ and several sectoral grant windows. Nevertheless access to those grants is subject to a number of minimum access conditions with performance assessment in nine broad functional

⁴² Before 2004, allocations for local health services were determined on a highly discretionary basis and LGA did not receive any direct, formula-based development grants, as government allocated those funds in an ad hoc manner (Boex 2008).

⁴³ Both the Health Block Grant as well as the HSBF use the following formula for the allocation of transfer to LGAs: 70% of the resource pool is distributed in proportion to population, 10% in proportion to the estimated number of poor, 10% in proportion to the length of the official medical vehicle route, and 10% in proportion to the estimated morbidity count in each LGA, based on the under-five mortality rate.

⁴⁴ CBG allocations are generally based on a fixed amount of 20,000 US\$ per council (Boex 2008).

areas. Council can use allocate CDG resources across different sectors in accordance with their local priorities. In fact, capital grants allow a broad range of investments in infrastructure and service provision within the mandates of the LGA. Evaluation of the use of LGCDG showed that councils spend approximately 8-9 percent of their CDG resources on the construction and rehabilitation of health infrastructure, and other health-related development expenditures (Boex 2008).

The Health Sector Basket Fund

Additional external funding is provided by different development partners (DPs) through the Health Sector Basket Fund (HSBF), which became the main modality for external support to health since a SWAp was initiated in 1998-1999.⁴⁵ About two thirds of HSBF funding is allocated to the local authorities either directly in cash releases or indirectly in terms of distribution of drugs and medical supplies that have been centrally procured (Ronsholt 2002). **HSBF provides direct support to local health services** and councils should use these resources for non-wage recurrent spending in accordance with their Comprehensive Council Health Plan (CCHP). Before 2004, the allocation was population-based (US\$ 0.50 per capita) only, and then the formula introduced for the health block grants was applied also for local HSBF. The funding pool made available to the local level has increased in recent years, up from US\$ 0.50 per capita to US\$ 0.75 per capita in 2007/08 and US\$ 1.00 in 2008/09. In addition, the **HSBF supports the rehabilitation of local health infrastructure** through the District Health Infrastructure Rehabilitation Component (DHIRC), informally known as the Joint Rehabilitation Fund (JRF). Those funds were earmarked for the rehabilitation of primary HFs (mainly rehabilitation rather than new constructions) for limited number of Councils (on annual rotating basis). A simple formula for allocation of funds to councils was developed based on a central assessment of local health infrastructure in need of rehabilitation, guided by a standard cost for the rehabilitation of HC (52 million of TzSh in 2004 then 120 in 2006) and dispensaries (14 million then 30). In a near future it was planned to merge those funds with LGCDG system.

The HSBF and the SWAp partners have pushed ahead the decentralisation of financing public health services in Tanzania (Boex 2008). A recent joint evaluation confirmed that the HSBF system was a key factor in providing a stable and predictable resource for local councils in the districts as they are supposed to plan and to manage health services in the context of the Local Government Reform Programme. In fact, the CCHP is closely linked to HSBF as the release of those funds depends on the assessment report of planning activities (COWI et al 2007).

Others

Fiscal autonomy in district councils is still limited. The central government remained the main source of funding to district health activities; its contribution was estimated to be around 50% of district health budget, for only 10% from district own sources (Hutchinson 2002). Other studies in rural areas showed that councils evaluated generated less than 20% (even less than 10% in some district) of their total revenue from own sources when 80 to 90% were conditional grants. (Braathen et al 2005). However, in the urban councils, the result could be very different because of possibility to generate more sources of income (taxes, licences, etc.) when having more dense population.

⁴⁵ SWAp and HSBF will be developed in the part 3 of this chapter.

3. New financing sources

Summary

- A cost-sharing policy with different mechanisms was introduced progressively: user-fee, National Health Insurance Fund (NHIF) and Community Health Fund (CHF).
- Exemptions policy for priority groups and waivers is a part of the cost-sharing policy.
- User fees were first introduced at hospital level (1993-1995) and funds collected are used to improve service delivery.
- NHIF was operational in 2001 and cover all civil servants; accredited HFs received directly funds claimed for subscribers expenses.
- CHF and user-fees at lower HFs were introduced later (2001-2008); funds collected are managed by the Council Health Board, the HFs, and villages committees.
- Cost-sharing collection fund has increased but remain very low.
- Exemptions are relatively well respected except for the waivers.
- The CHF has a very low enrolment rate and early drop outs of membership.
- NHIF has a continuous increase in membership and contributes for around 5% of health sector budget.
- There is significant amount of unused funds both at the National Health Insurance Fund and Health Services Fund.

In the 1990s, when Tanzania faced severe deterioration in the health sector, Central Government recognized that providing health services completely free of charge was not any more possible. Moreover, trying to cover all citizens with free services resulted in poor quality and inequitable health service delivery (Ministry of Health and Social Welfare 2005b). The objectives of cost sharing were then to (i) generate additional revenues to bridge the gap in government allocation, (ii) improve availability and quality of health services, (iii) strengthen the referral system, (iv) rationalize utilization of health care services, (v) improve equity and access to health services by pooling financial risk and cross-subsidizing costs and (vi) strengthen community voice (users/payers) towards improving service quality and provider's accountability (Health Advisors of the Agencies Providing Basket Funds Support to the Health Sector 2005, Hill 2002, Ministry of Health and Social Welfare 2005b, Mtei et al 2007). Therefore, mechanisms assuring contribution from patients towards the cost of services received were progressively put in place. Tanzania initiated user-fees in public hospitals in 1993. Over time, other financing systems were added like: prepaid insurance for all civil servants (National Health Insurance Fund - NHIF) and the introduction of the Community Health Fund (CHF) targeted at the poor and those living in rural areas (Mtei et al 2007).⁴⁶

3.1. User fees

User fees mechanisms were progressively introduced and were implemented in 4 phases. The first and second phases concerned referral and regional hospitals (1993 & 1994). The third phase started in 1995 and was for the district hospitals. The last phase for HC and dispensaries should have started after completion in all district hospitals but it took longer (in 2005, around 50% of the districts were charging fees in public HFs for 70% in 2006). There were several reasons for the delay; first, the Government wanted to develop safety nets for rural populations with the introduction of CHF and, secondly,

⁴⁶ There is an equivalent for urban area through "Tiba Kwa Kadi – TIKA".

there was a lack of skills for financial management in rural areas (Ministry of Health and Social Welfare 2005b).

User fees for services at lower HFs are low and on flat rate-based, around 1,000 to 1,500 TzSh (1 US\$); for hospitals, fees are nominal and are incrementally higher (the more advanced the care given, the higher the fees and the higher the relative contribution from user fees) (Boex 2008).

3.2. National Health Insurance Fund

It was established in 1999 and became operational in 2001 covering all public servants at central and local government levels (Mtei et al 2007). The scheme is compulsory; members contribute with 6% of their monthly gross salary to fund the insurance system (3% are paid by the employee matched by 3% government contribution). The membership includes civil servants with their partner and up to 4 children and/or legal dependants. The benefit package includes, from any accredited HFs⁴⁷ of member choice, registration fees, diagnostic tests, outpatient services with treatment, and in-patients services (accommodation, medication, investigation, surgery) (Ministry of Health and Social Welfare 2005d). Accredited providers of health services are reimbursed after they have claimed on a fixed-fee basis.

3.3. Community Health Fund

CHF was introduced in 1996 in a single district pilot (Igunga) and later was implemented gradually in other districts (Ministry of Health and Social Welfare 2005a, Mtei and Mulligan 2007). At the beginning, CHF aimed to improve the access to health services with a pre-payment insurance scheme granting access to basic health services to population in rural areas (Laterveer et al 2004, Mtei and Mulligan 2007, The United Republic of Tanzania, Ministry of Health & Social Welfare 2005). The CHF was then defined as means to offer better security of access to health care, empowering households, and community in health care decisions with strong local participation, and providing stimulus to local health care provider (The United Republic of Tanzania, Ministry of Health 1999). The CHF Act of 2001 put the following objectives: (i) to mobilise resources from the community to provide health care services for members, (ii) to provide quality and affordable health care with sustainable financial mechanism, and (iii) to improve service management in the communities with decentralisation that empowering communities in making decisions and by contributing on matters affecting their health. Membership is voluntary and household contributes with an annual flat rate price (5,000 to 15,000 TzSh at date, or around 4 to 12US\$) that entitles to a basic package of curative and preventive health service at HC and dispensaries (and hospitals in some districts). The membership unit is usually the household comprising parents and children under 18. The revenue collection is matched by a 100% grant from the government. Households who do not subscribe should pay a user fee.

3.4. Exemptions and waivers

It was a part of the cost-sharing policy introduced in 1994 and by extension of the CHF. Exemption is a statutory entitlement to free health care services, granted to individuals who automatically fall under the categories of priority population groups: under-five children, pregnant women, patients with chronic diseases, with AIDS or Tuberculosis. Waiver is granted to those patients who do not automatically qualify for statutory exemptions but are in need of the same, and classified as 'unable to pay' (The United

⁴⁷ All public HF are automatically accredited and 86 % of accredited HFs are from public sector (Mtei et al 2007).

Republic of Tanzania, Ministry of Health & Social Welfare 2005). District councils are expected to fully subsidize the CHF membership fees for those who have been exempted or waived (Mtei and Mulligan 2007).

3.5. Collection of funds

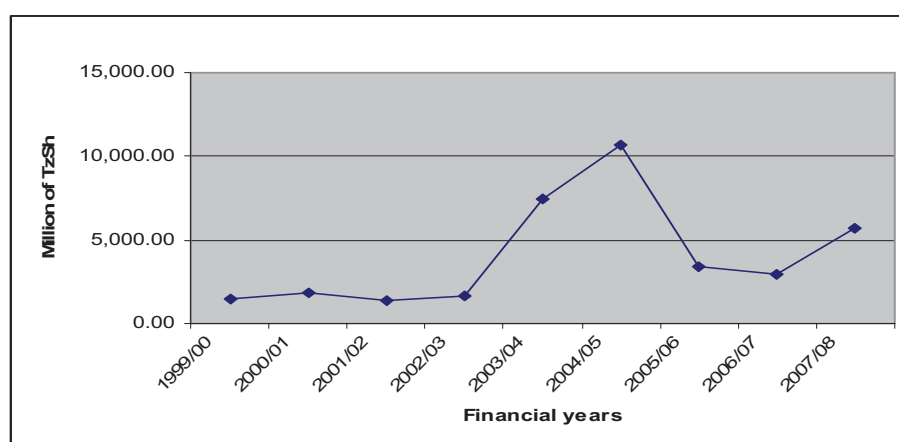
Revenue collected at the hospital level is normally deposited into the Health Service Fund (HSF) and can be used to support and finance specific hospital expenses like drugs, supplies, minor rehabilitation, staff incentives, transport charges, etc. The funds collected at lower HF level are put in the district's health account and are managed by the Council Health Board and the HF committees (Laterveer et al 2004, The United Republic of Tanzania, Ministry of Health & Social Welfare 2005).

3.6. Evaluation

Cost-sharing collection

Between 2003 and 2004 user fee revenue and expenditure at the public hospitals increased approximately by 51 and 80 % respectively (see Figure 25); after the pick in 2004 collection decreased then the total receipts almost doubled between 2006/07 and 2007/08 (Directorate of Policy and Planning Ministry of Health Tanzania 2008, Mtei et al 2007). However, when compared to other sources, the contribution of user fees to overall total public health care spending is small; in 2005, it represented less than 1 % of total spending and user fees charged at both the primary and hospital levels account for only 2 % of total public health sector financing (Mtei et al 2007). Reports for hospitals indicated that revenue generation from cost-sharing is essential to operating costs as it represents 30 to 60% of the non salary recurrent health expenditures (The United Republic of Tanzania, Ministry of Health & Social Welfare 2005). Collections of user fees tend to be considerably lower at local health facilities. Laterveer et al (2004) estimate that user fee income as a proportion of the district health budget was around 10 percent. However, the MOH reported difficulties to obtain complete figures from the cost-sharing movements (Directorate of Policy and Planning Ministry of Health Tanzania 2008). On the other hand, in some districts, it was found that funds were not utilised and hence remained idle in a bank account (Mtei et al 2007). The last PER (2008) reported the same: “there is significant amount of unused funds both at the National Health Insurance Fund (NHIF) and Health Services Fund (HSF)”.

Figure 25: *Cost-sharing collection per financial year*



Sources: Directorate of Policy and Planning Ministry of Health Tanzania 2008, PER Task Team Ministry of Health Tanzania 2005.

In fact, cost-sharing revenues objectives were review because it has remained very small compare to the needs. Therefore it shouldn't necessarily be considered in terms of contributing to the overall sector, but more in terms of improving the availability of flexible funds at the HF level (The United Republic of Tanzania, Ministry of Health & Social Welfare 2005).

Exemption system

It was reported that the exemptions were relatively well respected. However the failure of the waiver system to protect the poorest is generally agreed as the major weakness regarding cost-sharing in Tanzania (The United Republic of Tanzania, Ministry of Health & Social Welfare 2005).

Community Health Fund

The CHF performance is not convincing with a very low enrolment rate and early drop outs in membership (Chee et al 2002, Directorate of Policy and Planning Ministry of Health Tanzania 2008, Kamuzora and Gilson 2007, Mhina 2005, Mtei and Mulligan 2007; Shaw 2002). Kamuzora and Gilson (2007) reported that after 10 years of CHF implementation, the only 10%⁴⁸ of household enrolment was far from the government expected target of 70%. Thus, very often, enrolment has been found to go down where it was once relatively high. Many reasons have been already discussed to explain the low enrolment. Shaw (2002) argues that small user fees set in public HFs does not push community members to join CHF. Mhina (2005) explains that, user fees in some councils is only 1,000 TzSh (less than 1 US\$) per visit at HF compared to the 5,000 to 10,000 requested to subscribe to CHF. Other reasons found in different studies are poor inability to pay membership contributions, non-acceptance of the need to protect themselves against the risk of sickness, lack of trust in CHF managers mattered, wealthy community members, lack of information due to insufficient sensitisation/education of the community, introduction of NHIF which took out public servants who were previously members of CHF, non-coverage of referral care, perceived poor quality of health care services at public facilities (drug stock-outs and inadequate service provision), poor staff attitudes, and broad exemption policies which leave a limited number of people contributing to the CHF (Kamuzora and Gilson 2007, Mhina 2005, Mtei et al 2007, Mtei and Mulligan 2007). Of course access for service is facilitated by CHF enrolment as being a member improved the chance of seeking health care from formal health care providers (Msuya et al 2007). Still, despite this evidence, the question of persistently low enrolment rates remains essential because with a so small proportion of household covered it will not be possible to improve equity in health service access (Mtei et al 2007). The MOH (2006) in a CHF report enhanced the weakness in management and accountability explaining that the lack of capacity and experience in community mobilisation and financial management were among the factors hampered the implementation of CHF (Ministry Of Health, Tanzania 2006).

National Health Insurance Fund

To date, the NHIF covers all public servants and their relative at both central and local government levels and since its establishment, the NHIF has seen a continuous increase in membership. Total NHIF contribution to the health sector for the fiscal year (FY) 2006 was around 5 %. Of course, it is expected that membership increased because of the compulsory nature of its enrolment. Like cost-sharing fund, the spending level is still very low and much of the funds remain unutilised (Mtei et al 2007). The public expenditure review (PER) of 2008 analysed the income and reimbursement of the NHIF

⁴⁸ 10% seems very high as in many districts the enrolment rate is close to 1 or 2%.

for the period 2004/05 up to 2007/08. It indicated that the HFs in general were currently utilizing only a relatively small percentage of the overall funds available; i.e. around 15% of the overall annual income of NHIF (Directorate of Policy and Planning Ministry of Health Tanzania 2008).

4. Sector Wide Approach in Health

Summary

- The Ministry of Health and the Development Partners (DPs) agreed to pursue a SWAp to Health Sector Reforms (HSR) in 1998 to increase coordination and to support one comprehensive and coherent health sector programme.
- All core elements of a SWAp are present: comprehensive and coherent sector policy and programme, sector budget with a Medium Term Expenditure Framework (MTEF) including all available resources for health, sector coordination framework with government leadership, sector performance and monitoring system, and Sector Policy Support Programme.
- Health Sector Strategic Plan (HSSP) is coherent with priorities identified from situation analysis and is linked to national policies (Health sector, Millennium Development Goals, and Poverty Reduction Strategic Plan).
- The Medium Term Expenditure Framework captures different financing sources, and has significantly improved budget management, accountability, and efficiency in the use of financial resources of the health sector.
- Health SWAp and Health Sector Strategic Plan are intended to improve accessibility and quality of health services; and ultimately the health status of the Tanzanian population.
- Since the start of the SWAp, the number of health partners has increased with strong coordination mechanism and high capacity of commitment and mutual trust; the leadership and the ownership of the government have significantly increased.
- SWAp is supported by project financing, in-kind goods, services and technical support, basket pooled financing, and direct government budget support.
- There has been solid progress in the allocation of funds to the health sector since the start of the SWAp, with massive increase in external contributions.
- The Health Sector Basket Funding (HSBF) has facilitated the harmonization of administrative procedures and has provided leadership to the government; it has assured also an increasing predictability of funding.
- The health SWAp played a major role in the overall success of health sector reforms undertaken since its inception, in particular for the decentralisation process. HSBF has been a successful mechanism to strengthen the LGA in supporting district health services and it was a key factor in providing a stable and predictable resource base for local council plans and programmes.
- Project approach did not decline and the recorded volume of non-basket disbursements from DPs increased almost two-fold between 2002 and 2005.
- The percentage of external support to the health sector provided “on-budget” and under the government process has increased significantly during the same period.
- Programmes, projects and activities implemented under the SWAP have contributed to improvements in health outcomes and to some improvements toward Millennium Development Goals (under-five mortality) and Poverty Reduction Strategic Plan as well as in the service quality at operational level.
- Despite some recognised improvements, no significant progress was made for a certain number of impact indicators (e.g. maternal and neonatal health) and other crucial organisational needs for quality health services (e.g. human resources).
- Global Health Initiatives (GHI) and large bilateral programmes have injected much-needed resources into the fight against diseases that are national priorities. However, these remain largely outside existing health planning and

management systems and this distorts local priorities and threatens sustainability and ownership.

- Well developed health SWAp in Tanzania is a favourable factor to the last international aid effectiveness conferences: Paris Declaration (PD) & Accra Agenda for Action (AAA).
- GHI could be opportunity to strengthen health system (huge funds). The existing commitment of numerous DPs towards PD & AAA could influence GHI to operate within the SWAp arrangement.

4.1. Implementation of Health SWAp

Limitations to projects' Aid in the Health Sector in Tanzania (Burki 2001)

Since 1994, the government of Tanzania started to implement in-depth reforms in the health sector to improve the quality and the accessibility of services all over the country. Despite the reforms engaged, aid for health interventions lost some efficiency and efficacy due to the project- based approach. All projects and vertical programmes had different operating arrangements (accounting, disbursements, monitoring and reporting) with time and staff consuming. Other serious problems pointed out included frequent duplications of functions and efforts, and lack of coordination between the Development Partners (DPs) and the ministry of health. Moreover, number of projects selected some districts or regions to support primary health care and capacity in management, planning and monitoring. Then, instead of being model for replication in other places, the inadequate communication and coordination has led to fragmentation with “islands of excellence” for some regions/districts only. Final results gave incoherent and unequal health service distribution with unsustainable and not integrated parallel system.

SWAp in health sector

The Health Sector Reforms (HSR) engaged in the 1990s gained the support among main DPs. In addition, evidence of failure of traditional approaches for aid effectiveness led to concretized changes by different joint statements and reflexions with main DPs and MOH. From 1996, several joint missions that intended to implement more coherent sectoral programme with better coordinated inputs were organised (Burki 2001). Finally, in June 1998, the ministry of health and a group of partners⁴⁹ agreed to pursue a sector wide approach (SWAp) to health reforms to support and cover the sector as a whole (Brown 2000, Burki 2001, Ronsholt 2002). A Memorandum of Understanding formalising a health SWAp was signed between the MOH and main DPs, with the idea that sectoral goals could be better achieved through a comprehensive nationally defined policy, strategy and budget framework than a collection of projects (Burki 2001).

4.2. Objectives of Health SWAp

The adoption of a SWAp in health was expected to increase coordination between different donors and between donors and government. All stakeholders were expected to support one comprehensive and coherent health sector plan and all available resources for health have to be utilized within the framework of the agreed programme. The new approach was also expected to increase government ownership and support the development and use of government system instead of fragmenting. Most important, the SWAp aimed to improve health services delivery and health of the population (Hobbs 2001, Ronsholt 2002).

⁴⁹ Switzerland, Denmark, Germany, Ireland, Netherlands, Norway, United Kingdom, United States, African Development Bank, UNICEF, World Bank, World Health Organisation, Christian Social Sectors Commission (CSSC), and Tanzania Association of Private Hospitals (APHTA).

The Memorandum of Understanding defines the objectives of the SWAp on Tanzania and explains the shared obligations, modalities and structures for cooperation (World Health Organization 2009).

4.3. Core elements of a SWAp

1. Tanzania national health policy and national strategic health plan

The reform with a SWAp adoption was converted initially into a three-year Plan of Work (July 1999 – June 2002). Then it has been translated in two 5-years Health Sector Strategic Plan (HSSP II for 2003 – 2008 and HSSP III for 2009 – 2015).

Plan of Work 1999-2002

It was the first document that included the national vision of health policy: “to improve the health and well-being of all Tanzanians with a focus on those most at risk, and to encourage the health system to be more responsive to the needs of the people” (The United Republic of Tanzania Ministry of Health 1999). Eight strategies, constituting a framework of HSR programme, were elaborated and were the starting point for health sector implementation in the context of a SWAp (Burki 2001). The strategies concerned the availability and quality of essential and decentralised services, the necessity for clear priority setting, the importance of HRH challenge, the sustainability of health financing with comprehensive sources, and the strengthening of the relation between MOH and DPs. The programme was accepted in a joint MOH and DPs review in March 1999.

National Health Policy 2003 (The United Republic of Tanzania, Ministry of Health 2003)

Tanzanian officials recognized that “the Health Policy is a vital guide towards health development of any country”. The National Health Policy of 1990, which emphasized on the need for increasing community involvement in health development and improved access and equity in health and health services, was reviewed and finalized in 2002. New developments such as Proposal for Health Sector Reform of 1994, Tanzania Development Vision 2025, Poverty Reduction Strategy 2000, Gender mainstreaming, the focus on vulnerable groups, and HIV/AIDS, have been integrated in the new policy document that was edited in 2003. In the guide, it was decided to continue to address the challenges described in 1990 while addressing the different dimensions of reforms in the Public Sector. The **Vision** was “to improve the health and well being of all Tanzanians with a focus on those most at risk, and to encourage the health system to be more responsive to the needs of the people; when the **Mission** was “to facilitate the provision of equitable, quality and affordable basic health services, which are gender sensitive and sustainable, delivered for the achievement of improved health status”. It was decided to achieve the national health policy with 9 strategies:

1. Strengthening district health services so that essential clinical and public health packages are provided, so that the burden of disease, crude death rates, maternal and infant mortality are reduced, and so that life expectancy is increased.
2. Strengthening referral system such that it is efficient and cost effective.
3. Adopt diversified complementary health care financing options, which are sustainable involving public-private partnership and other resources, and ensure availability of required logistics and support services which are affordable and accessible to every citizen.
4. Enhance capacity at different levels by implementing comprehensive human resource development plan, which will facilitate deployment and retention of well-trained and motivated staff at the appropriate health service level.
5. Create public awareness at all levels on preventable public health problems and the need for active community involvement in taking care of their own health.

6. Improve partnership and multisectoral collaboration.
7. Ensure representation of stakeholders and communities in health service delivery.
8. Increase public private partnership in health provision.
9. Implement effective donor and other stakeholder's coordination mechanism.

2003-2008 Health Sector Strategic Plan (HSSP) II (The United Republic of Tanzania Ministry of Health 2003)

The formulation process of the HSSP II was lead by the Health Sector Reform Secretariat under the Division of Policy and Planning, Ministry of Health and Social Welfare (MOHSW), involving key stakeholders from Ministries, Departments and Agencies including the Prime Minister's Office for Regional and Local Government (PMO-RALG). The private sector and DPs participated in the preparation. In usual, the HSSP does not go into operational detail of activities, which are provided in specific strategic plans and work plans of institutions and programmes. It provides an outline of the strategic objectives across the whole health sector and it includes the achievements and constraints in the health sector, the priorities and the way forward to achieve quality health care. The main focus for this HSSP was "provision of quality health service". Therefore, the HSSP integrates the 9 strategies into three components: (i) district with the hospital, health centres, dispensaries and community health services, (ii) the regional and reference hospitals and other tertiary level institutions related to health care such as teaching institutions, and (iii) the central level that includes the role of the region as well as the Ministries. The plan was designed to highlight: (i) a greater integration of health services, (ii) the importance of human resources, (iii) the importance of the Public Sector Reform process, and (iv) the MOH commitment for continuing to integrate vertical programmes into the health service delivery system. The outputs, targets and indicators are formulated in a matrix framework. The indicators are consistent with the Millennium Development Goals (MDGs). More specifically with the indicators selected for measuring performance in the sector, as well as health indicators included in other key strategy documents such as the National Multi-sectoral HIV/AIDS Strategy and the Poverty Reduction Strategy monitoring master plan. The matrix framework allows periodic and annual review of progress at different levels.

National Heal Policy 2007 (The United Republic of Tanzania, Ministry of Health 2007)

The Health Policy was updated in 2007, by taking in account the National Strategy for Growth and Poverty Reduction ("MKUKUTA") and by providing the global direction for achievement of the Millennium Development Goals (MDGs). It provided the Government's vision on long-term developments in the health sector through 11 strategies.

2009-2015 HSSP III (The United Republic of Tanzania Ministry of Health and Social Welfare 2009)

This third HSSP reflects the strategic intentions of the health policy 2007 for the period 2009 – 2015. It consolidates existing HSR and retains the key strategic priorities of the HSSP II, adding new priorities identified (social welfare, emergency preparedness and response and maternal, newborn and child health). The main focus for this HSSP is "Partnership for Delivering the MDGs", because health sector has to work in partnership with all government institutions that are responsible for services having an impact on health. Then, partnership with the private sector is also necessary to increase accessibility and quality. Of course the DPs provide the health sector with financial, technical and moral support through a well-established SWAp that offers all partners an opportunity to contribute to better health in Tanzania. Other important partners, who are

also beneficiaries of the health services, are the communities and families, which have to become owner of their own health.

2. The sector budget and its medium term perspective

The health sector budget tried to reflect the sectors priorities and strategies elaborated in the HSSP taking in account all available resources for the health sector with realistic Medium Term Expenditures Framework (MTEF). Since 2000/2001 the MOH started preparing a MTEF. The MTEF is a prioritised three year integrated (Recurrent and Development, Government and DPs) budget estimates, based on clearly defined performance indicators within a strategic plan with annual updates (Ministry of Health and Social Welfare 2005c). It covers: (i) government funds (including external funds originating from general budget support), (ii) external funds, and (iii) other funds or “off-budget funds”, like external funds not disbursed through a government mechanism and domestic extra-budgetary income due to cost-sharing policy (Paul 2005). According to Paul’s report (2005), the MTEF preparation was in the hands of the MOH, and then during the past few years, DPs were invited to review and to give their inputs. “The MTEF has enhanced the predictive value of budgets by extending the coverage of Integrating Development Partners Finance into the budget framework in the form of Health Basket Fund and non basket resources in order to support the agreed priorities, to ensure increased shift of development partner finance towards broader budget support (i.e. allocation across capital and recurrent cost), it has further strengthened output orientated budget focusing on services delivery improvement” (Ministry of Health and Social Welfare 2005c).

3. A sector coordination framework under MOH’s leadership

Development Partners Group (DPG) for health

The DPG for Health includes bi-lateral and multi-lateral agencies supporting the health sector in Tanzania; in 2010, there were 17 partners.⁵⁰ DPG-Health has been established to support the government of Tanzania in improving the health and well being of all Tanzanians and to promote coordination among development partners for the most efficient use of development partners’ resources (<http://hdptz.esealtd.com/index.php?id=27>).

The SWAp Committee

The SWAp Committee, formal coordination forum, originally comprised only the Ministry of Health, the Prime Minister’s Office – Regional Administration and Local Government (PMO-RALG) and DPs committed to the SWAp. Then, it encompasses a wider group of all partners committed to the Sector-wide Approach in Health: the Government (MoHSW, PMORALG and Ministry of Finance), the DPs and Civil Society Organisations. The committee assures coordination and monitoring of implementation of the Health Sector Strategic Plan (HSSP), the Medium Term Expenditure Framework (MTEF) and Comprehensive Council Health Plans (CCHPs). The SWAp Committee is chaired by the Permanent Secretary and meets twice a year.

Technical Committee of the SWAp (http://hdptz.esealtd.com/fileadmin/documents/Sub_Sector_Group/Technical_Committee_page/Technical_Committee_of_SWAp_TOR.pdf)

⁵⁰ Ireland, United Kingdom, Canada, Denmark, Germany, The Netherlands, Norway, Switzerland, Japan, Clinton Foundation, African Development Bank, US Agency for International Development (USAID), United Nations Population Fund (UNFPA), United Nations Children’s Fund (UNICEF), United Nation for AIDS (UNAIDS), World Health Organisation (WHO), and the World Bank.

The Technical Committee represents all those signing the Code of Conduct for the SWAp and serve as a joint monitoring body. It is the main forum for government, DPs and civil society for discussing technical issues within the health sector. The Technical Committee is made up of 14 government staff (from MoHSW, PMO-RALG and Ministry of Finance), 6 DPs (WHO, Ireland, Germany, The Netherlands, USAID and World Bank) and 5 members of civil society. It is chaired by the Chief Medical Officer of the MOHSW. It is guided by terms of reference and meets once every two months. It has an advisory role; it discusses on technical issues within the health sector; and makes proposals or recommendations to the SWAp Committee. It collaborates with different sub-committees that have different consequent functions and tasks: (i) to facilitate dialogue between SWAp stakeholders, (ii) to coordinate activities in the health sector, (iii) to ensure that all stakeholders vest in the GOT-owned sector program, (iv) to monitor implementation of HSSP, MTEF and CCHP, and (v) to coordinate and facilitate policy and technical dialogue around specific sub-sector issues.

Sub-Committees, Working Groups & Task Forces

Various Task Forces, Working Groups and Technical Working Groups have emerged to facilitate dialogue around sub-sectoral issues (like HRH, maternal and child health, malaria, etc.) under the SWAp umbrella. Those committees meet routinely to discuss, analyse, propose advice according to their specific area of work, then, make recommendations to management through the Technical Committee.

4. Sector performance monitoring system: Joint Annual Health Sector Review (JAHSR) (Tanzania Health SWAp 2007)

Each year, a joint review is undertaken to look at the health sector progress, constraints and future priorities. This process is led by the MOHSW and PMO-RALG, with close collaboration of other parts of the government, DPs, other health sector stakeholders, private sector and civil society organisations. The review supports the production of one common Health Sector Performance Report submitted to the annual JAHSR. The Technical Committee of the SWAp prepares the terms of reference for the JAHSR. The MOHSW and its collaborating partners in the health SWAp make available documentation, reports and other materials necessary to support the JAHSR. Then, the routine Public Expenditure Reviews (PERs) is jointly conducted to assess the extent to which expenditures on health can be expected to contribute towards improved health outcomes. In summary, each JAHSR reports upon key developments in the sector, progress and challenges in implementing the annual work plan, sector expenditures against budgets, progress against the agreed milestone, and key performance indicators. Then, lessons learned influence priority setting, strategies, policies, planning and/or budgeting. Sometimes, external evaluations may be commissioned to supplement routine reporting.

5. Health Sector Policy Support and Health Sector Basket Funds (HSBF)

Once the government has started its sector programme, a sector policy support contributes to its funding and consequently shares its objectives. In theory and regardless of the financing modality chosen, no activities outside of the HSSP may be financed through that specific support (European Commission 2007). The health sector programme is financed by local and external sources. External funding is provided either under the Health Sector Basket Funds (HSBF), or under a variety of project/program modalities (mixed financing) and more recently under General Budget Support (GBS).

The establishment of a SWAp was very soon followed by the setting up of a joint funding mechanism involving some of the donors. The HSBF has started in 2000 (as the

first HSBF funds were used for the plan of action 1999/2000) with a pool of un-earmarked resources. The HSBF supports the HSR's implementation through the HSSP defined jointly by all stakeholders active in health within the SWAp. To date there are 11 DPs (for 8 at the beginning⁵¹) contributing to the HSBF (Canada, Denmark, Germany, Ireland, The Netherlands, Norway, Switzerland, United Nations System in Tanzania, UNFPA, UNICEF and World Bank). "Channelling resources through such a modality confirms a commitment towards a more effective and efficient use of aid resources that is line with both the Paris Declaration and the aspirations of the Tanzanian Government as elaborated in the Joint Assistance Strategy" (<http://hdptz.esealtd.com/index.php?id=17>). Thus, the HSBF became the main modality for external support to the health sector with provision of health services at all government level across the country⁵². Bilateral donors agencies and other DPs put their subventions to a HSBF holding account (Boex 2008). The priority setting and the allocation of HSBF is an integral part of the government planning and budgeting cycle; the resources from the HSBF holding account are disbursed through the government system, are managed like governmental resources and are accounted for a part of the MOHSW and PMO-RALG budget (Boex 2008, Hobbs 2001).

The Basket Fund Committee, which includes representatives from government and the relevant DPs, is responsible for running operations, allocations, priorities and management. Nevertheless, responsibility for general overview, supervision and implementation coordination stays in the hands of MOHSW and PMO-RALG. The committee meets twice per year and prepares agreements for the funds release from the HSBF holding account. Funds release is based on satisfactory financial and technical performance reports prepared by the Ministry of Health.

Central Funding is a part of the basket funding that is allocated to the central level to support the provision of primary health care services (purchase of essential drugs and commodities, support to programmes in reproductive and child health, nutrition, immunization, etc.) and this central basket fund is not earmarked for any specific purposes.

Local decentralised HSBF (Boex 2008, Ronsholt 2002): in addition to support the MOHSW and other central health services, the HSBF provides support to local health services with resources disbursed directly to the local level on a quarterly or semi-annual basis. About two thirds of HSBF is allocated to the local authorities. At the local level, Councils and District Executive Directors (DED) are expected to use these resources for non-wage recurrent spending in accordance with the annual Comprehensive Council Health Plan (CCHP). Before 2004, the allocation to councils was based on population with 0.50 US\$ per habitant. In 2004, a new allocation formula was introduced to give more funds towards poor and rural areas. It is now based on four allocation factors: population (70 %), poverty count (10 %), district vehicle routes (10%), and under-five mortality (10%). Moreover, the amount available increased from 0.50 US\$ per capita to 0.75 in 2007 then to 1 US\$ in 2008. Besides those funds, the HSBF supports the rehabilitation of health infrastructures.

5. Health Sector Policy Support and other external financing modalities

Other external financing modalities, within but sometimes outside the umbrella of the SWAp, include: Global Budget Support (GBS), bilateral projects and programmes (sometimes coordinated with the SWAP planning and priority setting processes), Global Health Initiatives (GHI) such as the Global Fund for Aids, Tuberculosis and Malaria

⁵¹ Denmark, United Kingdom, Germany, Ireland, The Netherland, Norway, Switzerland and the World Bank.

⁵² In Tanzania for 2001/2002, 54% of external health funds were pooled funds (Jeffreys et al 2003).

(GFATM), and large multi-country bilateral programmes such as the President's Emergency Programme For AIDS Relief (PEPFAR) (COWI et al 2007).

4.4. SWAp Evaluation

According to the Development Partner statement for Launch of External Evaluation of the Health Sector, the 19th of March 2008, *“the Sector Wide Approach has largely been a success. It has strengthened national ownership and secured higher levels of both domestic and external financial resources for health. This in turn has delivered real improvements”*.

SWAp process

Only two years after implementation, it was recognised that SWAp in the health sector in Tanzania produced significant results that included strengthening of partnership between government and donors, growing of government ownership with national commitment, and developing coherent sector plan with an advanced joint funding mechanisms (Brown 2000, Burki 2001).

About 10 years later, analysis of essential SWAp core elements showed that main of them were present with high degree of achievement (Paul 2005). All partners engaged in the health SWAp in Tanzania have demonstrated high capacity of commitment and mutual trust necessary to go forward in implementing a coherent and coordinated health programme (Burki 2001).

Coherence (National policy, HSSP, Poverty Reduction Strategic Plan-PRSP)

From 1999 up to now, the MOHSW, with support of DPs and other stakeholders, produced an impressive number of policies, strategic plans and guidelines, as well as tools to support health sector reforms. A recent joint evaluation supports the conclusion that health sector strategies, plans and programmes have been relevant to the needs of the sector in Tanzania and to the achievement of the MDGs and the Poverty Reduction Strategic Plan (PRSP) goals and targets (COWI et al 2007).

SWAp and decentralisation

In Tanzania, there was no intrinsic contradiction between adopting a SWAp and developing a decentralisation by devolution (Paul 2005). Thus, the HSBF and the SWAP partners in the health sector supported the decentralisation for financing public health services in Tanzania (Boex 2008). It is admitted that the SWAp pushed forward HSR and the process of decentralisation (Hutton 2002). Thus, the HSBF has played a major role in the decentralisation process with devolution of responsibilities to LGA with the development and implementation of planning, budgeting, monitoring and reporting activities; the combination of increased funding with financial decentralisation has given the districts the possibility to selectively increase resources for key interventions (<http://hdptz.esealtd.com/index.php?id=17>).

Health sector budget and external supports

Under the framework of the SWAP, DPs have used a wide range of funding mechanisms to support the health sector. Modes of financial assistance have expanded since the last few years; the SWAp is supported through project financing, in-kind goods, services and technical support, basket (pooled) financing, as well as General Budget Support (GBS) (Tanzania Health SWAp 2007). If all of them are relevant to the needs of the health sector, all of them could be integrated into the SWAp umbrella. Carrying out a MTEF has significantly improved budget management and accountability of the health sector. All measures under SWAp has facilitated the capturing of different sources of financing of the sector (from government, local

authorities, HSBF, DPs financing projects or programmes and NGOs). However, obtaining sufficient information on expenditures from private providers including NGOs and faith-based organisation is still difficult (Ministry of Health and Social Welfare 2005c).

Health Sector Basket Funding (HSBF)

The HSBF has been a successful mechanism to strengthen the LGA in supporting district health services. Donors and agencies that did not adhere to the basket fund modality in the beginning because of classical factors of resistance (e.g. specific complex internal procedures, necessity of visibility with earmarking aid) have finally joined the group (Canada, UNFPA, UNICEF). The basket fund is recognized to have been a process facilitating the harmonisation of administrative procedures and providing leadership to the government. It assures also an increasing predictability of funding (Ronsholt 2002). Thus, it was confirmed that the establishment and operation of the HSBF has been a key factor in providing a stable and predictable resource base for local council plans and programmes in the health sector (COWI et al 2007). The joint funds' pooling mechanism has strengthened health service delivery at central and local levels. Between 2001 and 2009 the Health Basket has channeled around 523 millions US\$ to the health sector playing an essential role for primary health care delivery (<http://hdptz.esealtd.com/index.php?id=17>).

Global Health Initiatives (GHI)

During DPs meeting on external evaluation of the health sector in March 2008, it was stipulated that *“GHI and large bilateral programmes have injected much-needed resources into the fight against diseases that are national priorities. However, these remain largely outside existing health planning and management systems and this distorts local priorities and threatens sustainability”* (Development Partner statement for Launch of External Evaluation of the Health Sector 19 March 2008). Thus, GHI such as Global Alliance for Vaccines and Immunisations (GAVI), Presidential Emergency Plan for AIDS (PEPFAR) and Relief Global Fund for Aids, Tuberculosis and Malaria (GFATM) plus multi-country bilateral disease specific programmes have addressed some important health needs in the country with considerable financial (and material and technical) resources during the last few years. However, they are not yet compliant with the alignment and harmonisation principles pursued by the Joint Assistance Strategy for Tanzania (JAST) as they are largely outside of planning and priority setting structures at national and local level (COWI et al 2007, World Health Organization 2009). These programmes need to be more integrated into health sector programme to avoid distorting local priorities (staff consuming, inequality in incentives, etc.) and to avoid threatening of reducing the government ownership. In fact, the huge investments that were done recently by the GHI must be an opportunity for strengthening health systems. Moreover, another opportunity exists in supporting their alignment and operating within the SWAp arrangement because of the existing commitment of numerous DPs to making aid more effective, as stipulated in the Paris Declaration (PD) and Accra Agenda for Action (AAA); thus SWAp structures should be exploited (World Health Organization 2009).

Budget Support

All in all, more DPs used that funding support either sectoral (SBS) and/or general (GBS) (Paul 2005).

Projects

An external joint evaluation pointed out that for the period 1999-2006, the use of the projects as a modality for planning, implementing and financing external support did

not decline and the data from Ministry of Finances showed that the recorded volume of non-basket disbursements from DPs increased from 24.7 billion of TzSh in 2002/03 to 57.0 billion in 2005/06 (COWI et al 2007). Hobbs (2001) explained that HSBF-donors continue to support projects, because of different reasons. First, a transition period is necessary to move to new financing modalities. Second, some donors prefer that approach especially for good projects supported by NGO and private sector. Thirdly, others argue that projects are still necessary when government and donor priorities differ or if specific activities are not covered enough by the health sector plan. However, in the same time, the portion of external support to the health sector provided “on-budget” and under the government process has increased significantly during the same period (COWI et al 2007).

SWAp and results/outcomes/impacts⁵³

According to different joint review evaluations and DPs reports (<http://hdptz.esealtd.com/index.php?id=17>), the programmes, projects and activities implemented under the SWAp have contributed to improvements in health outcomes and to some improvements toward MDGs and PRSP goals, especially relating to infant and child mortality (COWI et al 2007). The different mechanisms under the framework of the SWAp have also contributed to improvement in service quality at operational level by strengthening the districts authorities and health managers to assume significant responsibilities for budgeting, supervising and operating essential health services; and by enhancing central services and support (COWI et al 2007). In contrast and despite recognised improvements, no significant progress was made for a certain number of impact indicators (e.g. maternal and neonatal health) and other essential organisational needs for quality health services (e.g. human resources).

4.5. SWAp perspective in the light of Paris Declaration (PD) and Accra Agenda for Action (AAA)⁵⁴

Joint Assistance Strategy for Tanzania (JAST) and DPs

The approach to aid management in Tanzania is guided by the Joint Assistance Strategy (JAST) and takes into account the international principles of aid effectiveness. JAST is a national framework for managing development cooperation between the government and the DPs to achieve national development and poverty reduction goals. It has been created in the spirit of international commitments and initiatives on aid effectiveness like the Paris Declaration in 2005 (United Republic of Tanzania 2006). The main focus of JAST is to promote national ownership and government leadership in development cooperation and to enhance joint actions so as to achieve a more robust and coherent response to the many economic and development challenges that the country faces (<http://www.tzdpg.or.tz/>). JAST is implemented at all levels of the government within the existing national or sectoral process for all aid relations with DPs. Therefore, the JAST gave an opportunity to have a broader alignment and harmonisation agenda and

⁵³ This important topic will be developed in the chapter about the evaluation of the 6 building blocks of the Tanzanian health system.

⁵⁴ The Paris Declaration was adopted at the Second High Level Forum on Aid Effectiveness in Paris in March 2005. It commits donors and developing countries to take far-reaching and monitorable actions to reform the ways in which aid is delivered and managed for greater aid effectiveness. The Partnership Commitments of the Declaration focus on national ownership, harmonisation, alignment, managing for results, and mutual accountability (United Republic of Tanzania 2006). Then in Accra in September 2008, the Third High Level Forum on Aid Effectiveness (Third HLF) focused on (i) review progress in improving aid effectiveness, (ii) broaden the dialogue to newer actors, and (iii) chart a course for continuing international action on aid effectiveness.

the Health SWAp is perfectly integrated at sectoral level. SWApS will thus serve as instruments for organising sector dialogue around strategic issues and overall policy directions. The last code of conduct between the MOHSW, PMO-RALG, Ministry of Finance and DPs in health is a sector-specific instrument based on the principles of the JAST (Tanzania Health SWAp 2007).

“The Development Partner Group (DPG) in Tanzania promotes the implementation of the Paris Declaration by working closely with the government to ensure that the principles of Aid Effectiveness are fully embedded in the national development process” (<http://www.tzdpdg.or.tz/external/aid-effectiveness/principles-of-aid-effectiveness.html>).

Sector and Thematic Area Working Groups

The Sector and Thematic Areas Working Groups represent the lowest level in the new dialogue structure. All sectors and thematic areas follow the clusters of the Poverty Reduction Strategic Plan (PRSP), based on policies and strategies for a particular sector/thematic area. Sectors include: Agriculture, education, water, health, industry and trade, infrastructure, energy and minerals, whilst Thematic Areas covers Governance, Domestic accountability, Public Service Reform, HIV/AIDS, Anti-corruption reform and Gender.

10 Facts about Aid effectiveness in Tanzania (<http://www.tzdpdg.or.tz/external/aid-effectiveness/principles-of-aid-effectiveness.html>).

1. Tanzania’s aid effectiveness initiatives begun even prior to the international call on aid effectiveness. The initiatives follow recommendation of the Independent Commission report by Helleiner (1994) which called for among other things a closer collaboration between the government and development partners.
2. Development Partner Group (DPG) supports the coordinated Government-led programmes to strengthen capacity development in core reforms programmes. Sector programmes with capacity development components include – but are not limited to - Primary Education Development Programme, the Secondary Education Development Programme, Poverty Reduction Strategic Plan (PRSP), as well as the **health** and HIV/AIDS programmes.
3. The Joint Assistance Strategy for Tanzania (JAST) is the national medium-term framework jointly developed by the government and development partners in order to enhance aid effectiveness at country level.
4. JAST is approved by Cabinet and signed by 19 bilateral and multilateral agencies including: African Development Bank, Belgium, Canada, Denmark, European Commission, Finland, France, Ireland, Germany, Japan, Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom, UN, USA, and the World Bank.
5. Poverty Reduction Strategic Plan – Public Expenditure Review dialogue structure is the main structure for technical dialogue between the Government, Development Partners and domestic stakeholders. It integrates all major national development priorities and sector processes into a single process, whilst retaining government exclusivity on its internal dialogue.
6. DPG endeavours to align its own structure of sectoral/thematic and sub-groups to a corresponding government-led dialogue structure, within the cluster structure of the PRSP.
7. Three modalities are used to deliver aid assistance to the government of Tanzania: General Budget Support (GBS), Basket Funds and the Direct Project Funds with the GBS being the most preferred mode since it is consistent with government’s legal structure and processes.

8. **The SWAp is applied in key sectors including water, health agriculture, education HIV/AIDS and core reform programmes. Under SWAps, line ministries take a leading role in putting in place a comprehensive and operational plan and programme as well as a coordination framework allowing various stakeholders to focus on commonly agreed goals and targets.**
9. Tanzania's mutual accountability framework particularly the Independent Monitoring Group mechanism, is one the most established mechanisms worldwide with three evaluation reports produced since 1994.
10. Most of the working groups under the DPG are organised around a troika chairing structure, that is, there is an incoming and present and out-going chairing arrangement (act as leaders of the group), with other DPs being either active or delegating members, in accordance with the division of labour outlined in the JAST.

CHAPTER II – TANZANIA: HEALTH SYSTEM AND BUILDING BLOCKS

The World Health Organization has defined what should be a health system: “it consists of all organisations, people and actions whose primary intent is to promote, restore or maintain health” and its goals are “improving health and health equity in ways that are responsive, financially fair, and make the best or most efficient, use of available resources” (World Health Organisation 2007). As mentioned in the chapter on methodology we have decided to refer to the different components of a health system described in the WHO Framework for Action with six “Health System Building Blocks” (World Health Organisation 2007). Because all these building blocks are needed to improve outcomes, they serve as a convenient tool for investigating the positive changes in the health system in Tanzania since the implementation of major HSR supported by a SWAp. Thus, our survey in Tanzania concerns the Health System Strengthening (HSS) which is defined as “improving these six health system building blocks and managing their interactions in ways that achieve more equitable and sustained improvements across health services and health outcomes” (World Health Organisation 2007).

1. Health Services

“Good health services are those which deliver effective, safe, quality personal and non-personal health interventions to those that need them, when and where needed, with minimum waste of resources” (World Health Organisation 2007). The availability of HFs with essential basic health services, their frequency and time with which these services are offered, the presence of qualified staff, and the accessibility of HFs are part of this section.

Summary

- Significant progress has been made in increasing and rehabilitating the HFs but the density of HFs per 10,000 did not improve.
- Most of Tanzanian population lives within 5 km from a HF (for 72% in 1972).
- No evidence of real improvement in important issues hampering service delivery like water and electricity supply, communication equipment; shortage of basic working and diagnosis equipment, and lack of staff housing.
- Curative cares for sick patient and for sexual transmitted infections are almost universally available in Tanzanian HFs; high HF proportions offer also antenatal care, immunisation and growth monitoring service.
- Most of hospital can offer 24 hours emergency services.
- Doubt on rationale about slogan “one village one dispensary, one ward one HC” in the light of available staff/equipment/communication in existing HFs, in light of cost and considering the relative good coverage of the country.

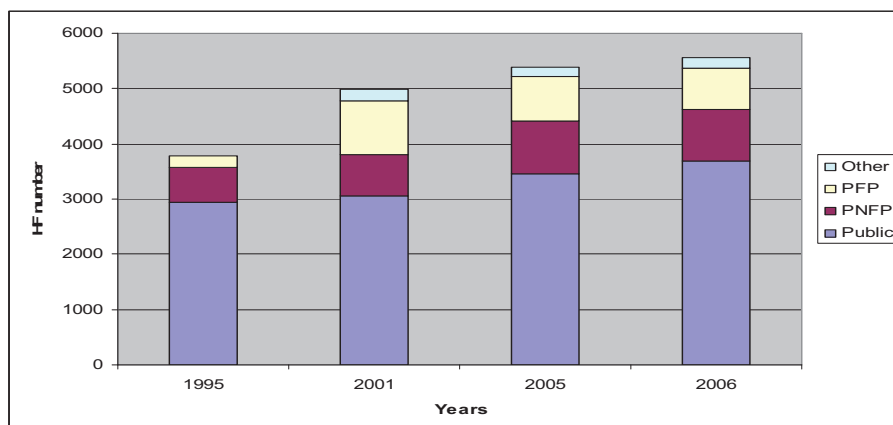
1.1. Health facilities

The number and the density

Standard of Tanzania for HFs was that a dispensary should cover up to 10,000 persons, a HC up to 50,000 and a Hospital up to 250,000 with population living within 5 kilometres from a HF. The total number of HFs has increased during the period of evaluation as showed in Figure 26. The increase between 2005 and 2006 was almost as much as important that between 2001 and 2005 with raise of more than 300 HFs in one year.

In 2006, among the 5,718 HFs⁵⁵, 86 % were dispensaries; 10% HC and 4% hospitals; the government owned 69% of dispensaries, 67% of health centres (HC) and 40% only of hospital; Private Not-For-Profit (PNFP) owned the same hospital percentage (Ministry of Health and Social Welfare, The United Republic of Tanzania 2008a). Between 2001 and 2006, the percentage of government HFs' ownership increased from 61% to 67% because of the reduction of parastatal and Private For-Profit (PFP) institutions (Figure 27).

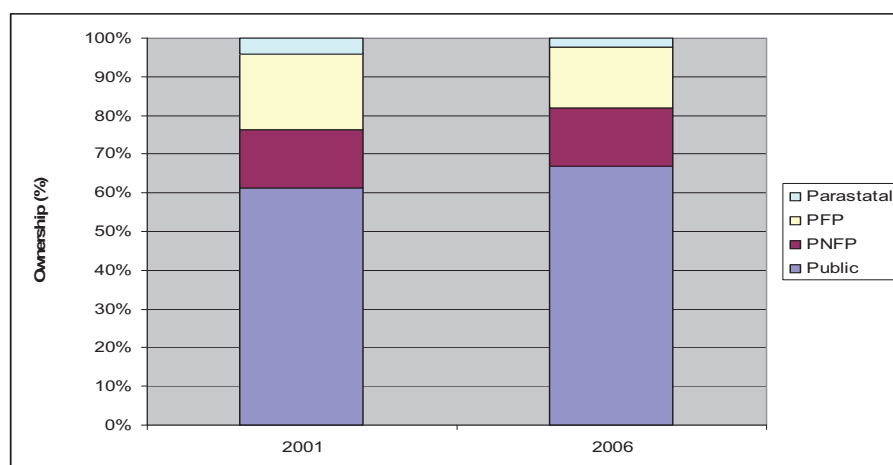
Figure 26: *Number of HF in Mainland Tanzania by ownership*



PFP: Private For-Profit PNFP: Private Not-For-Profit

Source: Ministry of Health and Social Welfare Tanzania Mainland and Ministry of Health and Social Welfare, Zanzibar & World Health Organization 2007, Ministry of Health and Social Welfare, The United Republic of Tanzania 2008a

Figure 27: *HFs Ownership (%) in 2001 and 2006*



PFP: Private For-Profit PNFP: Private Not-For-Profit

Of course in the same time the population increased as well and if we look to HF density, there were 1.67 HFs per 10,000 persons in 1997 (The United Republic of Tanzania Ministry of Health 1999) for 1.52 in 2006 (range of 0.93 in Shinyanga Region to 2.41 in Pwani (Coast) Region (Ministry of Health and Social Welfare Tanzania Mainland and Ministry of Health and Social Welfare, Zanzibar & World Health Organization 2007)). Thus, the theoretical patient load per HF has increased but it does not mean automatically a higher workload because other factors should be known like utilisation rate, staffing level, bed capacity, services offered, etc.

⁵⁵ The service availability mapping reported for the same year a total of 5795 (5512 for Tanzania mainland) (Ministry of Health and Social Welfare Tanzania Mainland and Ministry of Health and Social Welfare, Zanzibar & World Health Organization 2007).

The number of beds was 11.2 per 10,000 population in 2005 (Ministry of Health and Social Welfare - The United Republic of Tanzania 2006).

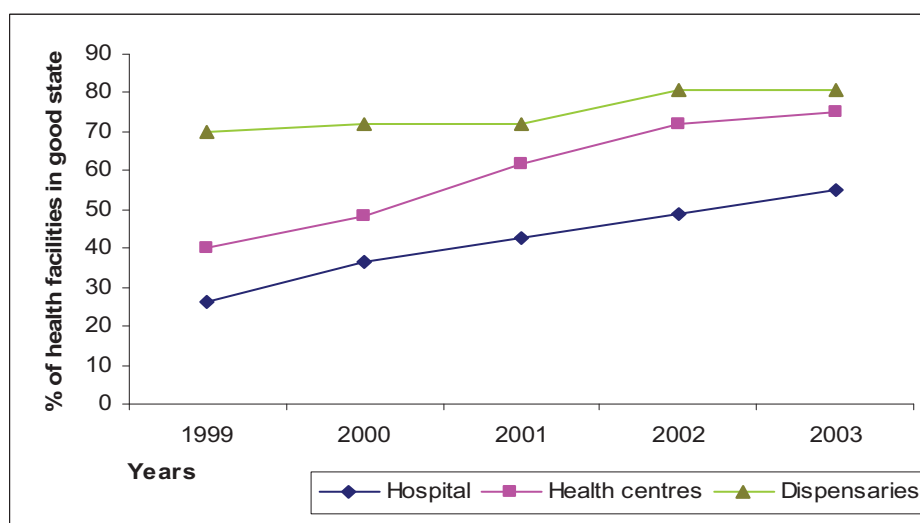
The accessibility for population

By 1980, about 45 % of the population lived within 1 km of a health facility, 72 % within 5 km and 93.1 % within 10 km of a health facility. Unfortunately, no recent estimate of population access to HFs could be found but, because of the continuous increase of the HFs number, it is “believed” that majority of population is living within 5 km from a HF but with geographical differences (Ministry of Health and Social Welfare Tanzania Mainland and Ministry of Health and Social Welfare, Zanzibar and World Health Organization 2007, Mtei et al 2007).

The HF conditions

The MOHSW classifies the physical state of health infrastructure as good, average or poor. According to the Annual Health Statistical Abstract (2006), the proportion of HFs in a good state of repair increased between 1999 and 2003, in particular for HC and dispensaries but less so for hospitals (based on data from 10 districts in 10 regions as showed at Figure 28).

Figure 28: *Proportion of HF (%) in good state 1999-2003*



Source: (Ministry of Health and Social Welfare - The United Republic of Tanzania 2006)

However, PMO-RALG officials indicated that the 2004 Annual Health Sector Review found that more than 50% of HF in rural areas were “dilapidated to the point of collapse and that an emergency response was warranted”. In response to this situation, a number of initiatives were undertaken. The Rehabilitation Strategy and Funding Mechanism for Health Facilities supported infrastructure maintenance and upgrading at district level. On the other hand, important issues such as water and electricity supply, communication equipment, and shortage of basic working and diagnosis equipment have not been resolved, hampering service delivery considerably. In the last “Tanzania Service Provision Assessment Survey 2006” (2007), it was reported that around 30% of HFs had regular water in the facility or within 500 meters from the facility; about the same proportion had regular electricity or a generator, and 13 % of facilities had basic client comfort amenities (functioning client latrine, protected waiting area, and basic level of cleanliness). Though, while the infrastructure of the HFs themselves is improving, lack of staff housing is another major constraint in the rural areas as it makes it difficult for HC and dispensary staff to be available outside working hours (as they are expected to

provide 24 hour service) and is also related to the reluctance of staff to come and stay in remote areas (COWI et al 2007).

1.2. Availability of essential services

Source: National Bureau of Statistics, Tanzania and Macro International Inc. USA 2007.

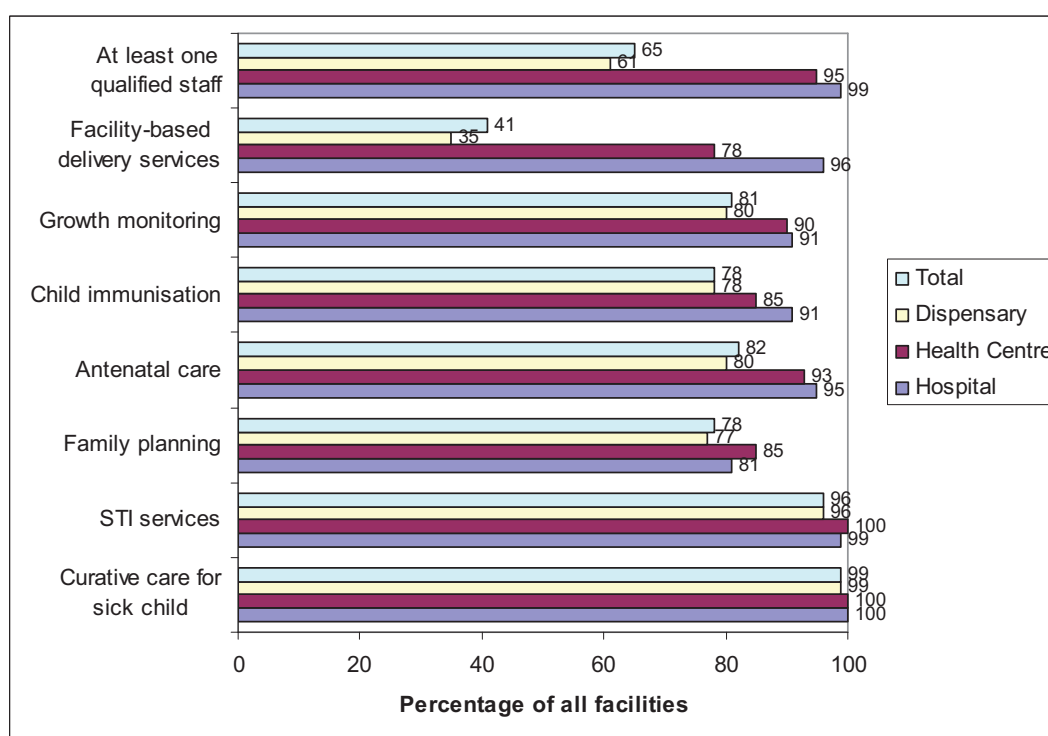
For the “Service Provision Assessment Survey”, standards and definitions were used according to the context of Tanzania. Hospitals, HC and dispensaries are supposed to provide full range of basic services, which include outpatient services for sick patients, for sexually transmitted infections (STI), family planning, antenatal care, immunisation, and child growth monitoring. Also the minimum frequencies of service offered are defined as curative care for patients offered at least five days per week, and other services one day per week. A qualified worker means doctors, medical officers, assistant medical officers, clinical officers, and clinical assistants⁵⁶. The component to be able to provide 24-hour emergency services are to have at least 2 qualified providers assigned to facility, observed duty schedule indicating staff are onsite or on call 24 hours a day, overnight beds, 24-hour emergency communication, and onsite water source at least some times during the year. The results of the survey are provided below.

- Overall, 72 percent of health facilities offer the full range of basic services. It is available at minimum frequencies in 44% of HFs. The package was most commonly found in hospitals and HC.
- A full package of services available at the minimum frequency, together with 24-hour facility-based delivery services, was available in one-fourth of all HFs. This includes two-thirds of hospitals and half of health centres.
- Facility-based, 24-hour delivery services were available in almost all hospitals (96%), in 78% of HC and in 35% of dispensary.
- Infrastructure to support 24-hour emergency services was mostly available in hospitals (62 percent) and health centres (15 percent). In fact, if the water and latrines factors are removed the proportion raised to 96% for hospital and 76 for HC (only 53% of HF had 2 qualified persons).
- Around one-fourth of HFs offered the full range of services at minimum frequencies plus facility-based 24-hour delivery services and 18% had all of these services plus at least one qualified provider of curative care.

The availability of specific services is summarized in Figure 29.

⁵⁶ In Tanzania, nurses cannot prescribe, therefore they were not included in this category for the assessment survey.

Figure 29: *Availability of different health services*



Source: Ministry of Health and Social Welfare - The United Republic of Tanzania 2006.

1.3. Recent policy and number of HFs requested

Already the number of new HFs has increased during the last few years, especially dispensaries. In the last HSSP (III for 2009-2015), the Primary Health Care Service Development Programme 2007-2017 wants to “improve access and expansion of health services in underserved areas with **one dispensary per village, one health centre per ward and one hospital per district** during that period (The United Republic of Tanzania Ministry of Health and Social Welfare 2009). To fulfil this statement, the increase of HFs appears to be a huge task as showed in Table 7. Only for public HF, it means to multiply by 2.5 the number of HFs; mostly the number of HC should be multiply by 6 and the dispensaries by 2. The total estimate budget is around 5 billions of US\$ without cost estimate for necessary massive increased in HRH to serve all those new health facilities. That new policy brings questions about rational and feasibility in term of investment and health workforce when the exiting HFs could not be staffed and equipped properly. Moreover, knowing that the majority of Tanzanian population lives within 5 km from an HFs, it is legitimate to have doubt on the usefulness of such priority. Thus, Bryan et al (2006) revealed that “no Tanzanian lives further than 10 km from some form of health care centre. Unfortunately, while the physical infrastructure exists, few of these facilities are staffed with the skilled health workers necessary to deliver critical interventions, and most of them lack the necessary medical equipment” (Bryan et al 2006) The acute HRH problem will be developed in the next section and will stress more on this doubtful health objective.

Table 7: *Available HFs in 2006 and new HFs planned 2007-2017 in the public sector*⁵⁷

Facility	Available HFs 2006	New HFs planned 2007-2017	Total
Referral/Regional Hospital	29	0	29
District Hospital	95	19	114
Health Centres	331	2,074	2405
Dispensaries	3,038	3,108	6146
Training institutions	72	4	76
Total	3,565	5,205	8,770

Source: The United Republic of Tanzania Ministry of Health and Social Welfare 2009.

2. Human Resources for Health

“A well-performing **health workforce** is one that works in ways that are responsive, fair and efficient to achieve the best health outcomes possible, given available resources and circumstances (i.e. there are sufficient staff, fairly distributed; they are competent, responsive and productive)” (World Health Organisation 2007).

Summary

- From 1994 to 2006 the number of health workers has almost been divided by two; moreover the higher proportion of reduction concerned unskilled and low qualified staff.
- The density of qualified staff/population is significantly below of other comparable low income countries and geographical imbalances are significant.
- Other important problem concerns the general health workforce performance.
- Human Resources for Health crisis has been recognized by high level authorities and became an absolute priority since 2005. Comprehensive strategies were elaborated.
- Some quick wins were obtained:
 - Training institutions have increased their output.
 - Accelerated recruitment of workers since 2005.
 - Significant increase of salary for public health workers
- Expenditure on human resources has increased, but still remains too low to meet the human resource needs as identified in the last Human Resource for Health Strategic Plan.
- Main challenge remains the Primary Health Service Development Plan, and its strategy to multiply in huge number the HFs number with need to multiply the workers by 5.

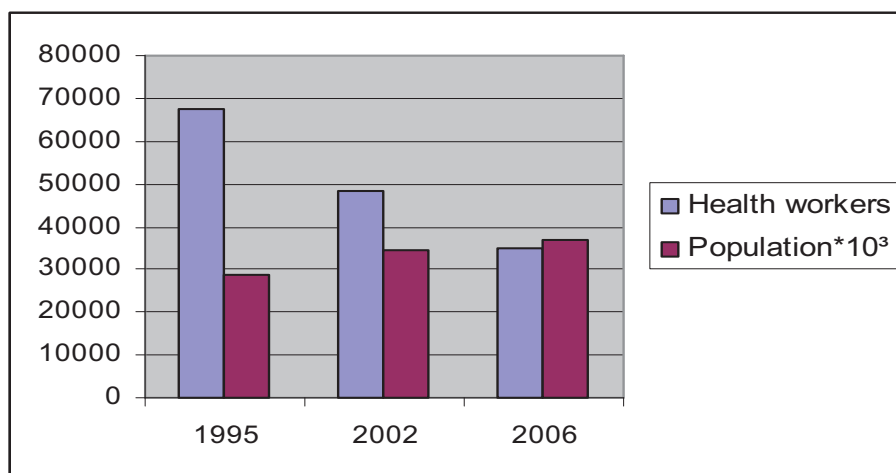
2.1. Decline of health workforce number

During the period of structural adjustment, in 1993, budgetary constraints resulted in a freeze in public service recruitment, which lasted 10 years. Almost at the same time, the 1996-2001 HRH strategic plan adopted a policy to reduce the number of unskilled and low qualified in order to create financial space for qualified staff and to improve quality (Ministry of Health 1996). The expected better efficiency was not obtained because the reduction number of unqualified staff was not compensated by equivalent qualified recruitment (COWI et al 2007) and by the fact that the policy was not financed (Mæstad 2006). Moreover the number of qualified staff has also decreased by 5% during that period as departures (retirement, HIV/AIDS) were not replaced (Wyss 2004). It was stated that between 1995 and 2005, only 16% of new qualified staff were employed in the public sector (World Health Organisation 2006). Therefore, as shown in Figure 30,

⁵⁷ In the private sector, the total number of HFs in 2006 was 1,959.

there was a sharp decline of the health workers number between 1995 and 2006 when the population continued to increase (Mæstad 2006, Ministry of Health and Social Welfare, The United Republic of Tanzania 2008b, O'Shea & Bryan 2009). The public sector hiring freeze was abolished in 2003 but as showed in figure the number of health workers has continued to decline.

Figure 30: *Total number of health workers and population in 1995, 2001 and 2006*



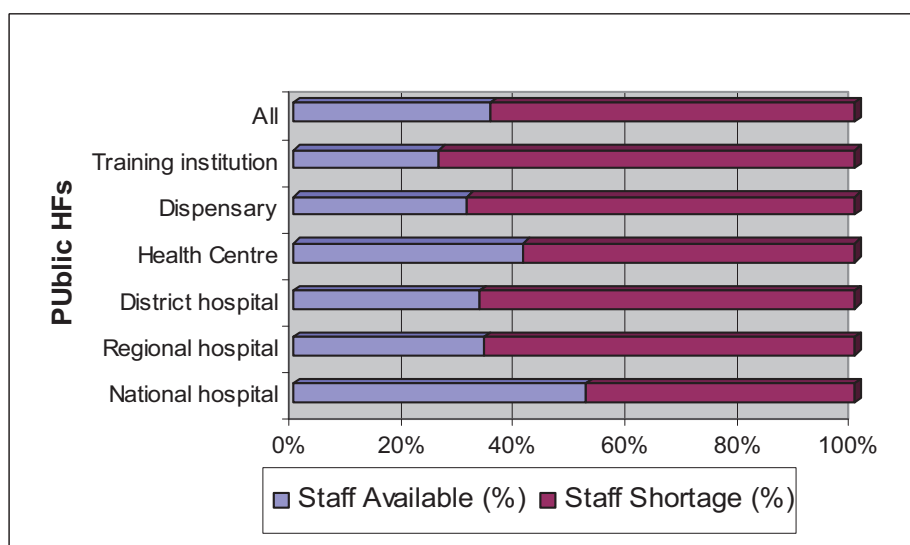
Source: HRH Census 1994/1995 & 2001/2002, Mæstad 2006, Ministry of Health and Social Welfare, The United Republic of Tanzania 2008b.

2.2. Recent figures and HRH crisis

It is generally recognised that Tanzania faces a serious human resource crisis that is hampering the health sector for delivering effective and quality health service (World Health Organization 2009). There is a global shortage of qualified staff compared to international standards and national staffing norms⁵⁸ – and a greater shortage is expected in the future because of increasing demand and attrition rates (Kurowski et al 2007, Mæstad 2006, O'Shea and Bryan 2009). The importance of shortage exists at all levels, though more severe in rural districts and it is illustrated at Figure 31. For health service delivery in the public HFs, according to the standard staffing level shortage is important at dispensary and at hospital level; globally 69% of standards requirement in health workers are not fulfilled. In number, it gives a total shortage of almost 53,000 workers (more than 80,000 health staff are required when less than 30,000 are available) (Ministry of Health and Social Welfare, The United Republic of Tanzania 2008b). In the private sector, the MOHSW (2006) reported an even higher shortage in all type of HFs with a deficit of almost 86% in regards of actual need; that represents around 38,000 units. The density of qualified health workers per population and comparison with other countries appears in Figure 32. With only 0.2 MO per 10,000 people Tanzania is significantly below of other comparable low income countries. The merge of MO and AMO (who play the same role as MO) increase the density to 0.7/10.000. Health workers in activity include a large proportion of unskilled staff (31% in 2003) with a medical officer per population ratio of 2.5 per 100,000 (Kurowski et al 2003).

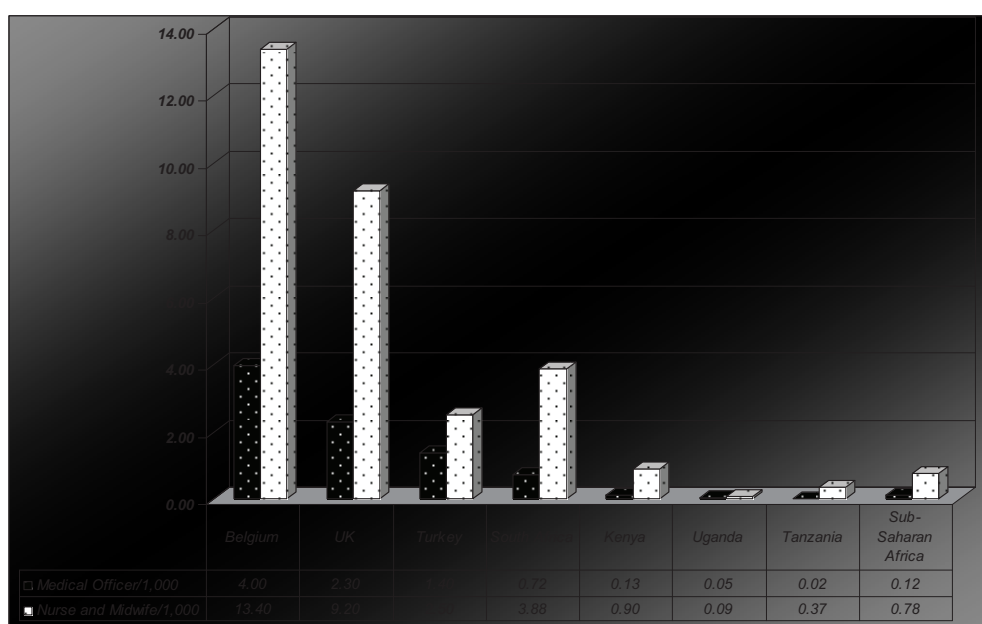
⁵⁸ WHO standards to provide the basic of health care is 23 skilled clinical health workers per 10,000 people.

Figure 31: *HRH availability (%) and shortage (%) per level of HFs in public institutions in 2006*



Source: Ministry of Health and Social Welfare, The United Republic of Tanzania 2008b.

Figure 32: *Qualified health workers /1,000 population in different countries*



Source: Who Regional Office for Europe June 2006, OECD Health Data October 2006, WHO Health statistics 2010, Mæstad 2006.

Geographical imbalances are significant and total health worker to population ratio varies substantially across districts, ranging from 0.3 to 12.3 per 1000 (Munga and Maestad 2009). The Service Availability Mapping – SAM (2006) reported 1339 MO, including 455 in the private sector. About half (52 per cent) of all doctors were employed in the Dar Es Salaam region, where the density of doctors was six times higher than the national average. The total number of AMO was about the same. Density of MO and AMO combined exceeded 1 per 10,000 in Dar Es Salaam, Arusha, Mwanza, and the five regions of Zanzibar. Ten regions have less than 0.5 doctors or AMO per 10 000 population. Clinical officers have a shorter clinical training than AMO and only perform minor surgery, but they were much more numerous than doctors and AMO combined. In total, 6908 clinical officers were reported, corresponding to 1.8 per

10 000 population. The same reported In the United Republic of Tanzania as a whole 5.3 nurses/midwives for every doctor or AMO.

Other important problem concerns the general health workforce performance; Mæstad (2006) report low skills level, low productivity, low motivation to comply with working standards (misdiagnosis and mistreatment of common illnesses). The WHO (2009), in its last country cooperation strategy, emphasised on different constraints in HRH like low output of skilled workers, poor distribution, lack of attractive retention scheme, and the increasing burden of disease.

2.3. HRH strategies

During the last few years, a consensus was reached among the officials in Tanzania to admit that the Tanzania was facing a HRH crisis. Awareness has progressively risen among policy makers and the Ministry of Health and Social Welfare (MoHSW) issued an emergency strategy to address the problem in 2005 (Dominick and Kurowski 2004, Mæstad 2006). In response, human resource policies and strategies have been developed, with plans for addressing numerous relevant issues that reveal the increasing awareness toward evident link between HRH and improved health services delivery and health outcomes. The policy and strategies have been finalized in the HSSP (III: 2009-2015) where it is mentioned that “improvement of the human resources situation is priority number one for the health sector in Tanzania” (The United Republic of Tanzania Ministry of Health and Social Welfare 2009).

“Quick wins”

With the adoption of the new strategies for HRH, some results have been already produced.

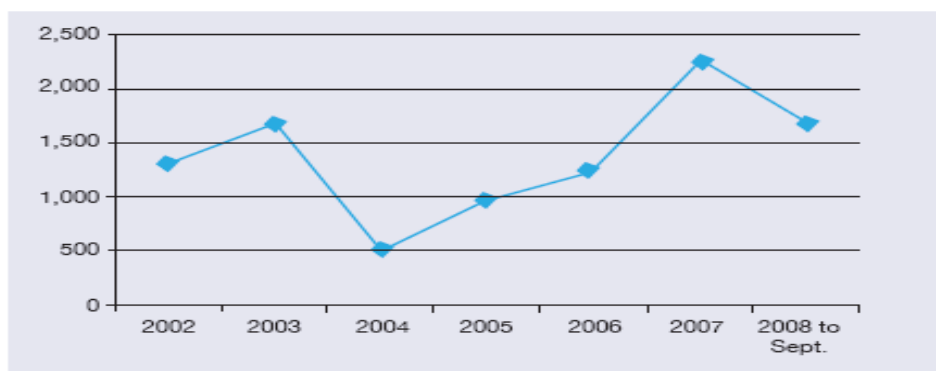
Health training institutions

Private and government training institutions have increased their output in recent year, but it is too early to see the result in the number of health workers employed (COWI et al 2007; Research and Analysis Working Group, Tanzania 2009).

Increase of health staff recruitment

Since the financial year 2005/06, and for the first time in more than a decade, there was an accelerated recruitment of workers with a total of 12,000 new positions approved (Ministry of Health and Social Welfare, The United Republic of Tanzania 2008b). Thus, Figure 33 below shows an increase of staff recruited at Council level; however it represents a very little raise compared to the total workforce in Tanzania and furthermore, with staff attrition due to retirement, suggests a very little change (Research and Analysis Working Group, United Republic of Tanzania 2009).

Figure 33: *New Health Staff Hired by Local Government Authorities, 2002 - 2008*



Source: (Research and Analysis Working Group, United Republic of Tanzania 2009).

Improvement in pay and benefits

A first substantial salary increment policy in public institutions was implemented during fiscal year 2006/2007 and another one, more important took place during the next fiscal year. The basic salary was in certain cases multiply by almost 3 (Local government finance information: www.logintanzania.net).

Overview of budget and expenditure on HRH

The last PER 2008 reported: “The review findings indicate increase in the overall spending on personnel, including training, and that, much of the spending on human resources are recurrent expenditures. But despite such increases in recurrent expenditure, the overall expenditure for HR Development still remains very low, and the HRH resources gap based on the HSSP-III costing figures still remains wide. The findings of this review indicate that, if HR needs as identified in the HR Strategic Plan are to be met, about 20% of the MoHSW budget should be allocated to HR Development. However, only 6% of the MoHSW budget has been allocated to HR development in 2008/09 which is approximately 31% of total resource requirements for human resource development in 2008/09” (Directorate of Policy and Planning Ministry of Health Tanzania 2008).

Main challenge: Workforce projection

Implementation of the Primary Health Service Development Plan, which aims at increasing health facilities from 5795 in 2006 to 13039 by 2017, shall increase demand for human resources significantly. That strategy is a call for doubling health workers training (with rapid expansion of existing institutions), and for multiplying health workers by 5 with an estimate of a need of 145,000 health workers to fill the existing gap in the public HFs plus around 40,000 more for private institutions (Ministry of Health and Social Welfare, The United Republic of Tanzania 2008b). However we could not found concrete action plans with necessary investment to realize such strategies that appear quite unrealistic (constraint of training capacity, time needed to train qualified people, attrition rate, amount required, etc.).

3. Health information system

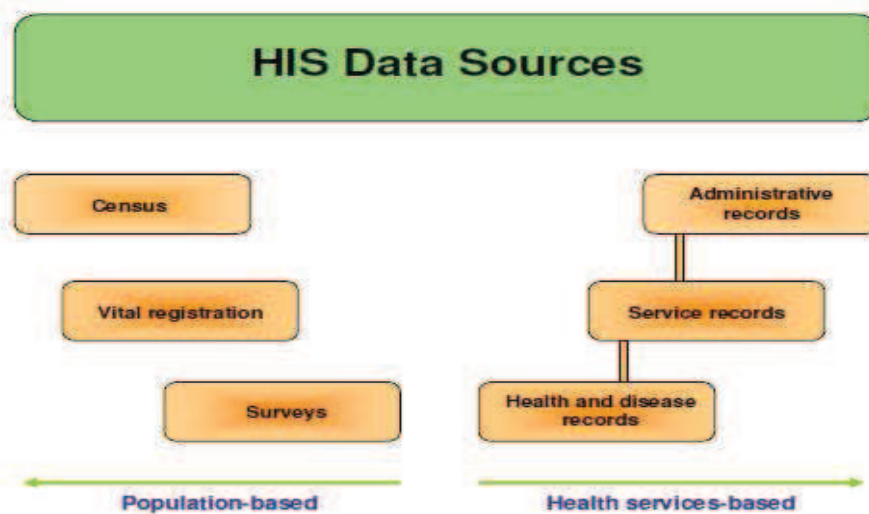
“A well-functioning **health information system** is one that ensures the production, analysis, dissemination and use of reliable and timely information on health determinants, health system performance and health status” (World Health Organisation 2007).

Summary

- The Health Information System is divided in 2 pillars: population-based information and the health-service-based information through the Health Management Information System.
- In the HMIS data flows from health facilities to national level.
- HMIS is the coverage of all HFs independently of ownership:
 - Estimate coverage with key services.
 - Comparisons across HFs and regions.
 - Information can be utilised efficient planning.
- HMIS has several weaknesses:
 - Data quality and accuracy.
 - Information not used enough to improve local services.
 - Little feedback on the data reported between various levels.
 - Parallel programmes and new policies has fragmented the system with overloading of health staff.
 - Significant increase of salary for public health workers.
- New initiative operating under WHO has been developed in order to improve the HIS in Tanzania.

The main sources of health information divided in two pillars; one that generates data relative to populations as a whole, and another one that generates data about the operations of the health services (Ministry of Health and Social Welfare - The United Republic of Tanzania 2007b). Figure 34, copied from the “Proposal to strengthen health information system (HIS), Ministry of Health and Social Welfare, Dar Es Salaam-2007” illustrates all those sources. Population-based health information sources include the census, vital events monitoring (civil registration, as well as sample or sentinel surveillance of births, deaths and causes of deaths. (Ministry of Health and Social Welfare 2007). The second pillar collects information from health service delivery; the Health Management Information System (HMIS) is the largest routine data collection system. It is commonly called MTUHA, which is an acronym for the Kiswahili meaning of HMIS -“Mfumo wa Taarifa za Uendeshaji wa Huduma za Afya.” The system covers all health programmes and health care services. All health facilities (Government, Private, NGO and Parastatal organisations) use the MTUHA system; analysis and use of data are supposed to be done at each level of the system. During the design stage of MTUHA, which started in 1989-1990, one of the objectives was to have a decentralised, integrated, functional, and reliable system (Lungo and Twaakyondo 2007, Mukama 2003). In 1998, a second version of MTUHA was introduced with some changes, in particular to simplify some formats and to have quarterly reporting from all levels instead of monthly which was unrealistic due to difficult communication in the country (Health Research for Action (HERA) 2000). MTUHA collects data on over 600 data elements aggregated in 12 data collection registers. Health data flows from health facilities to national level (Lungo & Twaakyondo 2007, Ministry of Health and Social Welfare - The United Republic of Tanzania 2007b).

Figure 34: *Health Information System data sources*



Source= (Ministry of Health and Social Welfare 2007).

The decentralisation process, meaning a health system managed more closely to the level of service delivery by the people in their respective localities, has generated new information needs with in-depth restructuring of information systems for data collection, processing, analysis, and dissemination requirements. Measures to improve the HMIS are still on course, e.g. all districts have been computerised and functioning of data bases centrally has been enhanced.

Evaluation of the Health Information System

According to the MOHSW (2007), “the HIS have evolved in an erratic, piecemeal way, fashioned by administrative, economic, legal or donor pressures” bringing fragmentation in the system. It pursues that HIS is “further fragmented by disease-focused programs demands which often relate to donor requirements and international initiatives directed to specific areas such as malaria, HIV/AIDS or tuberculosis; thus several disease-specific programmes have de-linked from the HMIS, set up their own information systems” and have overloaded already busy health staff (Ministry of Health and Social Welfare - The United Republic of Tanzania 2007b). Proposals have been made to shift these information needs from the regular HMIS to the Sentinel Surveillance System.

HMIS results

An important realisation with the HMIS is the coverage of all HFs independently of ownership as it concerns government, PNFP, PFP and parastatal institutions with mechanisms in place at national and sub national levels for supervision and feedback on information practices. The data derived from health service records are used to estimate coverage with key services such as antenatal care, delivery with a skilled attendant and immunisation. The complete coverage allows comparisons across HFs, across districts and regions; it gives pictures of burden disease, service use and finally all those information can be utilised for further more efficient planning with the priorities revealed by correct and realistic situation analysis (COWI et al 2007; Ministry of Health and Social Welfare - The United Republic of Tanzania 2007b).

HMIS weaknesses (Ministry of Health and Social Welfare 2007, Ministry of Health and Social Welfare - The United Republic of Tanzania 2007b, Mukama 2003, World Health Organization 2009)

Despite the fact that there is a national wide HMIS which is active and running in all HFs, the system is facing several challenges. Different evaluations have revealed the following weakness in Tanzania:

- Data quality and accuracy are not sufficiently assured:
 - Reporting is often incomplete with missing and lost of data between levels.
 - Delay in reporting.
 - Limitations in terms of human resource capacity because of inadequate skills at all levels for data analysis and interpretation.
 - Lack of mechanism from district to national level to verify completeness and consistency of data from facilities and non use of findings from surveys, civil registration or Demographic Surveillance Sentinel to assess the validity of clinic-based data by managers and analysts at national and regional/district levels.
 - Software and hardware problems at different levels
- Information is generally not sufficiently used for local decision-making to improve services.
- Little or no feedback on the data reported between various levels.
- HMIS-related activities result in higher workloads, especially for health staff at the dispensary and health centre level where data are being collected.
- High numbers of parallel systems for special programs like HIV/AIDS, Tuberculosis and Leprosy, Prevention of Mother to Child Transmission, mainly to track programme specific indicators. Moreover, the changes in health provision like Health Insurance Programme, Neonatal care etc has also created demand for new data tools. A fundamental issue has been lack of coordination of supplementary tools at all levels. As a result service providers at lower levels are the ones carrying the ultimate burden.

New strategy to strengthen the Tanzania HIS

The MOHSW recognised the weaknesses of HIS and a recent new initiative operating under WHO has been developed in order “to increase the availability, quality, value and use of timely and accurate health information by catalyzing the joint funding and development of core country health information systems (Ministry of Health and Social Welfare - The United Republic of Tanzania 2007b, World Health Organization 2009).

4. Drug and equipment

“A well-functioning health system ensures **equitable access to essential medical products, vaccines and technologies** of assured quality, safety, efficacy and cost-effectiveness, and their scientifically sound and cost-effective use” (World Health Organisation 2007).

Summary

- The Medical Store Department (MSD) is responsible for provision of drugs, supplies and equipment to all public HFs and approved private institutions.
- The monopoly position held by the MSD remains questionable for system efficiency.
- Improved availability of drugs, supplies and equipment have been reported at all levels and it was attributed to:
 - New ordering systems (indent then integrated) that are progressively put in place.
 - The spending on essential drugs has increased with almost 150% from financial years 2002 to 2005.
 - Cost-sharing mechanisms and decentralisation. Thus, with larger autonomy it became possible to use funds collected through cost sharing to improve procurement of drugs and supply outside of the MSD.
- Despite some improvement, the problems and disruptions in supply continue to impede efforts to improve the quality of service.

Provision of essential drugs, medical supplies and equipment: Medical Store Department

According to the Ministry of Health (2003), “the provision of essential drugs, reagents medical supplies and equipment is based on the National Drug and Supplies Policy Guidelines. The overall objective is to make available to all Tanzanians at all times the essential pharmaceutical products, medical supplies and equipment which are of high quality, proven effectiveness, acceptable standard and safety at a price that the individual and the community can afford. These are needed for health promotion, prevention and treatment of illnesses” (The United Republic of Tanzania, Ministry of Health 2003). In summary, the guideline was established to ensure reliable supply of quality essential pharmaceutical products to the community, and at an affordable price. In that optic, the Medical Store Department (MSD) was created by an act of Parliament in 1993 with the express objective of furnishing to the nation good quality drugs and medical equipment at accessible prices. MSD is an autonomous department of the Ministry Of Health and operates on a commercial basis, being responsible for its own self sustaining financially. Its mission is “to make available at all times essential drugs and medical supplies of acceptable quality at cost-effective prices to the population through government and approved non-government and private health facilities”. The MSD is responsible for developing, maintaining and managing procurement, storage and distribution of approved drugs and other medical supplies required for use by public facilities and approved non-government and private HFs. The MOHSW transfers the budget for essential drugs and supplies to MSD in regular tranches. All public health facilities have an allocation with MSD specifying the budget they can use for drugs and supplies. When they order, the costs are subtracted from their allocation. The MSD has a large degree of monopoly power. To ease this load, MSD has opened branch offices in the 8 health zones of Tanzania. However, the central medical store in Dar Es Salaam remains the sole supplier for the system that covers health centres and dispensaries.

Changes

Kit system, Indent System and Integrated Logistics System

Product availability of essential drugs under the old existing **kit system**, in which HF in public sector received monthly standardised contents, was recognised to be problematic since several years. The kit contents were designed to meet drug needs for the whole country despite the existing significant variations in morbidity between different geographic regions. Thus, there were continuously stocked out of certain products and overstocked in others with high levels of wastage (The United Republic of Tanzania Ministry of Health 2002). In reaction, the pre-packed kit system was transformed into an “**indent**” or **ordering system**, where health facilities determine their own drug needs and place quarterly orders with MSD (The United Republic of Tanzania Ministry of Health 2002). In fact hospitals were already in that kind of system. By end of year 2004, it was expected that Indent System should serve all districts in the country but it took longer. Although essential drugs pass through this system, exceptions include HIV test kits, condoms for STI/HIV and STI drugs, which are sent from MSD to regions and then go in vertical program vehicles to districts. This parallel system is generally not as efficient as the one for other health commodities (The United Republic of Tanzania Ministry of Health 2002). In response to that problem, a new **Integrated Logistics System (ILS)** has been developed to include all essential health commodities that should be in place in the whole country by 2010. In 2006, 5 regions were still on kit system for 10 in Indent and 7 in ILS (COWI et al 2007).

More autonomy to LGA

Decentralisation and larger autonomy in council budget allow the use of funds collected through cost sharing process to improve procurement of drugs and supply outside of the MSD.

Results

The absolute increase in health spending has allowed a rapid rise in funding for drugs and medical supplies; from financial years 2002 to 2005 the spending on essential drugs has increased with almost 150%, with greatest increase – a doubling – happened between 2002/03 and 2003/04 (Euro Health Group 2007, Smithson 2005, World Health Organization 2009). Also, the money available from alternative sources (cost-sharing, insurances, etc.) became available in higher quantity, especially at hospital level, and could address shortages in supply from MSD by procuring on the private sector (Euro Health Group 2007).

Concerning availability of drugs, supplies and medical equipment at health facilities, different evaluations and joint review assessments indicated significant improvement with higher satisfaction by service providers (COWI et al 2007, Health Research for Action (HERA) 2003, Ministry of Health and Social Welfare - The United Republic of Tanzania 2007a, Smithson 2005). WHO (2007) reported that overall medicines availability in the public sector was around 70%. Euro Health Group (2007) evaluation reported that availability of most drugs from the vertical programmes at HF was very good, except for STI. It is admitted that vertical programmes operate with national and district coordinators who are supplied with sufficient resources to undertake their tasks.

Challenges

Despite reported improvements, the same reviews and evaluations stressed also on the fact that reliability of essential drugs and medical supplies and equipment remains a key challenge:

- Delays in supplying.
- Doubtful quality of some medical equipment.
- Excessive stock-out and lacking in certain major equipment

The logic of the monopoly position held by the MSD is often put forwards in discussions but it remains unchanged.

5. Financing the health sector

“A good health **financing system** raises adequate funds for health, in ways that ensure people can use needed services, and are protected from financial catastrophe or impoverishment associated with having to pay for them. It provides incentives for providers and users to be efficient” (World Health Organisation 2007).

Summary

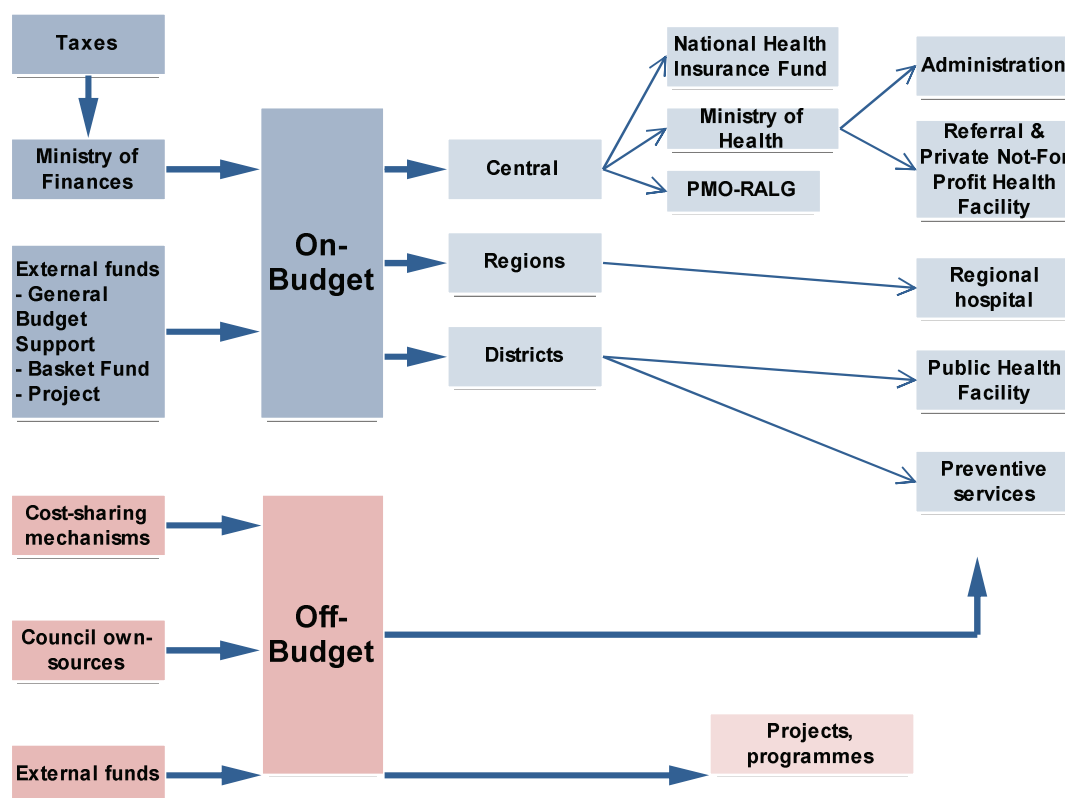
- Allocations and expenditures in health have increased significantly with both internal and external sources.
- Despite the augmentation, the share of health in government budget remains below 15% recommended in Abuja Declaration and the spending in health per capita is far from the international target of 40 US\$ per capita.
- Capturing complete and correct off-funding spending was difficult but the foreign off-budget resources remain important.
- External HIV/AIDS expenditure increased in very high proportion (more than double) between 2002 and 2005 being even more important that external on-budget. However, much funds start to be captured on the government budget (e.g. Global Fund for Aids Tuberculosis and Malaria injected important funds in development budget for year 2007-2008).
- Contribution from cost-sharing mechanisms remains very low (1 to 2% of the entire health sector financing) and not always used to improve service delivery but it constitute an important source of expenditures in the facilities where it is collected and spent.
- The share to Local Government Authorities is consequent but whereas a great majority of health services should be provided at the local government level (Decentralisation by Devolution), overall, only about 30% of health resources are actually provided to the local government level.

One of the objectives of the HSR initiated in the 1990s was to improve the use of health resources with better access to quality services. During the next decade, the main elements of the financial reform included the cost sharing strategy with introduction of user-fees, insurance system and community health funds. Another important reform was the decentralisation by devolution and in the late 1990s, the adoption of a health SWAp that increased coordination and coherence for the health sector with comprehensive programme. The health sector budget tried then to reflect the sectors priorities and strategies elaborated taking into account all available resources for the health sector (government funds including external funds originating from general budget support, external funds, and other funds or “off-budget funds”) and to allocate more resources to LGA.

5.1. The sources of funding and public expenditure framework in Tanzania

The main sources of health financing are the government of Tanzania with taxes, DPs with general budget support, basket funding or project funding, households contribution (cost-sharing mechanisms), NGO, and firms (contribution to private health insurance) (Mtei et al 2007b). Usually, among the source of funds and in the public expenditure framework, there is a distinction between two components: “on-budget” and “off-budget” resource/expenditure. The flow of all financing sources, with the different element alimenting “on-budget” and “off-budget” are summarized in Figure 35.

Figure 35: *Health care resources and public expenditure framework in Tanzania*



PMO-RALG: Prime Minister's Office_Regional Administration and Local Government.
Sources: MOHSW and Mtei et al 2007.

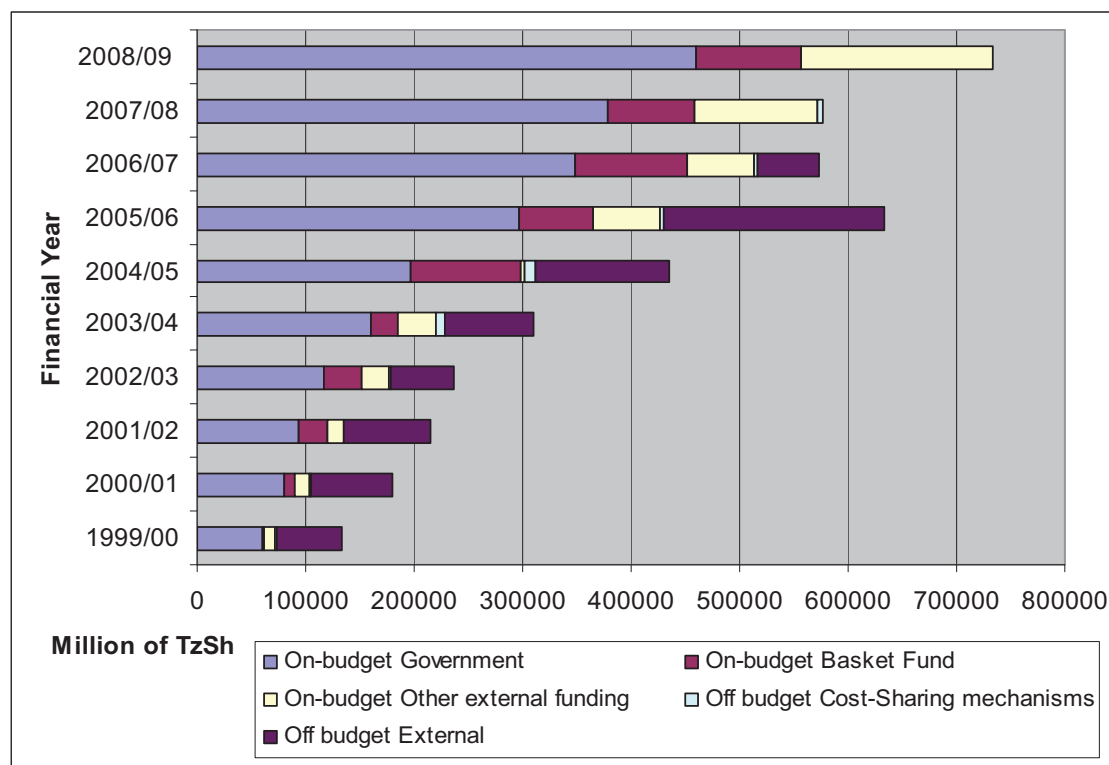
The following section shows the evolution of health budget and expenditure between 2000 and 2008. The contribution of different components and how the budget is allocated to the different posts described in Figure 35.

5.2. 2000 to 2008 increased funding for the health sector

The total level of spending on health increased with an upward trend since 1999/2000 and continues to increase year after year. Figure 36 illustrates the constant increasing of actual expenditure during the 10 last financial years. We made our own calculation with the “Health Sector Public Expenditure Review (PER) for year 2003, 2004, 2005, 2006, 2007 and 2008. In that figure, general budget support (GBS) is included in the domestic “on-budget” component. However the figures for the financial years 2007/08 and 2008/09 are not complete. For the year 2008/09 the amounts available were expenditure estimate rather than actual expenditure and were only available for the component “on-budget”. For the year 2007/08, none information concerning external funds in the off-budget line could be found. The last PER (2008) indicates that actual health expenditure

grew by 41% in 2005/06, then by 20% in 2006/07 and by 12% in 2007/08 (Directorate of Policy and Planning Ministry of Health Tanzania 2008, Health Sector Reform Secretariat Directorate of Policy and Planning MOHSW Tanzania 2010).

Figure 36: *Actual total health expenditure from different sources and per financial year in Tanzania*



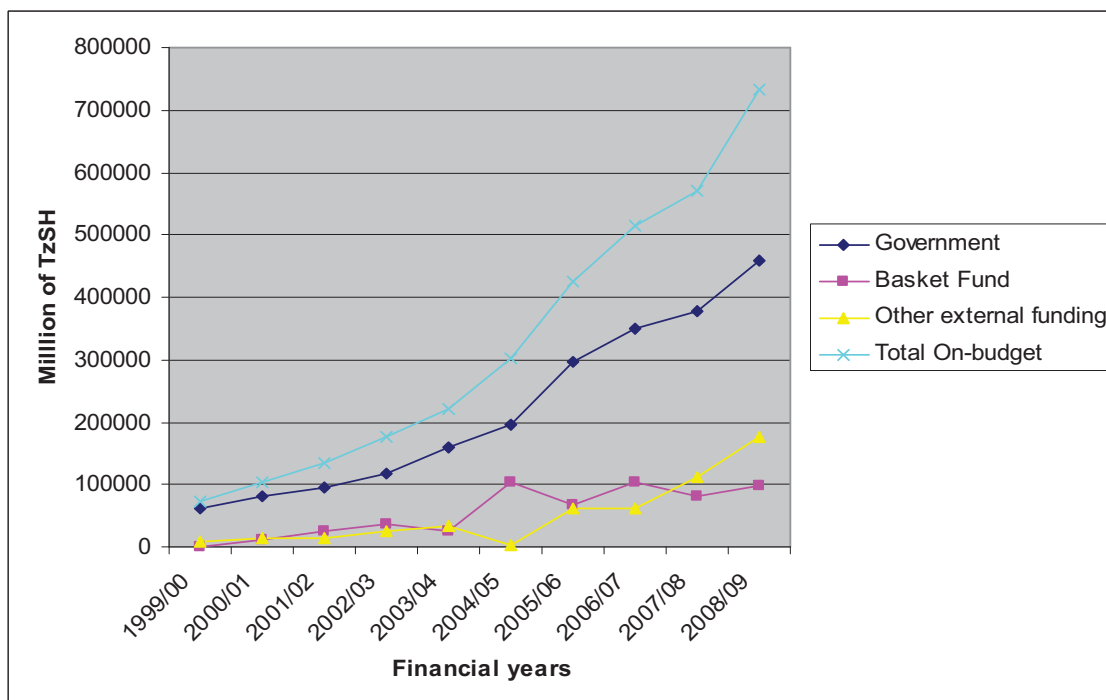
Sources: Directorate of Policy and Planning Ministry of Health Tanzania 2003, Directorate of Policy and Planning Ministry of Health Tanzania 2008, Health Sector Reform Secretariat Directorate of Policy and Planning MOHSW Tanzania 2010, PER Task Team Ministry of Health Tanzania 2004, PER Task Team Ministry of Health Tanzania 2005, PER Task Team Ministry of Health Tanzania 2006; PER Task Team Ministry of Health Tanzania 2007.

Actual health expenditure with “on-budget”

Figure 37 shows the important increase in on-budget resources, especially from government funding; in 2000 it was around 61 billions of TzSh (68 million of US\$) for 378 billions for 2007/08 (more than 300 million of US\$⁵⁹). The contribution of the NHIF was added to the government component in actual expenditure from 2001/02 and onwards (Health Sector Reform Secretariat Directorate of Policy and Planning MOHSW Tanzania 2010, Laterveer et al 2004).

⁵⁹ Exchange rate source is from the Bank of Tanzania with rate of the July 1st, 2000 and of the July 1st, 2008 (www.bot-tz.org).

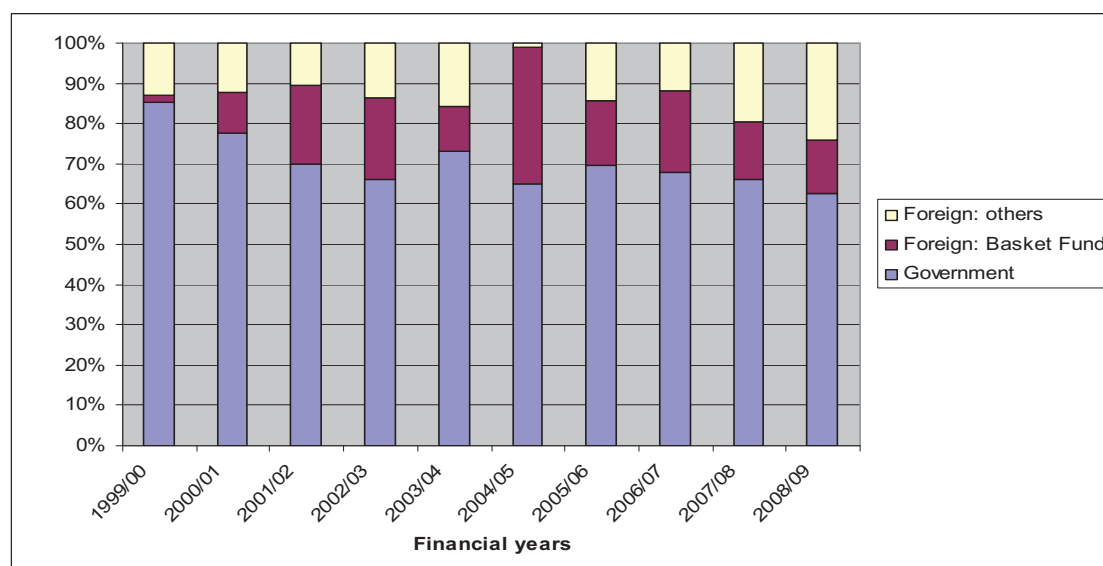
Figure 37: *Actual total on-budget health expenditure per financial year in Tanzania*



Sources: Directorate of Policy and Planning Ministry of Health Tanzania 2003, Directorate of Policy and Planning Ministry of Health Tanzania 2008, Health Sector Reform Secretariat Directorate of Policy and Planning MOHSW Tanzania 2010, PER Task Team Ministry of Health Tanzania 2004, PER Task Team Ministry of Health Tanzania 2005, PER Task Team Ministry of Health Tanzania 2006, PER Task Team Ministry of Health Tanzania 2007.

For the last years also the share of foreign funds in health sector financing had increased from 30% to 35% and it was expected that the trend would continue in 2008/9. Figure 38 illustrates the proportion between government and foreign funds in the on-budget.

Figure 38: *Shares of Government and Foreign Funds in Health Sector Financing*



Sources: Directorate of Policy and Planning Ministry of Health Tanzania 2003, Directorate of Policy and Planning Ministry of Health Tanzania 2008, Health Sector Reform Secretariat Directorate of Policy and Planning MOHSW Tanzania 2010, PER Task Team Ministry of Health Tanzania 2004, PER Task Team Ministry of Health Tanzania 2005, PER Task Team Ministry of Health Tanzania 2006, PER Task Team Ministry of Health Tanzania 2007.

Actual health expenditure with “off-budget”

The largest element of the off-budget is external projects financed by a wide range of development partners, and which are planned or being implemented through government, regions, local governments, NGOs and the private sector. The other off-budget element is the domestic income where resources come from different cost-sharing mechanisms (user-fees, insurances, CHF).⁶⁰ Unfortunately, and according to the different PERs, these two sources are subject to concern regarding the quality and completeness of data; there are just presented as captured with the lecture of different documents but should be taken with caution. Globally, for the period between 2001 and 2006, estimated off-budget resources have contributed between 18% and 32% of total sector expenditure. This contribution comes mostly from the foreign off-budget resources, since domestic off-budget expenditure remains a minor contributor to total expenditure (PER Task Team Ministry of Health Tanzania 2006). However the problem with absence of accurate data is that the reduction of off-budget part cannot be attributed to better integration of funds in on-budget.

Off-budget domestic funds or health service funds

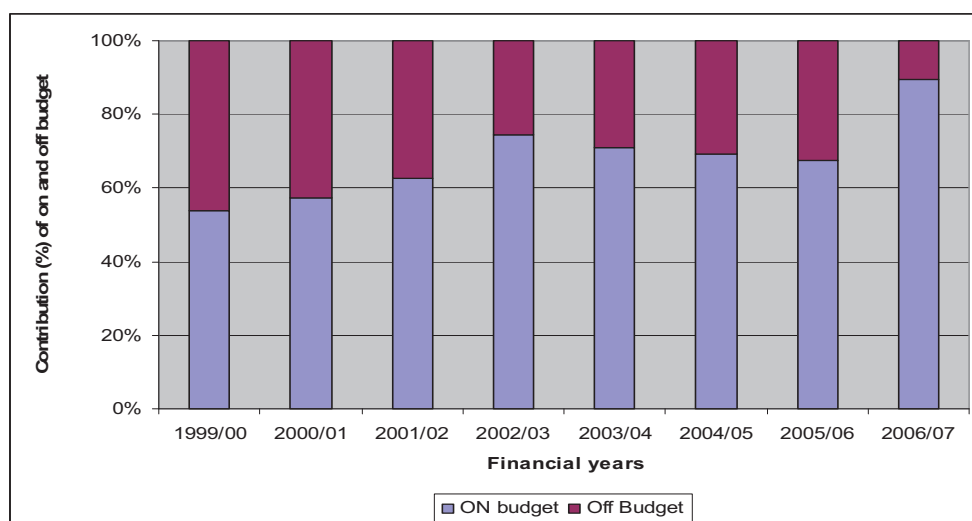
The captured data in the figures gives a low contribution to the health budget (around 1% of total sector spending) and are perceived to be insignificant. NHIF has grown more significantly but are “captured” in on-budget government funding. The last joint review report stipulated that a substantial health insurance resources remain unused by the HFs (not claimed), the estimate was that only around 15% of NHIF annual income is really utilized (Health Sector Reform Secretariat Directorate of Policy and Planning MOHSW Tanzania 2010). In the same way the last PER (2008) revealed that there was still a huge cumulative sum of funds collected from cost-sharing that were unspent at the end of 2007/08 (3,615 million of TzSh). Nevertheless, when the cost-sharing mechanisms function, the collection of funds constitutes an important source of expenditures in the facilities.

Off-budget foreign funds

During the last PER 2008, it was explained that “capturing of off-funding spending has proved to be difficult”. During the previous years, the latest version of the database maintained by the External Finance department of the Ministry of Finance was obtained for the purpose of providing some commentary on off-budget external financing; however, it appears that the information was not correct. Clearly, there are some significant gaps in the database, as several major partners appear not to have disbursed any funds over the three year period and in addition, some figures appear excessively high for FY2004/05 ... It was therefore decided that further analysis based on this data was not warranted (PER Task Team Ministry of Health Tanzania 2006). As the volume of off-budget remains important, emphasis is put to get a more complete picture of all available funding to the sector. Figure 39 illustrates the proportion of on and off budget between 1999/00 and 2006/2007 that has been calculated with the available data from the different PER.

⁶⁰ Since 2001/02, NHIF incomes, as additional contributions, are made through the MOHSW Development budget (Laterveer et al 2004, PER Task Team Ministry of Health Tanzania 2006).

Figure 39: *Proportion of on-budget and off-budget evolution 2000-2007*



Sources: Directorate of Policy and Planning Ministry of Health Tanzania 2003, PER Task Team Ministry of Health Tanzania 2004, PER Task Team Ministry of Health Tanzania 2005, PER Task Team Ministry of Health Tanzania 2006, PER Task Team Ministry of Health Tanzania 2007.

Special note about HIV/AIDS finances

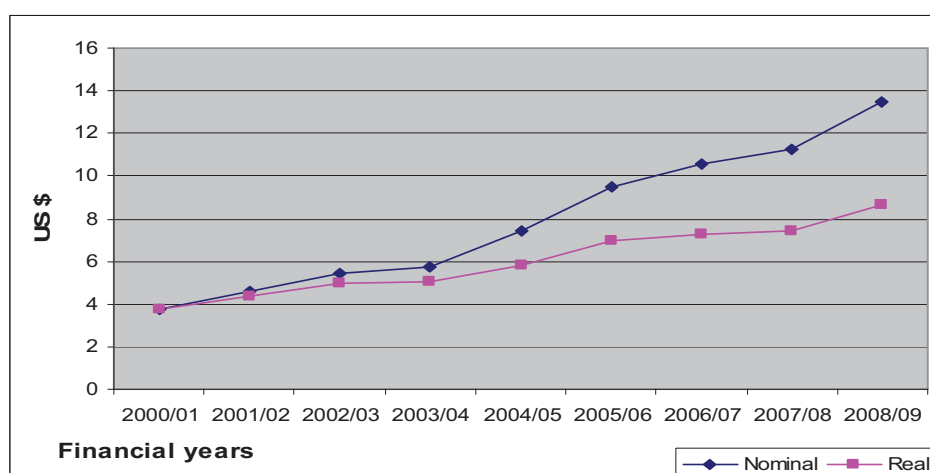
The most important funding mechanisms for HIV/AIDS are GFATM, PEPFAR and another programme financed by the World Bank. COWI et al, (2007) report that external HIV/AIDS expenditure increased in very high proportion (more than double) between 2002 and 2005 and more important, that external on-budget was not captured by external off budget. However, currently much more funds have started to be captured on the government budget. For instance, GFATM has injected important funds in development budget for year 2007-2008 (Health Sector Reform Secretariat Directorate of Policy and Planning MOHSW Tanzania 2010).

Per capita health spending 2000/01 to 2008/09

Figure 40 illustrates the movement of per capita health with a firm upward trend over the period under review. However, in real terms⁶¹ (using the 2001 constant prices) per capita health spending remains below 10 US\$. So despite the significant increase, the amount spent per capita is still far from the target established in 2007 – 40 US\$ by the commission for macroeconomics and health for low-income countries in Sub-Saharan Africa.

⁶¹ In economics, the nominal values of something are its money values in different years. Real values are adjusted for differences in the price level in those years.

Figure 40: *Trend of nominal and real per-capita health spending 2001-2009 in US\$*

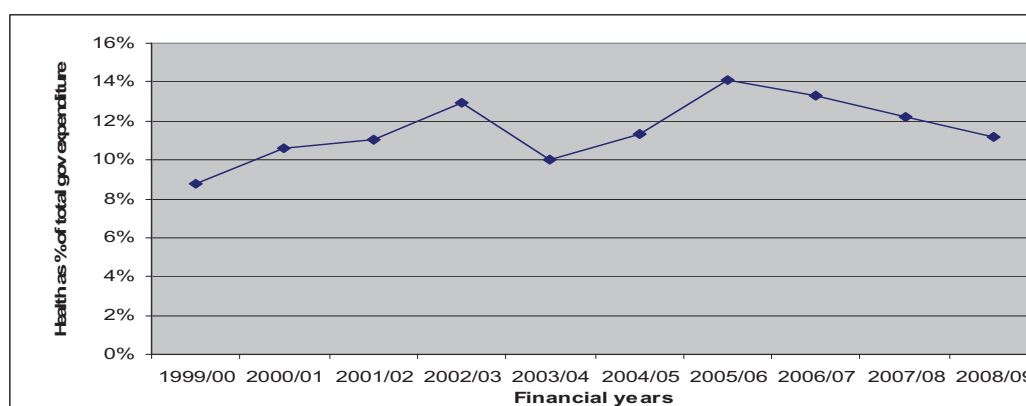


Sources: Directorate of Policy and Planning Ministry of Health Tanzania 2008; PER Task Team Ministry of Health Tanzania 2005.

Budget allocation to the health sector 1999/00 to 2007/08

The increase in health spending described above took place within an overall growth in total government expenditures to support the implementation of the National Strategy for Growth and Reduction of Poverty (NSGRP), which health is an integral part. The trend of actual Government expenditure in health (in %) is given in Figure 41. It appears that the share of the health sector in total government budget and expenditures has remained below the 15% target of Abuja Declaration. Allocation to the sector has been around 11% throughout the entire period of review. The changes can happen because total government budget can increase slightly faster than the increase in budget allocations to the health sector (Directorate of Policy and Planning Ministry of Health Tanzania 2008).

Figure 41: *Actual government expenditure in health expressed in % per financial year (2000-2009)*



Sources: Directorate of Policy and Planning Ministry of Health Tanzania 2008; PER Task Team Ministry of Health Tanzania 2005.

5.3. Spending flow of health funds

Table 8 gives how the on-budget funds are allocated to the different levels; funds are expressed in millions of TzSh. The share to LGA is consequent (around 30%) but it does not increase since 2004. For the last financial years, from 2004 to 2008, we found respectively a share (%) of: 30, 23, 32, 33 and 28. In 2000, the share was only 25%. Moreover, according to the last PER (2008), this table does not give a true picture of the

amount shared to the LGA because a significant portion of expenditure by the MoHSW go to the local level in form of drugs and other essential supplies for the health facilities, and the health resources managed by the PMO-RALG eventually go also to the local level (notably for rehabilitation of HFs) (Directorate of Policy and Planning Ministry of Health Tanzania 2008).

Table 8: *Health sector spending flow per fiscal year*

	2004/05	2005/06	2006/07	2007/08	2008/09
Ministry of Health	58,4%	63,6%	58,2%	54,9%	58,0%
Regional and local Administrations	1,5%	4,7%	0,5%	0,5%	3,4%
National Health Insurance Fund	5,5%	4,8%	4,7%	4,7%	4,1%
Region	4,8%	4,0%	4,8%	6,9%	6,8%
District Authority	29,8%	23,0%	31,9%	32,9%	27,7%
Total Health Expenditures (in million of TzSh)	301,277	426,374	513,606	571,073	733,878

Sources: (Directorate of Policy and Planning Ministry of Health Tanzania 2008).

6. Governance

“Leadership and governance involves ensuring strategic policy frameworks exist and are combined with effective oversight, coalition building, regulation, attention to system-design, and accountability” (World Health Organisation 2007).

We did not develop a section specifically oriented to governance because all elements present in the description given by WHO have already been developed and explained in a previous section about SWAp in Health Sector.

CHAPTER III: HEALTH OUTCOMES/IMPACT INDICATORS (1999-2008)

We present the trend of main health indicators during our evaluation period. However, it is not our objective to look for a direct relation cause-effect between HSR/SWAp and the results presented below. Indeed, measuring the impact of such policy on the health of the population seems too ambitious and too early. In fact, the impact indicators tend to respond slowly to health sector improvement (Foster et al 2000), are infrequently measured, and may be driven by non-health factors in the short term (e.g. drought, famine) or by changes in economic situation (Hutton 2000). Nevertheless, it appeared important to give a complete picture of the health sector for the case study in Tanzania, especially in relation with the MDGs 4, 5 and 6.⁶²

Summary

- Under-Five Mortality Rate has decreased significantly between 1999 and 2008.
- Diphtheria, Pertussis, Tetanus vaccine-3 doses (DPT3) immunisation coverage did not improve (remains around 85%), contrary to measles which reached a coverage of 90%.
- The maternal mortality has remained high over the past decade and the proportion of births attended by skilled health personnel has remained low.
- HIV incidence has decreased for all groups; detection and ARV treatment have improved since their introduction in the country (2004).
- Tuberculosis treatment completion rate has improved.
- Malaria prevalence for under-five has been estimated to be around 5% for under-five and, in parallel, the proportion of children sleeping under insecticide-treated bednets has increased.
- The overall use of health services remained unchanged between 2000 and 2007 but the public HFs accounted for a higher share of healthcare consultations.

1. Child mortality and immunisation coverage

Under-five and infant mortality rate (UFMR & IMR)

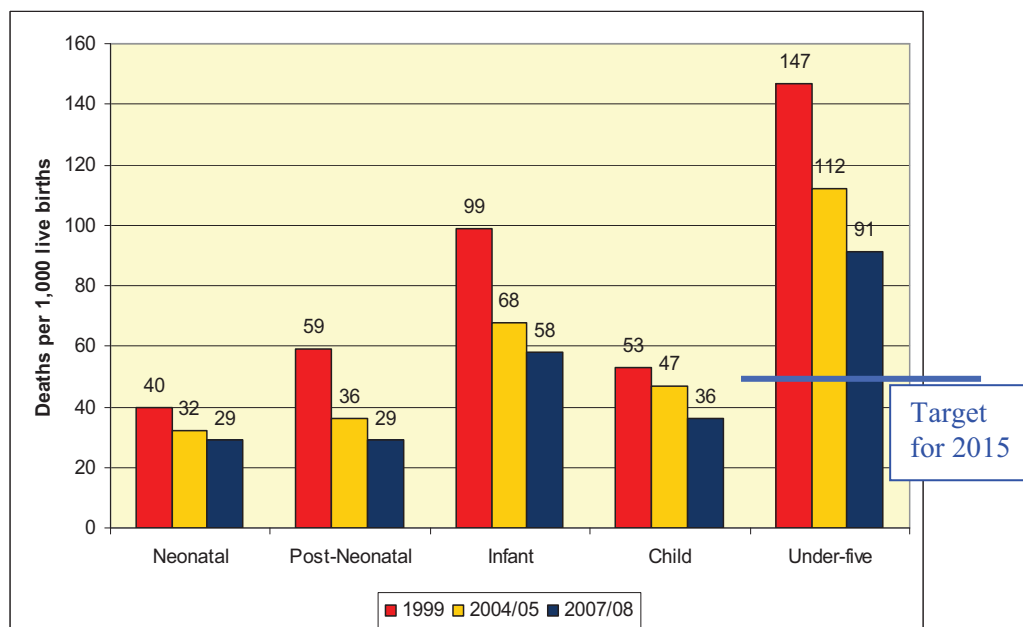
Both indicators have decreased significantly in Tanzania between 1999 and 2008 and are on good way to reach MDG 4 in 2015.⁶³ (Janson 2007; Masanja et al 2008, Ministry of Planning, Economy and Empowerment, United Republic of Tanzania 2007, National Bureau of Statistics, Tanzania 2006, Research and Analysis Working Group, United Republic of Tanzania 2009, United Republic of Tanzania 2008, World Health Organization 2009). The spectacular decrease since 1999 is illustrated by Figure 42. Tanzania Demographic Health Survey (2005) reported an infant mortality rate decline of 31% between 1999 and 2004/05 and a decline of 24% for UFMR. However, disparities have persisted between regions and between urban and rural areas (National Bureau of Statistics & ORC Macro 2005). The changes in infant and UFMR from 1999 to 2004/5 and from 2004/5 to 2007/8 are both statistically significant. Masanja et al (2008) reported that the sharp acceleration in that reduction occurred between 2000 and 2004 compared with a slight decrease from 1990 to 1999 (only 1% for UFMR). Examination of age-disaggregated data on child mortality reveals that the greatest change has occurred in post-neonatal and infant mortality. Neonatal mortality has declined to a much smaller extent and accounts for a growing share of under-five deaths

⁶² Millennium Development Goals (MDG) 4: Reduce child mortality. MDG 5: Improve Maternal Health. MDG 6: Combat HIV/AIDS, malaria and other diseases.

⁶³ UFMR target for 2015 is 47/1000 live births.

(Research and Analysis Working Group, United Republic of Tanzania 2009). Neonatal deaths are inextricably linked to maternal healthcare, where little progress has been made in recent years (Research and Analysis Working Group, United Republic of Tanzania 2009).

Figure 42: *Infant and Under-Five Mortality, 1999, 2004/05 and 2007/08*



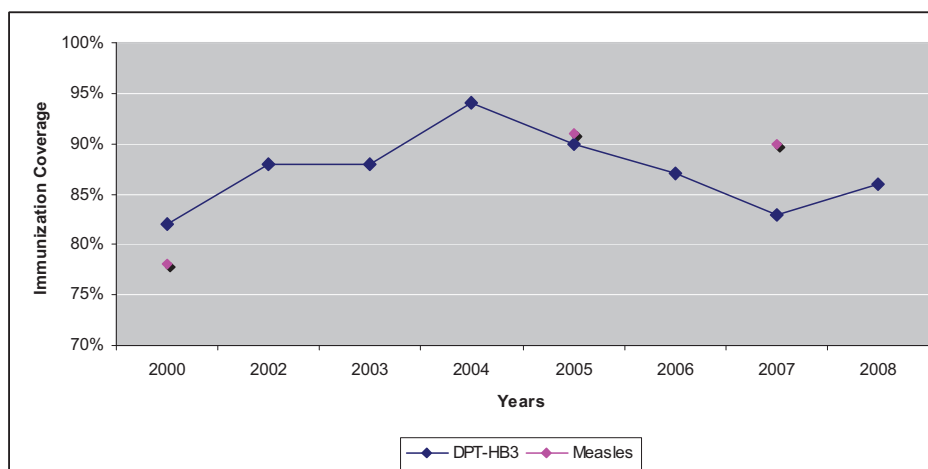
Sources: Research and Analysis Working Group, United Republic of Tanzania 2009.

The explanation of improvement in child survival since 1999 is different across sources. In the Poverty and Human Development Report 2009, it can be linked with gains in malaria control rather than to better health service provision or access, which have not changed much over the past years. Janson (2006) also put in parallel the malaria prevention strategies with new treatment and child and infant mortality reduction. Two studies (Masanja et al 2008, Schellenberg et al 2004) reported that those improvements with sharp decrease between 1999 and 2004 are related to improvements in health system that occurred during the same period with HSR, decentralisation and SWAp. These changes would have facilitated different strategies implementations with regard to child health.

Immunisation

Figure 43 gives the immunisation coverage for DPT3 from 1999 and 2008. Except a pick in 2004, there was no significant improvement. However, the coverage for measles vaccination increased significantly between 2000 and 2004 and remains stable, around 90%.

Figure 43: *Immunisation coverage for Diphtheria, Pertussis, Tetanus vaccine-3 doses (DPT) and Measles*



Sources: Research and Analysis Working Group, United Republic of Tanzania 2009; United Republic of Tanzania 2008; World Health Organization 2009 and World Development Indicators database, September 2009.

2. Maternal Health

Maternal mortality ratio (MMR)

The maternal mortality has remained high over the past decade with no improvement. Tanzania Demographic Health Survey (2005) estimated the MMR at 578 per 100,000 live births against 529 in the previous one conducted in 1996.

Births attended by skilled health personnel

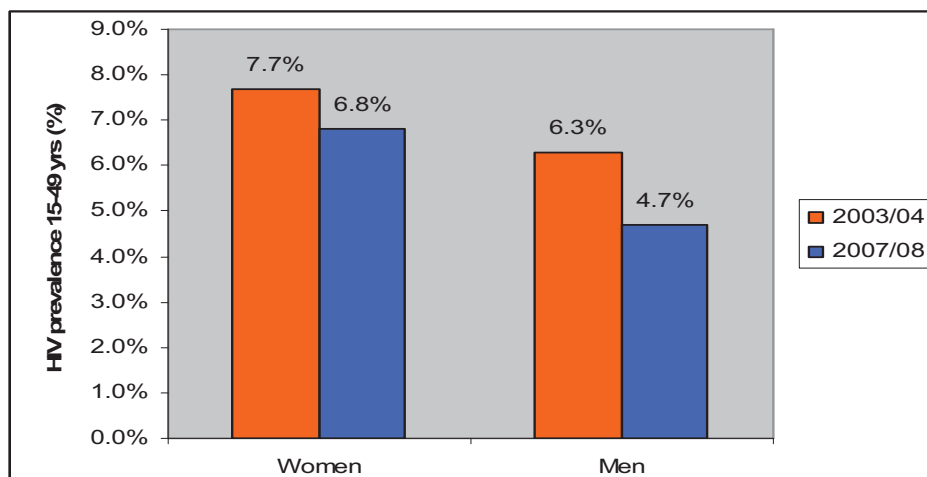
Because the MMR cannot be estimated frequently, it is common to use birth attended by skilled health personnel as another indicator to assess maternal health service delivery. The proportion of births attended by skilled health personnel has not shown significant improvement during the last decade and the indicator remains far from the target which is 90% to be reached by 2015 (Research and Analysis Working Group, United Republic of Tanzania 2009, United Republic of Tanzania 2008). In 2004/05, skilled birth attendance was estimated at 46%, just 2% better than in 1999 (Research and Analysis Working Group, United Republic of Tanzania 2009). Moreover, the access to skilled birth attendance varies between regions (ranging from 28% to 91%) and between type of region: more than 80% of urban women deliver in a health facility, compared with 39% for rural women (Research and Analysis Working Group, United Republic of Tanzania 2009).

3. Combat HIV/AIDS, malaria and tuberculosis

HIV/AIDS

HIV prevalence has decreased; it was 7.1% in 2000 against 6.2% in 2007 (World Development Indicators database, 2009). The reduction concerns all age groups and both sex, but infection among women (see Figure 44) remains higher than in men (Research and Analysis Working Group, United Republic of Tanzania 2009, United Republic of Tanzania 2008).

Figure 44: *HIV prevalence among 15-49 years by sex in 2004 and 2008*



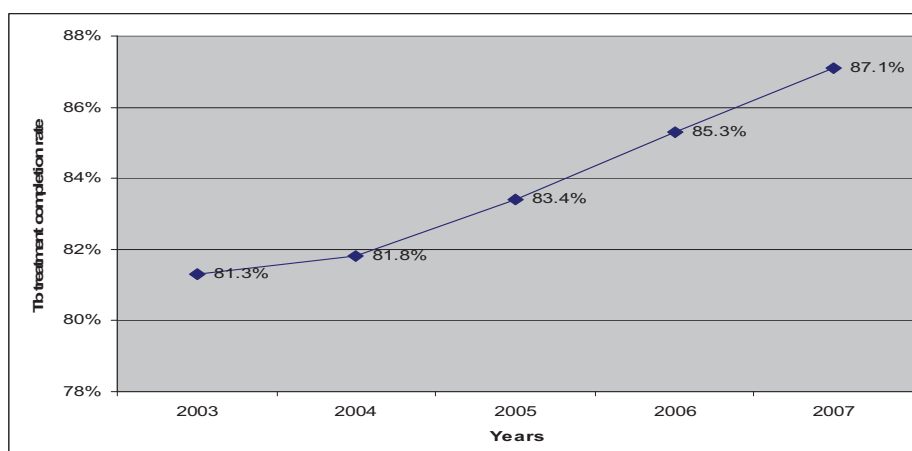
Source: Research and Analysis Working Group, United Republic of Tanzania 2009 and United Republic of Tanzania 2008.

HIV/AIDS Care and Treatment: the national campaign for voluntary counselling and testing (VCT) with the multiplication of clinics with anti-retroviral treatment has resulted in a higher proportion of people who were tested: in 2004 15% of adults (15-49) were tested against 38% of women tested in 2008 and 27% of men (Research and Analysis Working Group, United Republic of Tanzania 2009, United Republic of Tanzania 2008). The number of people enrolled on care and treatment was around 50,000 per year since 2006. The proportion of population with advanced HIV infection with access to antiretroviral drugs and the exact number of individuals who enrolled on therapy – and are alive and continuing treatment – are not known. Available data allow to say that this number of patients is quite lower than the targeted number of 423,000 patients on treatment by the end of 2008 (Research and Analysis Working Group, United Republic of Tanzania 2009, United Republic of Tanzania 2008).

Tuberculosis Control

As showed in Figure 45, there is recent year-on-year improvements in treatment success; this is accompanied by very low (<<1%) rates of treatment failure (Research and Analysis Working Group, United Republic of Tanzania 2009).

Figure 45: *Tuberculosis treatment completion rate*



Source: Research and Analysis Working Group, United Republic of Tanzania 2009.

Malaria control

Malaria is responsible for the largest burden of morbidity and mortality in Tanzania, especially among young children. According to HIV/AIDS and Malaria Indicator Survey 2007-08, about 26 percent of children slept under insecticide-treated nets (ITN) for only 16% during 2004/2005 evaluation. In 2008, THMIS (Tanzania HIV/AIDS & Malaria Indicator Survey) realized the first nationally representative household survey to investigate the prevalence of malaria, and so provides valuable information to assess the impact of control measures in tackling the disease. Its report indicated malaria prevalence for under-five around 5%, but with large variations between regions (range from less than 3% to more than 30%).

Use of Healthcare Services

The last “Poverty and Human Development Report” (2009) gives the results of Budget Surveys in 2000/01 and 2007 using data collected on healthcare consultations of survey participants. This permits a national estimate of recent changes in overall (curative) healthcare utilisation and the workload of the government healthcare system. We just present their findings. Data indicate that the overall use of health services remained unchanged between 2000 and 2007. However, government facilities accounted for a higher share of healthcare consultations in 2007 than in 2000/1. In fact, while consultations at mission facilities and with private doctors have decreased (the use of private health services dropped by 30%), the use of public providers has increased by 19%. Also, the gross number of healthcare consultations at government clinics has increased by 27% from 2000/01 to 2007, which is related to the population growth.

CHAPTER IV – DISTRICT MULTIPLE-CASE STUDY: SAMPLING

1. Health facilities

In order to cover the whole district, we selected at least one health facility per administrative division. The district hospital was purposively chosen in the 4 districts because being the reference centre. We also visited at least 2 health centres per district as they represent intermediate level of cares. They were selected randomly, except in the district of Newala where there were only 2. The dispensaries were selected by simple random sampling method from a list of dispensaries per administrative division. Table 9 summarizes the number, the type of health facilities selected and the division where it was selected. In total, we visited 33 HFs, the 4 district hospitals, 9 HC, and 20 Dispensaries.

In Kilosa District, we could not have access to 2 divisions; the visit occurred during the rainy season and roads were not passable by car. The selection of more than 1 dispensary per division was justified by their higher population.

Table 9: *Health facility selection, number-type*

	District Hospital	Health Centre		Dispensary	
Biharamulo divisions	Selected	Selected	Total	Selected	Total
1. Nyarabungo	1			1	5
2. Lusahunga		1		0	6
3. Bwanga		1		1	5
4. Nyamirembe				1	6
5. Chato		0		1	4
Total Biharamulo*	1	2	3	4	26
Kilosa: 9 divisions					
1. Kilosa Mjini	1			0	5
2. Ulaya		1		0	2
3. Mikumi		1		0	12
4. Kidete		Division not reachable			
5. Magole				2	10
6. Gairo				2	11
7. Nongwe		Division not reachable			
8. Masanze				1	6
9. Kimamba				1	7
Total Kilosa*	1	2	7	6	64
Newala: 3 divisions					
1. Newala	1			3	15
2. Kitangali		1		1	5
3. Chilangala		1		1	4
Total Newala	1	2	2	5	24
Mwanga: 5 divisions					
1. Mwanga		1		1	9
2. Usangi	1			1	8
3. Jipe		1		1	8
4. Lembeni		1		1	9
5. Ugweno				1	8
Total Mwanga**	1	3	4	5	42

Note: In Biharamulo, 5 private dispensaries are not reported. In Kilosa also, some private and other HFs from the not reachable division are not reported in Table.

2. Health services providers and health services users for structured questionnaires

Health workers

The size of the study has been computed according to random sampling with PASS-NCSS 2004 software. If at least $p=50\%$ of health workers report improvement in health service delivery, the study should be able to detect this rate at the 0.05 level, with a precision of 10%. For a total number of health care providers⁶⁴ (N) known in the different districts, we expected to have a sample of at least n workers to reach the objectives for the different districts; the numbers per districts are given in Table 10.

Table 10: *Computed sample size of health workers per district*

	Health care providers (N)	n computed for prevalence of 0.5, 95% CI and Precision of 10%	n collected in the field
Biharamulo	314	74	70
Kilosa	405	78	81
Newala	253	70	81
Mwanga	289	73	53
Total	1261	295	285

All the health workers present and available during the visits (see descriptive data in Table 11) were interviewed by the research team using open and close-ended questionnaires. Once the objectives were explained and consent was given, the workers were invited to answer the questions of interest respecting privacy of discussion. In Biharamulo, a lower percentage of workers were interviewed in public institutions, because we visited two not-for-profit facilities belonging to the Roman Catholic Church: one dispensary and the “designated” district hospital that is contracted by the MoHSW to act as a district hospital (Ministry of Health and Social Welfare, The United Republic of Tanzania 2008b).

As we encountered more than 20 different qualifications/occupations, we pooled them into three categories according to their responsibility towards patients: medical staff directly responsible for patient consultation and treatment (medical officers, assistant medical officers, clinical officers, rural medical aids, dentists), nursing staff (all nurses and nurse assistants with a one-year course), and supportive staff (pharmacists, laboratory staff, radiographers, health officers, health assistants, medical attendants, administrative staff). The proportion of interviewed staff per professional category was close to the corresponding proportion in the district and then, there is no need for weighting sampled-fraction. To analyse particular issues (salary, up-grading and possibility to move), the workers’ qualification status was classified into two categories: qualified for workers having at least a two-year course certificate, and non-qualified for others.

Patients

Facing with an unlimited number of patients (assuming a population size greater than 10 times the sample size) and using similar assessment on patients’ feeling about improvement (prevalence of 50%), a target sample size of at least 92 patients should

⁶⁴ Number of health provider was obtained from the district leaders during the period of the visit. For the sampling we took the following professional in account: Medical Officer, Assistant Medical Officer, Clinical Officer, Dentist Officer/Assistant, Pharmacist Officer/Assistant, Laboratory Technician/Assistant, Radiographer, Health Officer/Assistant, Health Secretary, Nurse, Nurse Assistant and Medical Attendant.

have been drawn per district. The sample size calculation has been computed with PASS-NCSS 2004 software with a precision of 10% and a 95% confidence interval.

Table 11: *Health workers sample description per district*

Design	Biharamulo	Kilosa	Newala	Mwanga	Total
Number	70	81	81	53	285
Qualified n (%)	48 (68.6)	46 (55.6)	46 (56.8)	31 (58.5)	171 (60.0)
Position					
Medical n (%)	13 (18.6)	16 (19.8)	15 (18.5)	9 (17.0)	53 (18.6)
Nursing n (%)	39 (55.7)	41 (50.6)	49 (60.5)	26 (49.1)	155 (54.4)
Suppor n (%)	18 (25.7)	24 (29.6)	17 (21.0)	18 (34.0)	77 (27.0)
Per type of HF					
DH n (%)	41 (58.6)	43 (53.1)	49 (60.5)	23 (43.4)	156 (54.7)
HC n (%)	12 (17.1)	20 (24.7)	19 (23.5)	21 (39.6)	72 (25.3)
Dp n (%)	17 (24.3)	18 (22.2)	13 (16.0)	9 (17.0)	57 (20.0)
Per HF owner					
Public n (%)	24 (34.3)	66 (81.5)	81 (100)	53 (100)	224 (78.6)
PNFP n (%)	46 (65.7)	15 (18.5)	0 (0)	0 (0)	61 (21.4)
Characteristics					
Sex					
Men n (%)	39 (55.7)	26 (32.1)	27 (33.3)	15 (28.3)	107 (37.5)
Age (yrs)*					
Median ^o	38 (31-47)	41 (34-47)	45 (40-50)	41 (33-50)	42 (34-49)
Range	26-59	26-64	26-59	24-59	24-64
≤ 30 n (%)	17 (24.6)	8 (9.9)	11 (13.6)	12 (22.6)	48 (16.9)
31 - 50 n (%)	40 (58.0)	60 (74.1)	50 (61.7)	31 (58.5)	181 (63.7)
> 50 n (%)	12 (17.4)	13 (16.0)	20 (24.7)	10 (18.9)	55 (19.4)

Suppor: supportive ^o Median with quartiles (P25-P75)

DH: district hospital HC: health centre Dp: dispensary

PNFP: Private not-for-profit

Age*: one missing value n = 284/285

Patients, at the hospital, have been randomly selected by ward (20 or 4/ward) for inpatients, except referral and emergency cases: those ones who could answer have been purposely interviewed; and outpatients were randomly selected for exit interviews. For the other health facilities, a convenient sample of patients present during the visit was selected. The number of patients interviewed in the different districts is reported in Table 12.

Table 12: *Computed sample size of patients per district*

	n computed for prevalence of 0.5, 95% CI and Precision of 10% (unlimited number of patients)	n collected in the field
Biharamulo	92	135
Kilosa	92	164
Newala	92	127
Mwanga	92	110
Total	368	536

As described in Table 14, there was less people employed in agriculture in Mwanga district; the other professions included small scale business (15.5%), student (12.7%), teacher (3.6%) and others (10.0%).

Table 13: *Patients sample design and description per district*

Design	Biharamulo	Kilosa	Newala	Mwanga	Total
Number	135	164	127	110	536
Output n (%)	66 (48.9)	107 (65.2)	86 (67.8)	78 (70.9)	337 (62.9)
Inpt n (%)	69 (51.1)	57 (34.8)	41 (32.2)	32 (29.1)	199 (37.1)
Per type of HF					
DH n (%)	72 (53.3)	81 (49.4)	74 (58.3)	49 (44.5)	276 (51.5)
HC n (%)	37 (27.4)	28 (17.1)	23 (18.1)	35 (31.8)	123 (22.9)
Dp n (%)	26 (19.3)	55 (33.5)	30 (23.6)	26 (23.6)	137 (25.6)
Per HF owner					
Public n (%)	55 (40.7)	155 (94.5)	127 (100)	110 (100)	447 (83.4)
PNFP n (%)	80 (59.3)	9 (5.5)	0	0	89 (16.6)
Characteristics					
Sex					
Men n (%)	54 (40.0)	74 (45.1)	56 (44.1)	36 (32.7)	220 (41.0)
Age (yrs)*					
Median [°]	18 (1-31)	17 (2-34)	21 (3-37)	21 (7-44)	19 (2-36)
Range	0.1 - 88	0.2 - 94	0.1 - 88	0.2 - 86	0.1 - 94
< 5 yrs old	60 (44.4)	76 (46.3)	55 (43.7)	36 (32.7)	227 (42.4)
≥ 5 yrs old	75 (55.6)	88 (53.7)	71 (56.3)	74 (67.3)	308 (57.6)
Occupation [°]					
Farmer n (%)	114 (84.4)	138 (84.7)	115 (90.6)	64 (58.2)	431 (80.4)
Education**					
Nil/incomplete	55 (42.0)	66 (40.5)	47 (37.0)	31 (28.2)	199 (37.5)
Prim	66 (50.4)	85 (52.1)	72 (56.7)	54 (49.1)	277 (52.2)
Sec/higher	10 (7.6)	12 (7.4)	8 (6.3)	25 (22.7)	55 (10.4)

Output: outpatients

Inpt: inpatients

Prim: primary school

Sec: secondary school

[°] Median with quartiles (P25-P75)

Age*: one missing value n = 535/536

Occupation[°] and Education: concerned patients of ≥15 and parents/relatives of patients <15.

Education**: 5 missing value n = 531/536

3. Health managers for in-depth interviews

District health managers

3 to 5 people from the 15 members of the Council Health Management Team (CHMT) were selected.

From the 15 official members of a Council Health Management Team (CHMT), 3 to 5 of them were interviewed in each district. Six CHMT members that were targeted were the District Medical Officer (DMO), the District Nurse Officer (DNO), the District Health Officer (DHO), the District Cold Chain Officer (DCCO), the District Reproductive and Child Health Coordinator (DRCHC), and the District Tuberculosis and Leprosy Coordinator (DTLC). We interviewed the ones who were available at the day of the visit. Interviews were carried out in their respective offices.

Health facility managers

The second group of interviewees involved all the in-charge of health facilities that were recruited in the study. In district hospital, we interviewed the Medical Officer in-charge and the Nurse Officer in-charge who are responsible for daily management. In the other HFs, we interviewed the sole person is in-charge, who is usually a clinical officer or a nurse but sometimes a nurse assistant.

Table 14: *Sample distribution per health structure for In Depth Interviews (IDI)*

	Biharamulo	Kilosa	Newala	Mwanga	Total
IDI	13	13	12	12	50
Female (%)	38.5	30.8	25.0	66.7	40.0
CHMT	4	5	4	3	16
MO/AMO	0	1	1	0	2
NO/N	1	2	2	1	6
CO	1	1	0	0	2
HO	2	1	1	2	6
Hospital MT	2	1	2	2	7
MO/AMO	1	1	1	1	4
Other HFs	7	7	6	7	27
AMO*	0	1	0	1	2
CO/RMA	5	4	5	1	15
N	1	2	1	2	6
NA	1	0	0	3	4

AMO*: Were present only in private not for profit health centre.

4. Villages and community representatives for focus group discussions

One village was selected by simple random sampling method from the list of all villages included in the service area of each health facility already selected. At least one group representative of the village was recruited and if possible in 2 sub-groups (male and female participants) within the target population. In each village, with the aid of the village chairpersons or the Village Executive Officers, selection of participants to FGD was carried out using a set of criteria. The criteria were: men and women aged more than thirty years, who have lived in the area for more than ten years, and who were neither leader nor outspoken. The participants were often gathered at a short notice to avoid pre-set answers to emerge. Each group was independently interviewed to allow for more freedom of expression among participants. FGD were consented verbally. The time spent for each FGD ranged between 70 to 80 minutes. The variation depended much on the nature of the people involved in the groups. This technique was imperative because our interest was on the discourses people give about the changes in the health sector, what reasons they think are responsible of the change etc. The remote rural area has facilitated similarities between selected people for ethnic group and socio-economic background.

Note: The participants (small group with 6 to 12 persons) should have been ideally recruited at random but the culture and habits (e.g. obligation to pass through the village leader) made this process difficult.

Table 15: *Sample description for Focus Group Discussion (FGD)*

	Biharamulo	Kilosa	Newala	Mwanga	Total
Number of village visited	8	9	8	8	33
Number of FGD	14	14	16	14	58
Number of participants	141	142	157	140	580
Female (%)	49.7	42.3	52.2	51.4	49.0
Farmer (%)	92.2	99.3	100.0	90.0	95.5

CHAPTER V – DISTRICT CASES: HSR KNOWLEDGE AND BENEFITS

The knowledge on HSR and their contributions to positive changes in health service delivery was evaluated through IDI and FGD at different district levels. The changes perceived by those categories of respondent will be more develop in the next chapters about health facilities and quality of care. From patients and health workers, we could assess if any changes were perceived during the past 6 years and which one, but without looking for possible link with HSR.

Summary

- Council Health Management Team members had a reasonable knowledge of HSR and generally they were strongly associated with positive changes on health service delivery.
- Workers from lower level HFs and community respondents had incomplete knowledge and generally pointed only few specific aspects (most often perceived being the introduction of cost-sharing) rather than a comprehensive strategic package.
- HFs workers and community had strong perception of positive changes in health service delivery during the past years, some of them being related to reforms.
- Main changes reported concerned participatory health planning and decision making (HF committees), health facility infrastructures, availability of drugs and supply, and human resources.

1. Council Health Management Team (CHMT) members perception

Most CHMT members understood health sector reforms (HSF). They explained that the design and implementation of the Health Sector reforms was placed within the context of the Local Government reforms (decentralisation), which also aimed at improving service delivery through empowering councils, ensuring community involvement, regular update on managerial aspects, and general health service delivery at district level. Others added that local governments have been given an obligation to enhance alternative financing options like Community Health Fund (CHF), cost-sharing and the National Health Insurance Funds (NHIF); sources that should help to bridge the health financing gap. With the reforms, district councils have become more autonomous than before. Some of the powers include decision making such as planning, budgeting, and deciding on procurements and allocation of funds from various sources such as HBF, CHF and user fees. Respondents at the council (CHMT) commented that this has helped to reduce unnecessary bureaucratic procedures thus hastening the process of health service delivery. For most, such autonomy has also improved health planning process because the initiation of the CCHP has put planning and budgeting at the district health management teams, with emphasis on intensive use of specific internal data that are sensitive to the local situation. CHMT members said that the most important aspect in these reforms is the reverse of the former top-down approaches by the ministry of health which was inefficient to them. They stressed on those diverse strategies that have affected positively important health issues⁶⁵: (i) human resources (including the nature of recruitment, workers incentives and motivations, and supervision), (ii) medical supplies (availability of drugs and other equipments), and (iii) HFs infrastructures (number and quality).

⁶⁵ This will be developed in the next chapters.

2. Lower level HFs managers perceptions

For health workers in the lower level facilities, health reforms were commonly interpreted as the new policy for improving health services to the community. However, a few did not know exactly where these changes came from, i.e. if it was the government or the donors, as one pointed out. Responses of most in-charge at the lower H/Fs indicated that knowledge about these reforms is often skewed to cost-sharing. Some even commented that reforms had targeted at making sure that people become responsible for their own health by contributing “kuchangia” for health services, while to others, health sector reforms meant workers’ increased responsibilities in primary health facilities; example, a mandatory twenty four hours of operation. Despite such a weak knowledge about these reforms by the in-charge of the lower H/Fs, all workers acknowledged that the reason behind reforms was to improve health services to the community. Admittedly, respondents reported to have witnessed several changes that included: rehabilitation of H/Fs infrastructures, availability of services 24 hrs to the public, and improved availability of drugs and supplies in some districts were some of the notable changes.

3. Community perception

Like the in-charge at lower H/Fs, it appeared that there was a gap in knowledge among discussants of focus groups. Most community members knew health sector reforms in terms of specific aspects rather than the package. For example, the introduction of cost-sharing system, the involvement of the community in H/F development and rehabilitation, the initiation of community health insurance scheme, and to others, a wide absence of drugs in public facilities and the proliferation of the private drug stores.

4. Positive changes perceived by health workers

Table 16 shows that almost all health workers interviewed agreed that positive changes in health service delivery occurred during the past few years except in Newala district. There was no significant difference between workers from hospital and from other HFs ($p=0.42$), neither between workers from public HFS and from PNFP ones ($p=0.60$); nevertheless we noticed a difference in Kilosa district with higher percentage for workers in public HF (97% vs 79 $p= 0.039$). The sex ($p=0.091$) and the qualification of workers ($p=0.26$) were not associated with that perception.

Table 16: *Proportion of staff who agreed that there were positive changes in health service delivery*

	B	K	N	M	All
n	63	78	80	53	274
Workers who agreed (%)	96.8	93.6	77.5	100.0	90.9

Table 17 indicates which sectors have improved as reported by interviewed workers. It differed by district but mainly the workers mentioned health infrastructures, availability of drugs, supply and equipment. Nevertheless, in Newala, infrastructure was almost the solely sector reported with improvement and drugs availability remained a problem, as it was mentioned by 76% of workers as a sector which did not improve. In Mwanga, the opposite district, we found several sectors which were commonly cited to be improved. The answers with less than 7% were not reported. Among the sectors reported with no improvement, generally, we found that staff shortage was mentioned by 40%, lack of basic working equipment by 39%. In that case, workers were talking about basic

working equipment while in Table 18, workers were talking about diagnostic equipment like x-ray and ultra sound machines.

Table 17: *Sectors with improvement as noted by workers*

	B	K	N	M	All
Respondents n	61	71	62	53	247
Sectors reported with improvement* (%)					
Building (state, space)	37.7	57.7	91.9	37.7	57.1
Drugs and supplies	41.0	76.1	19.4	69.8	51.8
Equipment	18.0	32.4	12.9	26.4	22.7
Financial matters	29.5	16.9	9.7	35.8	22.3
Quality of care	14.8	2.8	9.7	13.2	9.7
Management, participation	9.8	12.7	4.8	7.5	8.9
HFs closer to community	3.3	5.6	1.6	22.6	7.7
HIV services	14.8	0.0	9.7	7.5	7.7
Up-grading & Training	8.2	4.2	8.1	9.4	7.3

* Several choices were possible and percents were calculated on respondent basis

5. Positive changes perceived by patients

Figure 46 shows that the majority of interviewed patients had experienced positive changes in health services delivery during the past few years. The highest proportion of patients with such opinion was found in Mwanga and the lowest in Newala. There was no significant difference per type of HF ($p=0.43$), except in Biharamulo with lower proportion of patients from DH (58 vs 75 $p=0.025$). That was in relation with ownership of HFS: the proportion of patients who admitted improvement came from public institution (67 vs 56 $p=0.035$).

Figure 46: *Changes in health service delivery perceived by patient (%)*

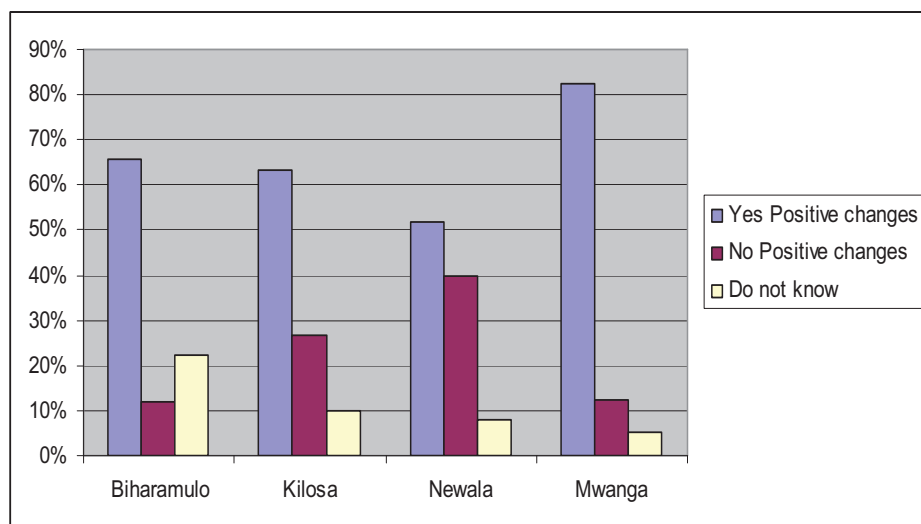


Table 18 (logistic regression) confirms the association between patients from public institutions. Another associated factor was the level of school education.

Table 18: *Factors associated with the proportion of patients who found positive changes in health service delivery*

	OR	95% CI	P-value
Hospital patients	1.09	[0.74 ; 1.61]	0.67
Patients from governmental HF	2.63	[1.40 ; 4.94]	0.003 [†]
Male patients	0.74	[0.50 ; 1.09]	0.12
Farmers	0.70	[0.40 ; 1.25]	0.22
Primary or higher school level	1.91	[1.28 ; 2.85]	0.002 [†]
Districts			
Biharamulo	1.00		
Kilosa	0.56	[0.31 ; 1.02]	0.05
Newala	0.31	[0.16 ; 0.60]	< 0.001 [†]
Mwanga	1.16	[0.54 ; 2.50]	0.70

Table 19 indicates which sectors have improved according to interviewed patients. It also differed across districts but for patients, only two sectors were cited with higher proportions: health infrastructures and availability of drugs. However, in the same exercise, 29% of patients (70% in Newala) admitted that drugs availability was also a main sector that did not improved; in fact they recognized substantial improvement but it was far to be enough and satisfactory. The sector without improvement most often mentioned (33%) was staff shortage.

Table 19: *Sectors with improvement as noted by patients*

	B	K	N	M	All
Respondents n	86	103	63	89	341
Sectors reported with improvement* (%)					
Drugs and supplies	40.7	63.1	36.5	73.0	55.1
Building (state, space)	39.5	33.9	63.5	56.1	46.6
Equipment	17.4	4.9	6.3	11.2	10.0
Quality of care	15.1	12.6	1.6	0.0	7.9
Cleanliness & linen	10.5	10.7	1.6	5.6	7.6
Staff attitude	3.5	8.7	3.2	12.4	7.3
HIV services					
Up-grading & Training					

* Several choices were possible and percents were calculated on respondent basis

CHAPTER VI – DISTRICT CASES: HEALTH FACILITIES

In this chapter, we report about the health facilities, especially the number, the distribution, and the physical state. The modality and the time to reach the health facility by the patient are also analysed.

1. Number of HFs and geographic accessibility

Summary

- The total number of public HFs, mainly dispensaries, has increased during the past few years especially in Mwanga and Kilosa districts. The density of HF per 10,000 populations remains very different from one district to another.
- The new policy “1 village 1 dispensary” doesn’t necessarily mean increased people’s access to quality services as shortage of workers and essential equipment was reported.
- 71 % of the patients reached HF in less than one hour (only 58% for Biharamulo) and 81 % reached HC/Dispensary in less than one hours (only 66% in Biharamulo). 80% reached HF by foot or bicycle.

1.1. Official district reports

Table 20 gives the number of hospital beds per district in 2006 according to the Tanzania Service Availability Mapping (SAM) and the number of per 10,000 populations (density).

Table 20: *Number of HF beds SAM 2006*

	Total	Density / 10,000	Private for profit (%)
Biharamulo	254	0.56	0
Kilosa	544	1.01	0
Newala	223	1.13	0
Mwanga	176	1.38	0

Source: Ministry of Health and Social Welfare Tanzania Mainland and Ministry of Health and Social Welfare, Zanzibar & WHO 2007.

This number did not increase/decrease significantly during the period evaluated. The number of beds is associated mainly to hospitals and their number remained stable (one per district except in Kilosa with 2). HC have also few in-patient beds but their number change is not significant on the total. Because there are two hospitals in Kilosa district (one public DH and one mission one) the number of beds is much higher. Table 21 gives the number of HF per district in 2006 according to the Tanzania Service Availability Mapping (SAM) and the number of HFs per 10,000 populations (density). A good indicator for distribution of HFs is the proportion of people residing within 5 km of a functional HF. Unfortunately the data was not available but because the number of HF did not increase that much, we assume that the coverage did not change significantly.

Table 21: *Number of HF per districts and density*

	Public	NGO	Private	Other	Total	Density / 10,000
Biharamulo	30	2	3	0	35	0.70
Kilosa	54	9	4	7	74	1.37
Newala	26	0	1	0	27	1.39
Mwanga	40	4	0	3	47	3.85

Source: Ministry of Health and Social Welfare Tanzania and WHO 2007.

The change in number of HF between 2000 and 2006 was difficult to obtain and the few available numbers differed according to sources (different sources at district level with different data). The reality is that the total number of public dispensary increased (see Table 22) significantly in Mwanga and Kilosa. The number of private dispensary and parastatal institutions decreased and were often replaced by public ones. The decline in private institutions is in line with national trend as incomes from dispensaries in the private sector, especially in rural areas, continue to fail to meet the running costs. Globally the number of hospital and HC did not change.

In Biharamulo, the number of governmental dispensaries increased while the number of private ones decreased; the number of HC increased from one to two. Finally the total number did not change significantly and Biharamulo had the worst density and coverage. The decision to split the district in two will probably help to improve the situation.

In Kilosa, there is a better coverage in term of density of HFs, almost the double. In 1999: 4 new dispensaries were built. The number of parastatal HFs decreased (due to the closure of state sugar factories) when the public ones increased in number: **in 2006 6 new governmental dispensaries were opened**. Again the number presented in Table 23 does not reflect the reality in the public institutions.

In Newala, there was no not-for-profit institution and only one small private for profit dispensary. In that region, the majority of the population is Muslim, and few Christian missions invested in that area. The number of HF did not increase that much; only two new dispensaries were built. The density was almost the same as in Kilosa. In that smaller district, the coverage was good. We found that 21 HF (from 26) had 100% of service area population residing within 5 km of them; 3 HF had 90 to 95% and 2 had 75%.

Table 22: *Number of governmental dispensaries per districts and per year*

Number HF	Biharamulo	Kilosa	Newala	Mwanga
2000	19	?	20	27
2001	?	?	22	28
2002	?	41	22	30
2003	?	43	23	32
2004	?	48	23	32
2005	21	49	23	35
2006	23	51	23	35 (37 in 2007)

In Mwanga, we found the highest density of HF per population, with **46 HFs in 2006 and 53 in 2007 and we were told that 6 were planned to be built/opened soon**. With 61 villages, we found almost one HF per village. The number of HC was also high compared to other districts.

1.2. Actor points of view

In all districts involved in this study, a substantial increase in number of health facilities was noted. Also, currently, more people live at the vicinity of a health facility compared to the past. CHMT members acknowledged a new political enthusiasm of establishing a dispensary in every village, together with drive of the local community to demand for this to happen as the major reasons for such improvement. Others had a feeling that as reforms are embroiled with ideas of community participation, it has become a tool in which members of the community have the power to decide, an increase in the number of facilities therefore is a reflection of the people's demands and a political willingness to support them. In Mwanga for example, all villages but nine were reported to have a health facility, while, in the next one month, three dispensaries were expected to be officially opened. These increases were also reported in other districts of Kilosa,

Newala and Biharamulo, *“I think health sector reform have been advantageous because we have been able to build a new health facility here instead of going to the district hospital which was very far”* (FGD/Magomeni - Kilosa).

Despite these increases, some CHMT members commented that the plan **“1 village 1 dispensary”** sounds better but it **doesn’t necessarily mean increased people’s access to quality services** as in some villages, people walked more than 20 Kilometres in searching for quality services while bypassing some nearby facilities. Example given by some in-charge from Newala district reported that people travelled a long distance to Ndanda mission hospital while they were surrounded by unequipped dispensaries and health centres. This situation was further evident through focus group discussions where a woman pointed that *“it’s better to go to Ndanda where I pay 3,000/= Tsh and I have medication than paying 1,500/ = for nothing”*. In Biharamulo also, managers of the district hospital reported some non-complicated outpatient cases that come from far villages where there were dispensaries and even health centres close to them. It appears therefore that availability of drugs and other services at a distant facility is worth than a mushrooming of facilities that are by people’s definition – “non-functional”. CHMT members questioned about the unsolved problems of staffing, drug supply, and equipping these facilities with essential supplies like basic laboratory equipments. This also raised scepticism among in-charge of the lower health facilities especially reaching people with quality health services. So the more critical respondents thought that possibly the question here hasn’t been the availability of a health facility, but it is of course **“what people get from the facility.”** It appears therefore that whether increased health facilities is a solution to the problem of access to care or not, is a matter for further research and should not be an a priori assumption.

If participants admitted to have access to a closer functioning health facility, there were variations between districts. **In Biharamulo and Kilosa**, where despite the CHMT members’ views on improved health service coverage, the in-charges in the lower health facilities reported that some people still travelled more than 25 kilometres to the health facility. One in-charge reported that in such areas/circumstances herbalists and traditional birth attendants are important sources of care. Participants in focus group discussions substantiated such allegations by demanding that *“the government should establish health facilities to rescue us”* (FGD/Nyang’omango). It is evident therefore, in these rural villages that distance to the facility is a critical determinant of hospital care utilization. **In Mwanga**, the situation was much better. CHMT member explained that Mwanga district has reached high achievements in the establishment of dispensaries because all villages except nine had a dispensary already, while in a next one month, three dispensaries were expected to be officially opened. The in-charge of the facilities explained that the rapid increase in number of health facilities in Mwanga was because of the community’s willingness to participate in building; most newly opened dispensaries were mentioned to be built by the community members (*“zimejengwa na wananchi”*). This was further revealed during FGDs when participants to the discussions explained that one of the changes observed as resulting from health sector reform is that health services have been brought closer to the community (*“huduma zimesogezwa karibu na jamii”*).

Access to health facilities, especially to the referral centres (district hospital), has remained a challenge in many districts; district hospitals are out of reach by many villagers, and this was reported by the respondents in all districts as having negative implications for emergency and referral care. In Kilosa for example, two divisions had no connection to the district hospital at all, hampering access to services that can’t possibly be offered at the dispensary level. In Mwanga, some even pointed that *“it was easy to go either to Same district hospital than Usangi district hospital”*. This situation

was noted to be intense during rainy season where most people are compounded by infrastructural difficulties to reach the Usangi district hospital located in mountainous areas and far from the location of the council.

1.3. Patients to reach HFs

The time needed by patients to reach the HF is expressed in median with range and the percentiles 25 and 75.

Table 23: *Time needed by patients to reach the HF*

	B	K	N	M	All
n	131	164	126	107	528
Median [°] (h)	1.0 (0.3-2.0)	0.5 (0.3-1.0)	0.8 (0.5-1.5)	0.5 (0.5-1.0)	0.5 (0.3-1.5)
Range	0.1 – 14.0	0.1 – 12.0	0.1 – 8.0	0.1 – 9.0	0.1 – 14.0
Median [°] (h)					
DH	1.0 (0.3-3.0)	0.5 (0.5-1.5)	1.0 (0.5-2.0)	1.0 (0.5-2.0)	1.0 (0.5-2.0)
Other HF	1.0 (0.3-1.3)	0.5 (0.3-1.0)	0.5 (0.3-1.0)	0.5 (.03-1.0)	0.5 (.03-1.0)
P value*	0.053	0.008 [†]	< 0.001 [†]	< 0.001 [†]	< 0.001 [†]

n: Number of respondents

DH: District Hospital

*Mann-Withney test

[°] Median with quartiles (P25-P75)

HF: Health Facility

[†]: significant P value

As showed in Table 23, the median time to reach the HF is globally half an hour. Logically, time to reach the DH is significantly higher. There is also a significant difference between districts; the median in Biharamulo is one hour which is in concordance with the above results (bigger district with low HF density/population). There were no difference between man and women, neither between different patients' occupation.

We grouped the patients according to the time needed to reach the HF; in fact **71 % of the patients reached HF in less than one hour** (58% for Biharamulo, 79% for Kilosa, 69% for Newala and 76% for Mwanga), 22% needed 1 to 3 hours and 7% took more than 3 hours (12% in Biharamulo, 4% in Kilosa, 7% in Newala and 6% in Mwanga). For lower HFs (HC and dispensaries), the proportion who reached in less than one hour is higher: 81% (66% for Biharamulo, 86% for Kilosa, 85% for Newala, and 87 for Mwanga). To analyse other associated factors, we grouped patients in 2 groups, one for patients who reached HF in less than 2 hours and one for those who needed 2 hours or more. Unconditional logistic regression (Table 24) shows the factors associated with time to reach HFs: the type of HF, type of patients, school education level, farmers and patients who used motorized vehicles. We did the same analysis for patients who went to DH only and the only factor associated found was the outpatients (OR: 3.09 [1.31;7.31]). In the particular motorized case more analysis revealed that those patients are more often emergency/referred cases (OR: 11.6 [4.4;25.35]).

Table 24: *Factors associated with time needed to reach the HF (≤ 2 hours)*

	OR	95% CI	P-value
District Hospital	0.41	[0.21 ; 0.77]	0.006 [†]
Outpatients	2.68	[1.35 ; 5.33]	0.005 [†]
Emergency / Refereed cases	1.03	[0.46 ; 2.29]	0.939
Patients with primary and higher level of school education	1.53	[0.86 ; 2.71]	0.148
Farmers	0.35	[0.13 ; 0.91]	0.032 [†]
Patients who used motorized vehicles	0.40	[0.21 ; 0.77]	0.006 [†]
Districts			
Biharamulo	1.00		
Kilosa	1.16	[0.58 ; 2.32]	0.664
Newala	1.91	[0.88 ; 4.31]	0.102
Mwanga	0.98	[0.43 ; 2.25]	0.960

We looked for the means that patients used to reach the HFs. The results are presented in Table 25. No surprise to see that the majority of patients (71%) reached the HF by foot (57%) or by bicycle (22%) with few differences between districts. Patients used significantly more motorized vehicle to go the DH, especially if they were referred or emergency cases. But using motor vehicles did not mean reaching the HF faster (except in Biharamulo and Kilosa where there was no difference), the proportions of patients reaching the DH in less than 2 hours were higher than when going by foot or bicycle.

Table 25: *Transport means to reach HF*

	B	K	N	M	All
	134	164	125	110	533
Proportion of patients who reached the HF by (%)					
Foot	47.0	56.1	56.0	70.0	56.7
Bicycle	29.9	25.6	26.4	3.6	22.3
Motorized vehicle	23.1	18.3	17.6	26.4	21.0
Proportion of patients using motorized vehicles per type of HF:					
DH	34.7	25.9	30.6	42.9	32.5
Other HF	9.7	10.8	0.0	13.1	8.9
P value	< 0.001 [†]	0.010 [†]	< 0.001 [†]	< 0.001 [†]	< 0.001 [†]
Proportion of patients using motorized vehicles when going to DH per type of patient (%):					
Urgent cases	77.8	75.0	75.0	80.0	76.5
Others	28.6	17.4	25.0	38.6	26.3
P value*	0.007 [†]	<0.001 [†]	< 0.008 [†]	0.09	< 0.001 [†]
Proportion of patients reaching the hospital in $\leq$ than 2 hours if using or not motorized vehicle (%):					
Motorized	66.7	71.4	68.2	52.6	65.1
Not motor	73.9	86.3	89.2	92.6	85.7
P value	0.35	0.07	0.031 [†]	0.003 [†]	< 0.001 [†]

2. Physical state of HF structures

Summary

- The proportion of HFs in a good state increased during the last few years, especially for health centres and dispensaries where constructions, renovation and up-grading were visible and reported. This was due mainly to:
- Special funding for rehabilitation for HF.
- Districts with access to basket funds for rehabilitation.
- Community participation.
- Special project (NGO, private initiatives).
- Supply of electricity and water in lower HFs was still an important issue that has not been solved hampering health service delivery.

2.1. District reports

The MOHSW classified the physical state of HF infrastructures as good, average or poor.

The information available at district level differed from one district to another. The state of HFs' buildings was rarely available for the previous years.

Table 26: *Buildings state and repairs per district and year*

	Biharamulo	Kilosa	Newala	Mwanga
2000-01	Nil	Nil		Nil
2002	Nil	Repaired: 9 HFs and 2 staff houses		Nil
2003	Nil	Repaired: 5 DH buildings and 6 other HF		- Good state: 80% of DH 75% of HC and 56% of disp. - Repaired: 6 DH buildings and 9 other HFs
2004	- Repaired: 2 other HFs	2 new buildings in DH Repaired in 2 other HF		- Good state: 90% of DH 80% of HC and 75% of disp. - Repaired: water source of hospital rehabilitated
2005	Nil	No information for that year	- Good state: 40% - 2 HFs repaired	- Good state: 90% of DH 80% of HC and 85% of disp. - Repaired: 3 DH buildings and HFs
2006	Nil	- Good state: 70% - Repaired: 2 DH buildings and no info for HFs		- Repaired: 1 DH building and 10 other HFs

In Biharamulo, there was a plan for renovation that has been prepared in 2003 but achievement is very low: only 2HF were repaired from the 36 planned (Table 26). The DH is not in the district plan because is a not-for-profit structure.

The DDH visited had 80% of its buildings in good state with running water and electricity 24H/24H. One of the HC visited was in good state and the other one needed important repairs that were planned in 2006 but were not yet started; both of them depended on water from a well and there was no electricity. From the 4 dispensaries visited, only one was in good state and had also solar panel. None had running water; in 3 dispensaries, staff used wells (one was one kilometre far) and the 4th one used rain water.

In Kilosa, there was a district plan for repair and renovation that has been prepared in 2004 and the achievement was around 75% when visiting the district. We visited two HC. The first, a public one, was in bad state, without electricity (using only kerosene lamp) and without running water; staff used rain water and source at 2 km far. The second HC, private not-for-profit, could be compared to a hospital. It was in a good state with running water, electricity plus stand-by generators. We present in Table 27 the summary of our findings in the 6 dispensaries.

Table 27: *State of buildings in 6 dispensaries (D) – Kilosa District*

	D 1	D 2	D 3	D 4	D 5	D 6
State	Good	Average	Good	Bad	Good	Good
Water	Well in village	Well	Water tank	Well (patients bring water)	Well, Buy water	Pipe not far
Electricity	No	No	Yes	No	No	No
Plan for repair	Repairs done	Yes but achievement = 0%	Yes, achievement = 90%	No	Repairs done	Yes

In Newala, there was a district plan for repair and renovation that has been prepared in 1995, but there were still 4 HFs that needed to be done. 7 HFs were repaired between 1995 and 2000.

At the DH, the number of buildings in good state was 50%. There was electricity 24 hours/24 hours since few days but there was no running water.

There is a hospital plan for repair and renovation that has been prepared in 2004 and achievement was about 45%. Both HC visited were in good state and used well for water. Only one had electricity. Concerning the 5 visited dispensaries, we found that 3 were in good state and 2 were average (one had repair plan for 2008). None had electricity; 2 used well for water and one used rain water.

Table 28: *State of buildings for 5 dispensaries (D) – Mwanza District*

	D 1	D 2	D 3	D4	D5
State of buildings	Average	Very good	Good	Average	Good
Cleanliness in the HF	Very clean	Clean	Clean	Clean	Clean
Water	Lake close	24 H running water	Rain water/from school at 1 km	Well	No running water
Electricity	24 H	24 H	24 H	No	No
Plan for repair	No	No need	No	?	No

In Mwanza, there was a plan for repair and for renovation that has started in 2003. Most of the buildings were in good stage. The visit of the DH gave us another appreciation where we found that only 60% of the buildings were in good state and the achievement of renovation plan (dated in 2004) was about 45%. Electricity and running water was present 24H/24H. The 3 HC visited were in good state. Only one had running water 24H/24H, the second used rain water and the third got tape water only once a week. Findings in dispensary are summarized in Table 28.

2.2. Actor points of view

One of the most unanimously recognized and significant improvement in health services was the repairs and rehabilitation of HF infrastructures. With reforms, the councils became more autonomous in terms of priority setting and planning. Among the focus have been rehabilitation of HFs. Community participation in many areas has been mentioned as an important element in these developments, especially at lower HF level.

In Biharamulo

CHMT members reported that health sector reforms, associated with basket funds, have contributed to improvement of infrastructural quality. For example, most buildings were rehabilitated, new toilet facilities were constructed, and incinerators were established. One added this new move was pointed to be possible because of people's participation to health sector's activities, like involvement manual activities, of which government funds or basket funds alone wouldn't bring much change. The community involvement in these activities reduced the direct costs that would have otherwise incurred.

In the lower level, respondents appreciated the improvements associated with the reforms by saying that: *"working environment have been improved, as you can see I am thankful for rehabilitation it is now attractive"* (IDI/Katoke dispensary).

Discussions with community members in FGDs revealed the same, where some said: *"I think improvements in the health sector manifest themselves in the infrastructures, buildings are clean"*.

Through observations, it was found out that most facilities lacked reliable sources of water, in few dispensaries there were rain water tanks with all indications that no water filled-in for months. Lack of electricity was common to most health facilities thus forcing people in some dispensaries and health centres to contribute money for kerosene.

In Kilosa

The majority of respondents noted that the most impressive outcome of health sector reform has been the infrastructural quality of health facilities at all levels.

CHMT members pointed that with health sector reforms, councils allocated some funds for rehabilitation of health facilities every year, as one pointed: *"our health facilities have tremendously improved because of the rehabilitation funds set annually in the council health plan"*. Apart from the rehabilitation funds, some acknowledged the contribution of community ownership and participatory policy associated with these reforms as contributing to greater possibility of success in infrastructural rehabilitation and construction.

In the lower HFs, all the in-charge appreciated the changes happening in their facilities. It was observed that most of the facility buildings were rehabilitated, new toilet facilities were constructed and incinerators were established. Although several improvements on the facility infrastructures were noted in Kilosa, still respondents pointed that there were areas that needed more attention. First, at the district hospital, facilities for inpatients were not enough, especially wards and beds. Secondly, facilities lacked reliable sources of water which was pointed to dangerous as it posed the risk of contamination. Third is a lack of reliable sources of power (electricity) in lower level facilities that include health centres which provide inpatient services.

In the community, expressed in different ways, discussants said: *"There is no doubt that there has been several improvements happening at the health facility, building has been rehabilitated and wards have been built so that children and pregnant women can be admitted"* (Magore FGD).

"It's true the facility environment has changed as buildings have been rehabilitated" (Luhwaji FGD)

In Newala

Expansion of the district health infrastructures and renovation of the existing ones were notable changes after the current health sector reforms.

CHMT members explained that *“buildings have been refurbished, and most of our dispensaries have been rehabilitated also we’ve got water wells, these are tremendous improvements in our district”*. The major sources of funding mentioned by CHMTs were the direct/vertical donor funds and basket funds.

At the district hospital, representatives of the district hospital committee acknowledged about the infrastructural improvement observed. The major improvement concerned rehabilitation of buildings and building new wards, example the TB ward. While this idea was shared by other respondent at district level, they added that there were funds allocated through the basket fund in annual basis to facilitate rehabilitation activities at facility level. One respondent explained that: *“Currently our buildings have been improved through funds from the donors and from the basket funds as you can see by yourselves”* (IDI/MO-Newala).

The in-charges of the lower level facilities were appreciative on the step made to renovate the facility infrastructures, and some noted that it was encouraging as the working environment was at least attractive compared to the past. Expressing his contentment, the in-charge at one dispensary said, *“there are changes (mabadiliko yapo) as more than two dispensaries have been built while the existing ones have been rehabilitated”*. Such appreciations were shared by other respondents in the research area. While all explained that basket fund were the major source of the funds used for rehabilitation, others acknowledge community involvement as being the hub of such achievement taking into account their contribution to such success.

Another important improvement associated with health sector reform in Newala, was the availability of water supply, especially at the district level. It was pointed by both CHMT members and the district health committee’s representatives that *“the situation has improved”*. Such appreciation was because of the noted availability of wells for water supply.

But in the lower HFs, water supply was noted to be a major problem that impinged the quality of services provision, as most dispensaries and health centres lacked reliable sources of safe water. Indeed, this was noted to be a shared problem for all people in surrounding villages as we saw various people walking to some distances in search of water, the major means being carrying buckets on their head or bicycles.

Another problem pointed out at that level was the lack of source of power (electricity); especially in HC where there are in-patient services. Although this was one of the critical areas that would have received significant attention, some respondents explained that in some ways the problem was accelerated by some politicians. At Kitangari health centre for example, one complained that *“two years ago, there was an organization that showed interest of funding the power supply project (Solar Power), but this idea was hindered by the Member of Parliament (MP) who used the organization’s interest as his electoral campaigns project. After realizing this, the organization withdrew despite the fact that they had already conducted the cost analysis at the facility”*. Because of this experience, this in-charge envisaged that in some ways, political leaders use people’s suffering and vulnerability as their political projects.

Community members in Newala appreciated about the improvement in terms of rehabilitation of the health facility. Despite such appreciation, almost all participants contributing to this topic had the same approach in answering the question on influence of reforms on nature of health infrastructures; the common response was *“the building*

yes, but....” this response suggested the community’s discontent concerning the nature of health services they received from these facilities. Consider the following quotations: *“Only buildings, but services are still poor; principally, a hospital is supposed to have three qualified doctors (waganga watatu wenye ujuzi) but we have received only one few days ago (hapa juzi), others have no degree”* (Nangwala – Men FGD). And *“We are thankful for the facility buildings but our providers have no houses, thus it is difficult for them to provide quality services”* (Mkwaya – Men FGD). And *“Only buildings have been improved but not other things”* (Chihangu – Women FGD). And *“The government has improved the buildings but there are no drugs”* (Chihangu – Men FGD). And *“Things have improved, but they should bring water, because the quality of health services cannot improve without reliable water”* (Makonga – Men FGD).

In Mwangi

At CHMT level, improvement was noted. *“Health infrastructures have improved tremendously after these reforms”* (CHMT IDI). It was further explained that, at least every year, some buildings were rehabilitated. Three interviewed CHMT members associated this change with availability of funds through basket funds associated with better planning activities.

At HFs’ level, such improvement was equally revealed where respondents pointed that apparently HFs were impressive because of efforts exerted to refurbish them.

Through observations, it was clear that most of the facilities were clean with newly painted buildings, with toilet facilities and incinerators. Dispensaries in particular, got support from the members of the community who participated fully in activities related to building and renovation of the facility building together with construction of new ones. At Chomvu dispensary for example, researchers found community members participating in carrying sand to be used in building a health workers’ house, at the same time they explained that as a *“second step after they finished working on the dispensary building”*.

Community members were happy about the improvement observed; the major reason for such improvement was noted to be good leadership that encouraged people to volunteer in building health workers’ houses and rehabilitation of the facility buildings. *“I think there are improvement, and now we are proud of the existing leadership that encourage community members to volunteer to build health workers’ houses and renovation of health facilities’ buildings”* (Chomvu FGD).

On a probe **about water supply** to the facilities in the district, the in-charge of three facilities complained that water supply was a problem. In other facilities, water supply was mentioned to be satisfactory, where some got direct tapped water and others had tanks that received water from different sources.

CHAPTER VII – DISTRICT CASES: QUALITY OF HEALTH SERVICES

The quality of health services was evaluated through different categories of variables: (i) District planning, (ii) the availability of drugs, supplies and equipment, (iii) the human resources for health (number, qualification, motivation, attitude and morale), (iv) the district health finances, (v) the referral system, (vi) the health information system, and (vii) the supervision.

We also explored if positive changes in these categories occurred during the evaluation period.

1. District Health Plan and stakeholder participation

Summary

- Comprehensive Council Health Plan (CCHP) was available in each district.
- The principle of planning & budgeting decentralisation with bottom-up consultation and use of local data was a reform highly appreciated by all respondents.
- No evidence could be found that district planning activities involved the communities and the district health boards.
- Poor communication between the lower level HF workers and the CHMT was reported; information on plan content and implementation did not reach lower levels.
- Plans were corrected and improved year after year but still remained an activity-budgeting tool rather than a dynamic process focused on the health system delivery.

1.1. HFs Visit reports

In the four districts, annual CCHP were available and were following the rules and official format. Thus, comprehensive plan included the situation analysis that identifies the main problems concerning health in the district, and identifies all (public and others) resources available in term of personnel, material, equipment and finance. From there, priorities were selected; then action plan and description of activities were decided. In usual, the last versions of plans were more comprehensive; that could be explained by an increase in capability with experiences and by recommendations following mistakes done in the beginning of the process. Communities were never involved directly into planning activities and annual CCHP were not submitted to District Health Board.

Observation of different plans revealed that they appeared like compilation of listed shortage and problems with estimated cost for solutions rather than in-depth analysis of the whole system.

In Biharamulo, the annual CCHP became available in 2002. At district level, for its elaboration, the CHMT included representative of different NGO and private for profit institutions. In 2004, it added few in-charges from lower HFs. The district plan should compile and include possibly priorities elaborated at each HF level. At DDH, the management team has started to prepare an annual comprehensive plan in 2002, following the district format with situation analysis, resources available and priority identification. The activity involved management team members and the in-charges of different department. Then the plan was proposed and discussed during the annual meeting. It was reported that usually their plans were accepted. Habitually, at HC level, workers discussed together, analysed the situation and, according to the budget available, prioritized their needs. It consisted in a long list of all missing item and other problems that, of course, could not be all resolved. Public dispensaries visited were not involved at all in planning activities and were not consulted about their specific needs.

In Kilosa, CHMT members, official from Council, and few health workers from HF elaborated CCHP since 2002. In 2004 one representative from mission hospital was included. Neither representative from the community nor from private institutions was involved. At DH level, management team started to be consulted in 2003. They proposed annual plan but it was not comprehensive as it was done with HBF only. The PNFP HC was not involved at all in district plan; the second HC has started to prepare a list of their needs, but only in 2006, and the community was not concern by its elaboration. We found the same situation at dispensary level.

In Newala, the CCHP became available also in 2002 and it was elaborated by an extended committee with CHMT, representative from Council, from private pharmacy and from NGO. The community was not represented at that level. At DH, management team and in-charges of departments prepared a comprehensive plan since 2004 which was discussed during the annual meeting. In the 2 HC visited, in-charges prepared (without community) and sent a list with the needs to the district. At dispensary level, they sent a list with the needs only once but they did not receive any feed-back and nothing was implemented.

In Mwangi, CCHP started in 2003 and it was elaborated by CHMT members, the district planning officer, a representative from regional health team, and a representative from PNFP HF. The community itself has never been invited for planning activities. In the DH, a list with needs was prepared according the funds available. The HC and dispensaries were not involved in planning activities; in one dispensary, a list of needed item was prepared and ratified by the HF committee.

1.2. Actor points of view

One important and positive element of the HSR reported at CHMT level was the increase of district autonomy in terms of planning, budgeting, employment, and decision making. *“The positive change I’ve noted in health sector after reform is for the CHMT to be empowered to plan for their own activities”* (CHMT Mwangi IDI). And *“Changes observed concerne the ability of the district to plan and prioritize; this is the major advantage of this reform”* (CHMT Mwangi IDI). Health managers should use the available information for decision making and prioritization; and should encourage participation of local communities through HF committees. Respondents recognized that such autonomy of planning and budgeting with intensive use of specific internal data sensitive to local situation has improved health planning process with the initiation of the CCHP. *“At least now, there has been an increase in capacity to respond to the needs of the population at the local level and it is possible to know the requirements of all facilities through their facility committees”* (CHMT Biharamulo IDI). And *“At the lower level HFs, they have been empowered to identify their needs, like furniture, essential drugs, rehabilitation of the buildings and other necessary requirements. All these are identified through their HF committees instead of waiting for the ministry to do everything”* (CHMT Kilosa IDI). And *“I understand health sector reforms as a system which has been adopted to improve health services by involving the community and empowering them to own all health infrastructures and services provided in their community”* (CHMT Kilosa IDI). And *“This shift is important as the decisions and priority setting involves many people at the community level where they decide on various aspects related to betterment of services at their facility”* (CHMT Newala IDI). At HFs level, most-in charges of HF admitted that often they were invited to submit a list of their own needs for annual planning but they complained about a lack of feed-back on the incorporation of their demands in the district plans. This was reported as discouraging health facility committees.

At community level, the most important way in which members should be involved in the planning and management of council health services is through their participation in HF committees. Nevertheless, participation of the community in planning and monitoring at district level was not reported. Several possible reasons were noted during interviews: (i) time constraints faced by CHMT to plan and prepare annual plan, (ii) absence of skill for planning and budgeting among the community members, (iii) health managers' tendency to see planning and budgeting activities as their domain of expertise, and (iv) lack of interest from community members.

2. Drug, supply and equipment

Summary

- The hospitals were better equipped these last few years (X-ray, ultrasound, laboratory, etc) thanks to special projects and basked funds with district autonomy in buying needed items. That was not the case of lower HFs' level that misses essential equipment (BP machine, thermometers, etc).
- There was a unanimity to recognize an improvement of drugs and supplies availability; mainly due to:
 - New order system (Indent system versus kit system).
 - Other sources of finance (User-fee, CHF) and autonomy to use their own collected funds.
- Despite improvement, the availability of all essential drugs and supplies remained a major problem, still most of respondents and reports showed drugs out of stock, especially at the end of the month.
- The Medical Store Department (MSD) was pointed to be responsible of shortage, delays in delivery; and poor quality of some supplies and equipment. The health managers advocated for introducing other national suppliers allowing more competitions and also requested to review the system of fixed allocation for HF at a given level.
- Newala appeared to be different, because the improvement looked so minimal that brought a lot of complains from all actors especially at HFs level, and at community level where the integrity of health managers and workers was questioned.
- The drugs and supplies for vertical project like vaccination, global funds to fight AIDS, tuberculosis and malaria were better available than other drugs.

2.1. HFs Visit reports

In Biharamulo, at district level, we could not get any information concerning the availability and the stock of drug and supply. When we visited the DDH, very few drugs were out of stock. That was confirmed by interviewed outpatients, **93% of patients interviewed at the district hospital said that they received all drugs prescribed** (see Table 29) It was not the case, with significant difference, at HF from lower level (except in the private not for profit dispensary). In the two HC and public dispensaries, several essential drugs like cotrimoxazole, amoxicillin, quinine, and paracetamol were out of stock from one week to three months.

Table 29: *Proportion of outpatients who got all prescribed drugs in Biharamulo*

n	65
Proportion who got all drugs (%)	78.5
Per type of HF	
DH (n= 29)	93.1
Other HF (n=36)	66.7
P value (Fisher exact)	0.009
Per owner of HF	
Public (35)	65.7
Private not for profit (n=30)	93.3
P value (Fisher exact)	0.007

In Kilosa, the last two-quarter reports seen at district level did not show any shortage of drugs. Nevertheless, **the proportion of patients who got all drugs prescribed was around 80%** without any significant difference between DH (83%) and other HF (75%), between (78.6) public (79) and private (75%) but in that case, the number interviewed was too small (n = 4). When visiting the different HF, the number of drugs out of stock was quite important, especially in the dispensaries and concerned the essential drugs (cotrimoxazole, amoxicillin, paracetamol and mebendazole were missing everywhere, and there were also different type of shortage according the facility).

In Newala, at district level, it was reported that many drugs and supplies were out of stock for quite a long time. For instance ampicillin, ibuprofen, penicillin v, quinine, metronidazole, etc were out of stock for more than 6 months. That was confirmed when we visited the HFs and by patient interviews where only **49% got drugs prescribed**. There was no significant difference (p=0.298) between DH (54%) and other HF (46%).

In Mwanga, drugs were reported out of stock at district level (quinine, cotrimoxazole, mebendazole, etc.). The same was confirmed at HFs level. The outpatients' interviews did not give the same results as **84% of patients declared getting all drugs prescribed at the facility**. The difference observed between DH (92%) and other HF (81%) was not significant (p=0.203).

The difference between the drugs out of stock observed/declared and the availability of drugs for patients was due to clinical officers who adapted their prescription according to the drugs available in their store, which can induce questioning on the quality of treatment.

2.2. Actor points of view

In all districts, **members of CHMT** acknowledged to have noted some improvement in terms of availability of drugs and other medical supplies, especially at the level of district hospital. The reasons for this improvement have been associated with the change from the former "kit system" that failed to take into account the varying morbidity patterns and therefore the diverse demand for health care across the country, to adoption of the indent system. For most CHMT members despite some practical hindrances, the indent system is beneficial because it entitles the in-charge of the facilities to estimate and press order of supplies according to their needs.

Sharing the same idea, the in-charge of lower H/Fs believed that the operational changes of the medical stores department, has not only improved the availability of drugs and other medical supplies but led to reduction of the problems of unnecessary wastage of supplies and resources in general. However, there were discontents on the whole process of supplies delivery from MSD; most interviews with respondents (both CHMT and In-charge) revealed frequent delays and absence of drugs and other equipments. That situation impedes the efforts exerted to ensure quality health service provision in these districts. Because of the dependence on one supplier, sometimes districts are obliged to buy even low quality equipments from MSD because it's the only supplier.

Another problem pointed out was that most dispensaries and health centres lacked basic laboratory equipments and reagents; such situation was mentioned by all respondents as demoralizing some patients. Some CHMT members commented that this and frequent shortage of drugs in public health facilities were aspects that discouraged community members to join the CHF and to contribute user fees.

Both CHMTs and In-charge at the lower levels are of the opinion that the government should induce competition on the drug suppliers, while the funds for drug procurements be posted and managed by the respective district councils. At the same time the councils should be entitled to choose the best supplier that will meet the necessary demands.

As part of these reforms, CHMTs noted that recently, there is insistence on buying new medical equipments which seemed to be less prioritized in the past. This perception is widely shared by members of the hospital management teams who added that, currently, there have more equipments compared to the past. Major equipments mentioned included: X-ray machines, ultrasound, dental chair, surgical and laboratory equipments at the level of district hospital.

Adoption of the indent system, however, is not the single aspect for such improvement. CHMT members from three districts (Mwanga, Kilosa and Biharamulo) reported that collection from user fees and CHF have been useful for supplying. However, the situation in Newala was different from other districts where CHMTs admitted to have no option of getting medical supplies apart from MSD. Lack of functional CHF and poverty of the local people to satisfactorily contribute user fees affects the Districts capacity to deal with the problem of shortage of medical supplies induced by the weaknesses at MSD. In all districts, **the drugs reported to be available all the time were those supported by the vertical projects** like the tuberculosis and leprosy vaccines, anti-malaria, and HIV drugs.

At community level, availability of medical supplies varies between levels of care, mostly at the district hospital and the lower levels. In areas where people got medication directly from the district hospitals, especially for three districts of Mwanga, Kilosa and Biharamulo, participants to FGDs reported a significant change compared to the past, with most mentioning the increase in diagnostic equipments in the laboratories at district hospital. Such changes were associated with contributions of the user fees, while others especially in Mwanga linked this improvement with contributions of Community Health Funds.

In the villages served by health centres and dispensaries, participants have also noted some improvement in terms of supplies, despite complaints of frequent absence of drugs in their health facilities (meaning close health centres or dispensaries). They commented that the situation is far better than in the past. Others pointed out that drugs are usually available at the beginning of the month. In Newala however, this study found an absolute case where villagers complained about shortage of drugs in all levels, while few drugs, mainly funded by the vertical programmes, were available in reasonable quantities. A common complain was the lack of basic laboratory equipments and reagents at lower level facilities that compromises the perception of the patients on the quality of treatment in those facilities. This and frequent absence of drugs in those areas were noted to influence health seeking behaviours. Some participants said they were sometimes forced to buy drugs from the retail pharmaceutical outlets. In rural villages where drug shops are unavailable, participants reported to use herbs, while others seek help from traditional healers, and a few reported to live in despair because of absence of alternative.

In Biharamulo

CHMT members commonly pointed improvement with better availability of drugs and supplies. The new ordering system was the clue of success. *“I can say services have improved: for example, before the reforms, drugs were brought for the whole district, but it was common to find a health facility supplied with drugs for schistosomiasis while the disease does not exist in that area, thus drugs just accumulated”* (IDP- CHMT). Apart from changes in medical supply policy, the increased sources of funding were another reason for this improvement in Biharamulo, especially the user fees. This was mentioned to be potential at the district designated hospital where the funds are used to buy some essential drugs during shortage from MSD.

At HFs level, the interviewed in-charges were happy about the new medical ordering system as it has reduced the problem of unnecessary wastage of medical supplies. Involvement of the medical staff at the health facility in quantification of the needs was thought to help reducing the shortages. *“Drugs are available, although there might be some patients who aren’t satisfied but you can’t compare with the past”* (IDI - disp).

Despite such annotated improvement on part of the public health facilities, some respondents had a feeling that ‘the new system was good but is being hampered by the weakness in operation of Medical Stores Department (MSD)’. From the in-charge interviewed in the lower level facilities, six (67%) pointed that in most cases when they order drugs from MSD they get less compared to what they ordered. Likewise, delays of orders and missed items have become common, thus affecting the quality of services provided to the community.

A problem that was pointed out concerned the lack of basic laboratory equipments and reagents at lower level facilities especially in HC. That situation compromises the quality of services offered, and thus makes little difference between these referral posts and the dispensaries.

In the communities, participants of FGD had different opinions on the availability of medical supplies. In villages that got services directly from the DDH, improvements in terms of availability of diagnostic equipments in the laboratory as well as drugs were noted. Some community members had a feeling that the introduction of the user fees had increased the extent of sustainability of health services in health facilities. In villages served by public dispensaries and HC, participants noted some improvement but also complained of shortage, with a tendency of availability early in the month, thus causing overcrowding when drugs were available. This situation raised a sharp distinction between these public facilities and the private facility involved in the study. In Lusabya village where most people received services from Katoke Mission dispensary for example, participants in FGDs pointed that drugs and other medical supplies were not a problem provided that one had the required money to pay for the service. In instances where one had no money for treatment at this mission dispensary, it was possible for health workers to provide treatment in terms of loan with expectation that after one had relief would pay back.

In Kilosa

CHMT members pointed that health sector reforms have contributed significantly in dealing with the problem of medical supplies. Interviews reveal that initiation of the basket fund has enabled the districts to buy several medical equipments at least at the district hospital. The same improvements were noted for drug supplies where the policy changes in procurement mainly from the EDP kit system to the indent system. They further pointed that the role of identification and quantification of the medical supplies were left in the hands of the in-charge of the health facilities and the facility health

committees. As the district medical supplies system depends on the medical stores department (MSD), and that sometimes drugs and other supplies are unavailable, CHMTs pointed that other sources of funding collected through the cost-sharing systems have been helpful. *“We are currently thankful that we have CHF, cost sharing and the National Health Insurance fund (NHIF), at least now, we can compensate and buy some medicines from these sources for two years, however it is not possible to fill the gap because most of the items are not found at MSD despite lot of money is sent there”* (CHMT-Kilosa).

At HFs level, although the in-charge approved the medical supply system, most complained about delays and missed item reports from MSD. Some commented that this raises dissatisfaction among community members, while some think that health workers are responsible for this shortage despite involvement of facility committees in medical supplies procurements.

Apart from such shortage of drugs, the in-charge further reported lack of basic laboratory equipments and reagents. This coupled with the formers problem was noted to compromise the quality of services delivered to the community.

In the communities, the information from focus group discussions varied in terms of level of health facility. Those who got services from the district hospital applauded for improved availability of drugs and other medical supplies. The reason for such improvement was noted to be the contribution of cost-sharing. They further described why they thought cost-sharing contributed to the stated improvement:

“Before cost-sharing, there were always shortages of medical supplies but now, at least there are some improvement” (Magomeni FGD).

In contrast however, discussants from villages served by lower health facilities stated that the objective of ensuring steady supply of drugs have not been reached and claimed that there was always irregularity in availability of medical supplies in the facilities. In that regard, drug stock-outs in dispensaries were noted to be common. Following these weaknesses therefore, discussants strongly questioned on use of their contributions for health services that include user fees and community health funds. Describing the situation in different ways, some remarked: *“Services are available at the facility. However, there are several problems because when you go there they tell you to go to the drug shops to buy medications”* (Mbuyuni FGD). *“As we said before, we have contributed five thousand shillings for the services but when we go for medication they tell us that drugs are unavailable”* (Luhwaji FGD). Some discussant even went further to claim that may be the drugs are leaking due to absence of monitoring, as one quoted saying: *“In that situation we think that maybe leaders are far from health workers instead of monitoring medical supplies”* (Magore Kilosa).

Contributing to the discussion on availability of medical equipments, participants in focus groups commented that this was a problem as there were no essential diagnostic equipments such as BP machines, blood smear for malaria and other essential reagents.

In Newala

CHMT members reported some improvement: “There are improvements though they might be very pronounced after 5-10 years. The change has been on the availability of drugs, at least now we cover the top ten diseases and the morbidity has decreased; for example, the number of malaria cases is now very low.” CHMT – Newala. Some medical equipment have been bought, and actually “they have brought some relief in terms of services we offer”, said one CHMT member. The same statement was expressed by another member by mentioning the X-ray machine and increased patient beds at the hospital. In the lower level facilities, the major improvement concerning medical equipment is the availability of examination beds and BP machines.

Concerning drugs, very few respondents (n=2) pointed some improvements. However, it was difficult to understand their use of language. For example, the in-charge of one dispensary pointed that “the amount of drugs coming to the facility has increased, formerly we had drugs for only one week, but now they last for two weeks”. It is difficult to say that the situation has improved basing on the number of weeks in a month; the above quote therefore imply that at least two weeks in a month, the dispensary lack drug supply.

In all levels of health care, medical supplies (drugs and equipments) featured as the major hindrance to quality health service provision. It was pointed out by CHMT member that for over four months until this study was being conducted, there were no drugs supplied to this district. Major complaints from the CHMTs were on the central supply system – the Medical Stores Department (MSD). *“to be frank on this!.... the Government contributes to this situation greatly, I don’t understand why, after all these reforms made in the health sector, they still prefer MSD, and this costs people’s lives!”* (CHMT – Newala). Some CHMTs believed that the problem of drug shortage is beyond their control. Apart from the problems with MSD, another source of inefficiency in medical supplies was an ineffective allocation formula. CHMT members complained that the amount of funds allocated for the district isn’t proportional to the clients served. Although several internal sources of fund-raising to supplement supplies are in place, such as the Community Health Fund (CHF), user fees and the National Health Insurance Fund (NHIF), CHMT members said they are less functional. Two major reasons for such failure were mentioned. One was that most people in Newala are too poor to contribute for health services, and a second one was the sector’s failure to meet the expectations of their clients as people complain of absence of drugs and other laboratory services in most health facilities.

In the communities, Information from FGD revealed the same picture. The most dissatisfying aspect in most FGD concerning health services was noted to be the absence of drugs and other medical equipments. It was particularly discouraging that people were obliged to struggle for 1,200/= TzSh with hardship, nevertheless they had to give it to health workers without any medication. Some even questioned that *“why do they take the money if they know that there are no drugs?”* Discussions conducted in villages that were catered by the district hospital revealed that administrative ineffectiveness and leakages were the major foes for health service delivery in Newala. Some participants pointed that *“there are networks between workers at the district hospital and the owners of the retail drug dispensing outlets in town”* (Nangwala – men FGD). Following this tendency, doctors at the hospital have developed a habit of referring clients to some specific drug shops, as one of them declared *“He tells you, go to that shop, this drug is available”* (*anakuambia nenda kwenye duka la fulani utapata dawa hii*) (Nagwala – women FGD). Although they might be genuine advices, such statements raise skepticism among community members, especially when the district is haunted by prolonged shortage of drugs. In other villages, participants to FGDs were equally dissatisfied, expressing their discontentment, some participants in FGDs revealed that: *“The situation is not good; drugs are available only at the beginning of the month, you pay 5000/= TzSh if you are sick, after that, there are no drugs, the only way to survive is to go back home and pick some leaves (traditional medicine)”* (Nanda FGD) and *“the service is not good, you are just advised, ... boxes are opened at the 1st day of the month and, after only four days, there are no more drugs, we don’t understand”* (Nanda FGD) and *“the government has decided that we should pay 1,200/=Tsh for the services, and we didn’t refute that but after paying, you are told that there are no drugs and you have to go to private pharmacy for buying, while I leave my money there”* (Hengapano FGD).

In Mwanga

CHMT members pointed that the problem of medical supplies in terms of drugs and other medical equipments has partly improved. Such improvement was associated with instigation of multiple sources of funding such as the CHF, NHIF and the basket funds. One explained that *“regarding availability of drugs, there are some improvement (maboresho) though not that much; the improvement is based on the fact that when we don’t get drugs or supply from MSD, we can take money from CHF or from cost sharing and buy the required items”*. Change in the system of ordering medical supplies have contributed significantly to improve availability of medical supplies in the district.

The in-charges at the district hospital were equally happy about the new changes observed. *“Drugs are available and when they are finished, we write a letter to request a permission to buy them at the approved pharmacies using the money from the CHF”* (IDI– DH)

At the lower levels, majority of the in-charge (from all HFs except from one HC) revealed that availability of essential medical supplies had improved. The major reason for such an improvement was the ability of the in-charge of the health facilities to order drugs according to their needs. *“Currently drugs are available because community members contribute. Thus the situation is good. Delivery equipments for pregnant women like gloves, plastic sheets, syringes are for free. Also, services have improved and people are coming to the health facilities instead of going to the traditional healers as before”* (IDI– disp). Despite improvement, it is far to be perfect as one pointed: *“At least now, drugs and medical equipment are available although we can’t say we have succeeded because there are times when most essential drugs are unavailable together with laboratory equipments. Now, this makes people feel vulnerable especially here in rural areas where there are no even drug shops”* (IDI – disp). One dispensary was complaining and reported that they did not receive most of the drugs during the past six months.

Discussions with the community members revealed positive results on the availability of drugs and supplies in the district; at least in all groups, participants said they noted improvement. In the village where people got services from the district hospital, people explained that *“availability of drugs and medical equipments”* were the major reason for their satisfaction with the services offered. *“Formerly, we were told to buy drugs, but nowadays drugs are available all the time”* (Nyabinda & Jipe FGD) and *“Regarding reforms, I remember in the past, drugs were not available at all but, as soon as we have started contributing (kuchangia), at least drugs were available”* (Chomvu FGD) and *“Currently services have improved; in the past even for aspirin we were told to buy from the drug shops, but now drugs are available”* (Kilaweni FGD). A few however, indicated that although health services were improving, there are some weaknesses that persevered. The major weakness was the absence of diagnostic equipments at the HF. *“the service is somehow good...I am saying somehow because there are no diagnostic equipment ... they just look at you and tell you that you have malaria, that is not right and sometimes we are sceptical to the services provided because they aren’t determined by diagnostic equipments”* (Mgagao FGD).

3. Human resources in number and qualification

Summary

- The decentralisation shifted partly to district level the role of quantifying and identifying the needs in human resources as well as autonomy to employ. But unclear procedures and organisational diversity guiding the process of recruitment and location of decision-making at the district and national levels pose unnecessary bureaucratic delays.
- The total number of qualified health staff has increased; nevertheless staff shortage remained severe and constituted a big challenge hampering the quality of health services. The community did not experience the change in workers number.
- The increased number of HFs hampered or made worse the health workers shortage.
- The voluntary departure from public institutions is almost inexistent; the main cause of staff loss in public sector is death (60% of reported lost staff was due to death, probably caused by HIV infection).
- The rural and remote areas had difficulties to attract new qualified staff.
- There was a high turnover in the private not-for-profit institutions; the workers who left those institutions were attracted by the public sector.
- Sponsored (public and private HFs) up-grading is offered to a significant number of health workers; it appeared to be the most efficient strategy to get and to retain qualified staff in rural areas.

3.1. HFs Visit reports

Number of staff

Thanks to central policy, trainings and the number of qualified health staff has increased. Nevertheless, staff shortage remained severe and constituted a big challenge for health managers. Table 30 shows the number of main health workers reported the day of the visit per district with the density per 10,000 populations compared to national data (NO, TN and NMW have been put together as Nurse (N) as well as nurse assistant (NA) and medical attendants (Att) as the one year course was not any more recognized as qualification). There was no physiotherapist in the visited districts. In fact some workers are counted but are not necessarily in their working post, like in Newala that reported 6 AMO, but one was leaving and one was in up-grading course (anaesthesia). Also, from the 46 CO, 6 were still Rural Medical Aid and 6 were in up-grading course.

Table 30: *Number and type of Health Workers/district*

	B	K	N	M	National*
Medical Officer (MO)	4	4	1	1	
MO/10,000	0.08	0.07	0.05	0.08	0.3
Assistant MO (AMO)	5	17	8	6	
AMO/10,000	0.1	0.3	0.4	0.5	0.4
Clinical Officer (CO)	42	82	29	46	
CO/10,000	0.8	1.5	1.5	3.8	1.8
Nurse (N)	101	80	72	58	
N/10,000	2.0	1.1	3.7	4.8	
N Assistant/Attendant	144	189	134	163	
Dentist	1	7	2	0	
Pharmacist	3	2	2	2	
Laboratory technician	2	2	2	1	
Laboratory Assistant	7	11		3	
Total	314	406	253	289	
Total/10,000	6.3	7.5	13.1	23.7	

*Source: Tanzania Service Provision Assessment Survey, 2006 National bureau of statistics Dar Es Salaam, 2007.

Staff shortage, turnover and employment

The best way was to consult the list of staff shortage per category of staff from 1999 and 2006. It was done but unfortunately, no significant difference appeared because the standard used differed from one year to another, because information was not clear. On the other hand, the existing national standards of staffing by HF level was no more adapted and was completely unrealistic, especially with very high number requested of AMO, CO and nurses. For instance, in Kilosa for 2006, the shortage was (according to national standard) 4 AMO, 111 CO and more than 200 N. Therefore we preferred to look at turnover despite the fact that HFs' number has increased.

In Biharamulo, between 2000 and 2006, **97 health workers were newly employed** for public institutions. The majority was engaged in 2003 (36) and were qualified like CO and N but still poor qualified were enrolled (Ward attendants). During the same period, **19 workers left**, including 12 who died and only one who was a voluntary departure, and others were due to transfer. In Biharamulo, the important recruitment process did not help so much to reduce severe staff shortage; in fact, the process of dividing the district in two required to up-grad one HC in hospital with many new qualified health workers. At the **DDH** level, the turnover is much more important, about **100 workers were engaged** between 2000 and 2006 when **64 left** and we were told that "many" left already in 2007. In that case, we had only 4 deaths and the majority of departures were voluntary. The workers who left the mission hospital were attracted by the opening of posts in the public sector and this high turnover consumes a lot of energy of the management team. In one **HC**, there was no change between 2000 and 2006; it worked with 9 people (1 CO, 2N, 1 Health Assistant, 2 ward attendant 2 security guards and 1 driver). The second HC had 19 workers but the data for previous years were not available. Concerning the dispensary's level, we could not see significant changes in number of staff during the last 7 years (from 0 to 2), 2 had 4 workers, one had 5 and 1 had 7.

In Kilosa, between 2000 and 2006, **65 health workers were newly employed** in public institutions. The majority was recruited in 2003 (27) and in 2006 (27) and were qualified (CO and N). During the same period, the district **lost 26** workers including 15 deaths. Finally in 6-7 years the difference was positive with only 39. At the DH, for the same period, we found a nil balance (12 in and 12 out) but the shortage in qualified staff was not so important (1 MO and around 20 N). The situation of the 2 HC visited was quite different. In the first HC (public), only one NMW was present, the CO was in town

for training and the other one left for family reason. The 3 successive AMO went for up-grading and never came back to the HC. In total the number of staff was reduced by 7 from 2000 to 2007. The case of the second HC (VA) is particular in the sense that is a big one and subsequently closer to hospital status; therefore staffing could not be compared with HC standard. The management of that HC complained about shortage and reported high turnover of staff since public post were vacant. They recruited between 2002 and 2006 around 30 workers because the same number left to work in public institution. At dispensary level, 1 work with only 2 people since 2001 (CO and ward attendant), one lost 2 workers who retired without being replaced (remain 1 CO and 1 N), two has also 3 staff (CO, NA and att) and it did not change since 2000, one had 3 because one N was engaged in 2006, and the last one had 6 workers but without turnover in 6 years.

In Newala, it was impossible to get the information concerning new employments of health workers in the district. The information available was the number of departures from 2003 to 2006 where 13 workers left (8 deaths). The shortage off different health categories was reduced: AMO (10 in 2001 to 7 in 2006), CO (49 in 2001 to 40 in 2006), and N (103 to 91). In the DH, only the nurse shortage was a little bit reduced. In the 2 HC visited no change was observed during the last 7 years; the first HC had 15 workers (1 CO, 3 N, 1 lab ass, 1 health assistant, 7 ward att and 2 guards) and the second had 9. At dispensary's level, there was no significant change, when it occurred, it concerned one or two new or lost staff; we had two with only 2 workers (one has none CO), 2 had 3 workers (one without CO) and one had 4 workers.

In Mwangi, it was also not possible to get information concerning the arrivals/departures of workers between 2000 and 2006. Nevertheless, we can say that the voluntary departure from public institutions is almost inexistent and the major cause of loss was death like in the other districts. Despite the increased number of dispensaries, the shortage of N and AMO decreased during the studied period because of employment policy and up-grading process. In the DH, during the same period, 12 qualified workers were engaged for 4 departures (2 deaths). In the HC, we had respectively 21, 12 and 16 workers with negative turnover for 2 (less 5) and positive for the third (+5). The situation was also different for each dispensary visited (4 to 6 workers per HF); during the last 7 years, the turnover was nil for 2, positive for 2 (+1 and +3) and negative for the last one (-3).

Up-grading

Usually up-grading concerns different categories of semi-qualified staff, mostly, RMA to become CO, CO to become AMO, NA to N, N to NO, assistant to become technician (in laboratory, pharmacy, and radiology). This process of up-grading has increased since changes occurred in work legislation (2002). Actually several categories of staff with usually one two year's course (NA, lab assistant, pharmacist assistant, RMA, etc.) were no more recognised and were just designed as medical attendant with the correspondent lower wage scale. Sometimes, up-grading was the acquisition of specific qualification (e.g.: anaesthesia, ophthalmology, public health, etc.).

Up-grading is fully paid by the government and during the course workers continue to get normal salary.

In Biharamulo, the total number of public health workers in up-grading was 17. At DDH level also around 30 workers were sent for up grading between 2002 and 2006.

In Kilosa, information was fragmented and incomplete. We got for the year 2003 and 2004 with respectively, 12 workers then 7 sent for up-grading.

In Newala, an important number of workers were also given opportunity of upgrading. There were 13 in 2000, 12 in 2001, 15 in 2003, 10 in 2004, 7 in 2005 and 7 in 2006.

In Mwanga, 3 in 2003, 9 in 2004, 5 in 2005, 10 in 2006 and 14 in 2007 (10 were from DH). Information was not available from 2000 to 2002.

3.2. Actor points of view

Most CHMT members mentioned greater involvement of the district health management in assessing and identifying the Human Resources needs in their respective districts with an increased autonomy of the district councils. That has helped to improve the long term shortage of health workers. Supporting and encouraging the existing staff to go for up-grading courses was mentioned as a strategy used to obtain qualified health staff in the districts. Some commented that although the policy encourages employment at district level, very few health professionals are attracted to work in these rural districts, thus up-grading is a vital approach. Despite the above mentioned efforts, all districts reported to still be confronted to shortage of qualified health workers (clinicians and nurses) especially at lower level HFs. The shortage has been pointed as a drawback to attaining quality health service delivery at various levels in the districts, causing dissatisfactions in patients on the services delivered. Health managers also pointed out that the increased number in HFs in all districts were served to worsen the human resource problem.

In the communities, shortage of health workers was also mentioned as a core factor compromising the quality of services in many public health facilities. Participants to focus group discussions in all districts reported that available health workers, especially in lower health facilities, do their best to provide services but their efforts are usually hampered by their numbers.

In Biharamulo

Interviews with members of CHMT revealed that involvement of the district officials to identify the human resource needs and ability to employ is behind this achievement. *“Concerning the number of health workers, we have achieved to some extent because we are currently allowed to employ, thus increasing the number of health workers compared to some years ago”* (CHMT IDI). Despite such appreciation, it was pointed that the increase in the number of health workers has been insignificant compared to the needs. Substantiating this allegation, one said: *“one of the areas that I think we still need to improve is the proportion of health workers to the increasing number of facilities”* (CHMT IDI). The split of Biharamulo district in two has affected negatively the number of health workers as several qualified staff were moved to the new district (Chato) leaving several unfilled gaps in the source district. Another reason for shortage of health staff in Biharamulo was mentioned to be an increase in the number of dispensaries; these have increased disproportionately to the number of workers employed. *“You know, politicians are pushing through the idea of establishing dispensaries at least in all villages, several facilities have been built but the problem has been on health staff, so what we do is to move the available workers despite the existing shortage”* (CHMT IDI). Another pressing challenge in recruiting human resources was the complexity of employment process and by non-authorization of their proposals because of budgetary implications of these recruitments. It appeared to CHMT members that despite decentralisation of employment and deployment autonomy, still the central government dictates what should be done.

At DDH's level, managers viewed the process of recruitment after health sector reform as affecting negatively the quality of service in non-governmental HFs. An increase in employment opportunities and disproportional increase in salaries between public health staff and those employed by the non-governmental facilities result in rapid internal movements of health workers, mainly being drained from the DDH to the dispensaries,

thus increasing the workload to the available health staffs and eventually affecting their performance.

At lower HF's level, the same pessimistic views were held by the in-charge where some condemned the government for not doing a lot in solving the problem of scarcity in human resources; instead, it has aggravated it by increasing the number of facilities with less consideration of the existing human resource needs. A respondent at one dispensary for example pointed that: *"We have all laboratory diagnostic equipments and reagents but nobody was recruited to use them"* (Dispensary IDI).

At the community level as well, staff shortage was mentioned as a major source of dissatisfaction which hampered the quality of care received. *"Health workers are not enough because one person is expected to prescribe, dispense drugs, attend the injection room and wounds, while children are waiting to be weighed, I agree that we get services but in a very difficult situation"* (FGD Bwanga rural) and *"I sent my wife at.... (name withheld) HF for delivery; when we reached it, they gave her a bed but they left her alone without any help until she delivered alone"* (FGD ... village).

In Kilosa

CHMT members pointed that reforms with its concomitant decentralisation has shifted the role of quantifying and identifying the human resource needs, and the ability to employ have partly helped to reduce the problem of scarcity of human resources in the district. *"With these reforms we are able to identify the human resource needs and we request the central government to allow us to employ"* (CHMT IDI). It was added that despite decentralisation of employment and deployment roles to the district level, Kilosa has not been able to satisfactorily solve the problem of scarcity in human resources. The interviewed persons identified two main hindrances to that. First, the district is unable to attract qualified health personnel: *"Life here is different from that in town, last year we had twenty vacancies advertised, but only six people applied, this is because there are no strategy to attract them to live in rural areas where there are no houses, electricity and tarmac roads"* (CHMT IDI). Secondly, the existing organisational diversity guiding the process of recruitment and location of decision-making at the district and national levels pose unnecessary bureaucratic delays that hinder efforts targeting at filling the available vacancies in the districts.

At the DH, interviews revealed that an increase in number of dispensaries in the district have reduced the number of health workers as there has been no significant employment to fill the available shortage, thus necessitating to internal movement of health workers. *"This shortage at the district hospital has partly been exacerbated by the increase in the number of dispensaries newly opened, ... you know, employment has been slow thus the D MO is obliged to appoint health workers from the DH to run the facilities"* (DH IDI).

At lower HF's level, workers insisted that more efforts are required to deal with shortage of health workers: *"Still there is a problem because I am alone here, people tend to lament and show dissatisfaction because they waste much of their time waiting but there is nothing I can do because everything has to be done accordingly"* (Dispensary IDI).

In the communities, participants in FGDs pointed that shortage of health personnel was a discouraging aspect. In one village, discussants pointed that at the district hospital, long queues were common because clinicians who attend outpatients were not enough. One noted that this was discouraging, and that, when some had mild illnesses, he opted for drug shops for medication. *"If you think you have fever or just malaria, it is more convenient to buy drugs from a drug shop instead of going to the district hospital"*

(FGD). Discussants requested the government to send more health workers in lower level HFs in order to reduce the problems people are facing with at the hospital.

In Newala

At CHMT DH level, interviews revealed that with health policy change, there have been several strategies introduced and adopted by the district to influence HRH in Newala. Efforts mentioned included recruitment of new health workers and up-grading opportunities. Support for up-grading was explained as being the most reliable technique to ensure availability of qualified health workers in this rural district, as most graduates from colleges do not want to work in peripheral districts like Newala *“Currently the councils have been empowered to help health personnel especially clinical officers to go for up-grading to receive the grade of assistant medical officer (AMO), this has become a solace (faraja kubwa) to the peripheral districts where no Medical Officers want to work..., I believe there will be more improvements if these efforts will continue”* (CHMT IDI). And such experiences among CHMTs and hospital representatives became a drive for them to ascertain that more chances for up-grading in the district would easily assure availability of trained and quality health workers in Newala than waiting for graduates to apply for the vacant posts. *“It is easier to retain the up-graded workers than those who are newly employed to the district”* (2 CHMT and 2 DH IDI). At CHMT level, respondents pointed that although several efforts were in place, the district still faced with a shortage of qualified staffs, especially nurses and clinical officers. The district health officer explained that the problem was chronic in Newala (*hili ni tatizo sugu hapa*). One of the reasons for such persistent shortage is the geographical location of Newala, which according to the DNO is regarded *“the peripheral of the peripheral of Tanzania”*.

At lower HFs’ level, complaints about shortage of health staff has been an overwhelming response of many health workers. At least every respondent interviewed at facility level indicated that their number was less than the standard. Example, at Kitangari health centre where the in-charge said they had to be at least eight trained personnel (including an AMO, clinical officers, nurse midwives and the public health nurse), only three were qualified health staffs (1 clinical officer, 1 midwife and a public health nurse) while three were medical attendants. *“Activities have increased while workers are very few, and reports increases every day, and every month; then we are supposed to send those reports to the district ... it is necessary that they increase health workers to reduce this burden”* (Dispensary IDI). The respondents further explained that, following such shortage in all health facilities, there are times when non-clinical workers (like medical attendants, public health nurses) were obliged to work as clinical officers. This especially happens when the in-charge travels either for reporting or seminars. *“What I know is that we are few and that’s why we are overworked, and many health facilities are headed by nurse assistants alone,... this is contrary to the governments claims on the efforts to improve health services to the community”* (Dispensary IDI). And *“The number of health workers hasn’t increased, example here we are supposed to be 29 in total but we are only 9, and I am the only clinical officer with expectation to do everything, ... I am also a human being and I get tired. When I am away there is nobody to assist me as they are all nurses, this is a problem”* (HC IDI). And *“What should I tell you! If everyone could do things on what he/she is trained, but I am a nurse, I know much on MCH activities, I must work as a clinician”* (Dispensary IDI).

At community level, respondents were particularly dissatisfied with service provided and the shortage of health workers was their major concerns.

In Mwanga

CHMT members agreed on efforts undertaken by the government to deal with the problem of human resources at the district level like recruitment and provision of upgrading opportunities. *“Districts have been empowered to assess and propose for recruitment according to the needs”* (CHMT IDI). Like other districts, and despite strategies, the problem of HRH, scarcity has not been reduced so much. *“Health workers are overloaded and we are unlikely to deliver quality of services because everything will be done partially (kila kipengele kitafanywa kwa kulipua kwasababu staff ni wachache)”*. The reasons that were mentioned were (i) the disproportional increase in number of HF compared to health workers employed annually, (ii) the geography in Mwanga, where most of qualified workers do not want to work. One CHMT member related cases of new qualified workers who disappeared few weeks after they had started working.

At DH’s level, they revealed that shortage of health workers remains a challenge, and to a great extent compromises the nature of health services delivered to the community as this shapes even the conducts of individual workers. It was said that at DH, often only one CO attends the outpatient department and sometimes is required to attend some cases in the wards. This situation was noted to impact negatively the quality of health services provided to the community. The conducts resulting from such workload include delays for getting services and too brief contacts with patients, and this has become common, thus causing dissatisfactions in most patients on the delivered services.

At lower HFs, such complaints about shortage of staff in Mwanga were shared by the in-charge. *“For sure, I can say the problem of health workforce is still persistent, although we hear that the number of workers is increasing, but not here”* (Dispensary IDI) and *“There is no increase of health staff, instead there is a decrease, like here”* (Dispensary IDI). It was revealed that sometimes non-clinical workers were obliged to prescribe and providing treatment to patients, something which was viewed as *“not right”* by some respondents, because *“some services need specialized skills”*. *“If the government intends to improve health services to the community, then it would be appealing if every health worker performed the activities he/she was trained in (kila mtu afanye alichosomea)”* (Dispensary IDI). However, this was noted to be impossible following the current shortage. Another source of dissatisfaction was work overload that is tiresome and can lead to poor performance: *“In fact health workers are not enough, example, I remain sometimes alone here, I leave this room (prescription room) and go to the OPD where I am expected to dispense drugs and attend patients in the injection room, from there, I am expected to go and weigh children at the clinic, ... there is vaccination... yet I am expected to write reports which have become many nowadays than before”*. The respondents mentioned the same reasons as at the higher level like the increase in number of HF. The few workers available in the health facilities are sometimes displaced to the new ones, leaving some facilities with only one or two health workers. Others mentioned that new workers often faced adversity to start working in rural areas where possibly there is no support from any source during three months. Commenting on the general policy, health workers explained that *“this is possible in urban areas where people are able to earn through other sources, which is a different case from rural settings”*.

The community members had also a lot to say about the staff shortage: *“I don’t see any difference, there are drugs but staffs are few compared to the past, even at Mwanga the situation is the same”* (Nyabinda FGD), and *“I feel that there are weaknesses because there is no clinician (mganga) here, the only staff available is a nurse assistant for three years and she is carrying the load which is not hers, however, she treats any*

patient despite the fact that she doesn't know" (Mruma men FGD) and *"I haven't seen any changes ... there is no change because we don't have a doctor and some people deliver at their homes"* (Mruma women FGD) and *"The same person is doing cleanliness while at the same time is expected to give services"* (Kilaweni FGD).

4. Human resources motivation, attitude and morale

Summary

- Stability of staff varied between districts but was quite high. Non-qualified staff was more likely to stay longer at its position, while workers from private not-for-profit facilities were more likely to have reasons for moving to public HFs.
- Public institutions remained very attractive with better job security, salary and retirement benefits.
- Reforms brought positive changes in financial incentives especially with significant increase in salary; nevertheless, delay for salary increment was reported, at HF level, most workers still complained about the inadequacy between salary and living costs and the absence of extra allowances for all.
- Few positive changes on non-financial incentives were reported like supportive supervision and trainings/up-grading opportunities.
- Satisfaction on working conditions remained very low due to inadequate working equipment, work overload (severe staff shortage), lack of services, and absence of decent housing, difficult environment, favouritism, and "empty promotions".
- Attracting new staff in rural area was more difficult than retaining it.
- Staff morale and attitude have improved despite difference between individuals and sites.

4.1. From structured health workers questionnaires

One important type of behaviour we interpreted as being influenced by motivation is stability at workplace versus mobility.

Time spent by interviewed workers at their present position is reported in Table 31. The median reached a peak of 23 years in Newala, where it was even higher in facilities other than the hospital. In Kilosa, it was significantly higher in governmental than in private not-for-profit facilities. Differences per category of workers show that non-qualified staff stays longer than qualified staff, and it reached significance in Kilosa and Newala. Comparing types of HF, differences remained significant only at the district hospital level in Kilosa, with a median of 27 years for non-qualified staff and 4 years for qualified staff ($p=0.005$). In Newala, the difference was significant at both levels: the median was 25 years for non-qualified and 2 for qualified staff at district hospital ($p=0.012$); and 26 years for non-qualified and 9 for other staff at other health facility level ($p=0.021$).

Table 31: Staff stability: time spent at present position

	B	K	N	M	All
n	70	81	81	53	285
Median ^o (yrs)	6 (3-16)	17 (4-27)	23 (14-30)	10 (6-24)	16 (4-25)
Range	0.5 - 37	0.1 - 39	0.1 - 38	0.3 - 38	0.1-39
Per HF					
DH	8 (3-16)	21 (4-27)	19 (2-27)	8 (5-26)	16 (3-26)
Other HF	4 (3-16)	16 (5-26)	25 (21-32)	12 (7-23)	17 (6-25)
P value*	0.38	0.60	0.022 [†]	0.95	0.53
Per owner			No private institution		
Public	6 (4-18)	22 (5-27)			17 (4-27)
PNFP	7 (3-16)	5 (1-15)			7 (3-15)
P value*	0.73	0.001 [†]			<0.001 [†]
Per Quali					
Not quali	10 (4-19)	23 (16-27)	25 (22-30)	13 (8-23)	21 (12-27)
Quali	6 (3-15)	8 (1-25)	18 (2-30)	8 (5-25)	10 (2-24)
P value*	0.46	0.004 [†]	0.001 [†]	0.72	<0.001 [†]

n: Number of respondents ^o Median with quartiles (P25-P75) HF: Health facility
DH: District Hospital PNFP: Private not for profit Quali: qualification/qualified
*Mann-Withney test [†]: significant P value

Logistic regression analyses presented in Table 32 confirmed some previous results. Workers had more chances to stay over 10 years at their present position in Newala, followed by Kilosa. As expected, older workers stayed longer at their position. Within a district and at equal age, non-qualified staff had more chances to stay over 10 years; the same trend was noted for staff working in public institutions, while no such effect was noted in hospitals. Sex was not a factor affecting time spent at position ($p=0.22$).

Table 32: Factors associated with time spent at present position (> 10 years) for workers aged of at least 30 years ($n = 248/285$)

	OR	95% CI	P-value
Governmental HF	2.20	[0.94 ; 5.15]	0.069
District Hospital	1.56	[0.70 ; 3.48]	0.280
Not qualified staff	4.41	[2.00 ; 9.70]	<0.001 [†]
Male patients	0.63	[0.30 ; 1.31]	0.217
Workers age (yrs)	1.17	[1.11 ; 1.22]	<0.001 [†]
Districts			
Biharamulo	1.00		
Kilosa	3.09	[1.27 ; 7.50]	0.013 [†]
Newala	22.68	[5.41 ; 95.16]	<0.001 [†]
Mwanga	1.30	[1.25 ; 3.73]	0.621

Most interviewed workers had reasons for staying at their present position (95% in Biharamulo, 93% in Kilosa, 87% in Newala, and 91% in Mwanga). The most often mentioned reasons were job security which means the guarantee of keeping one's employment contract as long as desired with, at the end, significant pension benefits (mentioned by 42% of workers in Biharamulo, 63% in Kilosa, 65% in Newala, and 98% in Mwanga), training and upgrading opportunities (30% in Biharamulo, 36% in Kilosa, 32% in Newala, and 55% in Mwanga), and personal reasons (origins and family). Financial incentives were only cited by 21% of workers in Biharamulo, 12% in Kilosa, 29% in Newala and 23% in Mwanga. However, at the same time, many respondents had reasons for looking for another position, especially in Biharamulo and Kilosa, a significantly high proportion of which coming from not-for-profit health facilities (the difference in Kilosa became positive after weighting process (54% versus 23%,

p=0.002). Other differences are also shown in Table 33. The main reasons mentioned for leaving, despite some differences between districts, were first for a better salary and better living conditions, and second for children education opportunities and job security. Beyond these reasons, many workers looking for another job would preferably move to a governmental health facility when they were employed by mission institutions; otherwise, they would prefer to go to larger cities.

Table 33: *Reasons for staff turnover*

	B	K	N	M	All
n	70	81	81	53	285
Workers with reason to move (%)	55.7	27.2	22.2	15.1	30.5
Per Health Facility (HF)					
District Hospital (DH)	73.2	23.3	28.6	26.1	38.5
Other HF	31.0	31.6	12.5	6.7	20.9
P value ^{&}	0.001 [†]	0.28	0.074	0.058	<0.001 [†]
Per owner					
Public	37.5	21.2	No private institution		25.6
Private Not-For-Profit	65.2	53.3			62.3
P value ^{&}	0.025 [†]	0.017 [†]			<0.001 [†]
Per Qualification					
Not qualified	31.8	33.3	20.0	9.1	24.3
Qualified	66.7	22.2	23.9	19.4	34.7
P value ^{&}	0.007 [†]	0.19	0.44	0.27	0.041 [†]
Reasons*	n=38	n=23	n=18	n=9	n=88
For a better salary	89.5%	82.6%	72.2%	44.4%	79.5%
For better living condition	76.3%	82.6%	77.8%	55.6%	76.1%
For children education	31.6%	43.5%	55.6%	11.1%	37.5%
For job security	44.7%	47.8%	16.7%	11.1%	36.4%
For having private practice possibility	26.3%	17.4%	22.2%	22.2%	22.7%
For family reasons	7.9%	8.7%	38.9%	11.1%	14.8%
More incentives	15.8%	0	0	11.1%	8.0%
Up-grading-training possibilities	10.5%	0	5.6%	0	5.7%
Others	15.8%	8.7%	22.2%	44.4%	18.2%

&: Fisher exact

*: Several choices were possible; percentage calculated on respondent basis

Table 34: *Factors associated with workers having reasons to look for another job*

	OR	95% CI	P-value
Governmental HF	0.38	[0.19 ; 0.76]	0.006 [†]
District Hospital	1.71	[0.95 ; 3.07]	0.08
Not qualified staff	1.00	[0.55 ; 1.82]	0.99
Male patients	1.39	[0.76 ; 2.52]	0.28
Workers age (yrs)	0.95	[0.92 ; 0.99]	0.005 [†]
Districts			
Biharamulo	1.00		
Kilosa	0.87	[0.43 ; 1.77]	0.69
Newala	0.56	[0.24 ; 1.32]	0.19
Mwanga	0.24	[0.08 ; 0.73]	0.012 [†]

Multivariate logistic regressions presented in Table 34 show that Mwanga and older workers had less willing to move to another job. Working for public institutions obviously reduced the risk of looking for another position, and no more difference appeared between qualified and not-qualified staff.

Turning to staff motivation and incentives, the first studied element was salary.

Table 35: *Financial incentives received – Salary*

	B	K	N	M	All
% workers + salary in time	80.9	100.0	98.8	100.0	95.0
Amount Median ^o (TzSh*10 ³)	120 (98-182)	151 (118-200)	187 (125-230)	212 (133-300)	160 (118-209)
Range	65 - 350	50 - 416	80 - 800	83 - 700	50 - 800
Per HF					
DH	120 (98-168)	158 (140-208)	200 (123-231)	250 (166-300)	164 (120-216)
Other HF	143 (98-191)	120 (85-189)	168 (125-203)	173 (130-337)	160 (110-201)
P value*	0.79	0.006 [†]	0.23	0.23	0.050
Per owner			No private institution		
Public	143 (98-192)	158 (125-203)			158 (118-197)
PNFP	120 (98-168)	75 (63-130)			119 (93-154)
P value*	0.54	< 0.001 [†]			< 0.001 [†]
Per Quali					
Not quali	98 (93-115)	119 (98-150)	122 (104-150)	132 (114-166)	120 (98-150)
Quali	152 (117-192)	193 (154-250)	207 (199-258)	300 (230-377)	201 (160-260)
P value*	< 0.001 [†]	< 0.001 [†]	< 0.001 [†]	< 0.001 [†]	< 0.001 [†]
Per Gender					
Man	122 (98-168)	187 (140-236)	200 (167-255)	256 (212-450)	181 (119-240)
Woman	120 (98-192)	143 (115-184)	165 (120-208)	175 (130-300)	154 (117-204)
P value*	0.64	0.032 [†]	0.023 [†]	0.052	0.001 [†]

^o Median with quartiles (P25-P75)

HF: Health facility

DH: District Hospital

PNFP: Private not for profit

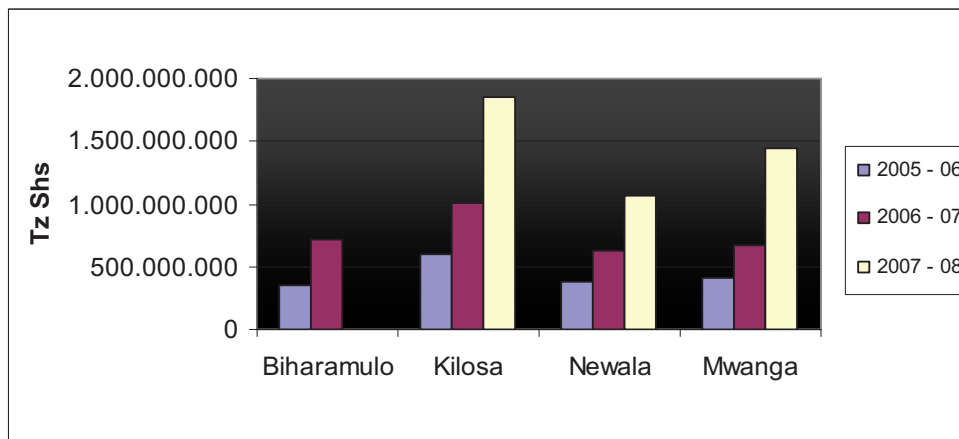
Quali: qualification/qualified

*Mann-Whitney test

[†]: significant P value

Table 35 illustrates that most respondents received their salary monthly and in time, except for private institutions staff in Biharamulo (75% with p=0.04). Median salaries experimented differences between districts, with the lowest median found in Biharamulo and the highest median found in Mwanga. The difference between public and private structures was significant in Kilosa only, and it could not explain the lower salary in Biharamulo. In the 4 districts, there was a significant difference in salaries between qualified and not-qualified staff. Compared by type of facilities and by owner, results were different from one district to another. The difference in favour of men was explored with the qualification status. For qualified staff, there is no more difference (p=0.40) and for non-qualified workers the difference was this time in favour of women (median of 123,000 versus 99,000; p=0.007). The increment required by staff for being satisfied (in percentage of current salary) was quite similar in all districts with a median close to 100% and a range from 0 to 539%. In Biharamulo, it was higher at the district hospital (122%, against 92% for other HFs, p=0.004). There was no difference between workers from private and from public institutions. Non-qualified staff required higher increment than qualified staff in Newala (122% against 96%, p=0.011) and in Mwanga (135% against 83%, p=0.043). Note that the visit period coincided with the first substantial salary increment policy in public institutions during fiscal year 2006/2007. For information we provide Figure 47 that shows appreciable increased of salary under the reforms led by the MoHSW from 2005 to 2007.

Figure 47: *Budget for personnel emolument*



For other financial incentives, 43% of workers in Biharamulo admitted getting extra-allowances, compared to only 21% in Kilosa, 10% in Newala, and 6% in Mwanga. The amounts of extra allowances received were low, with a median ranging from 3,000 (Newala) to 30,000 TzSh (Kilosa). This important matter of concern is better described with workers IDI as the quantitative data do not properly reflect exactly the reality. Concerning coping strategies to increase financial income we found that except in Mwanga (10% of respondents), many respondents (51% in Biharamulo, 41% in Kilosa, 38% in Newala) declared having another income generating activity, especially for non-qualified staff (but the difference vis-à-vis qualified staff was significant in Biharamulo only: 76% versus 37%, $p=0.001$). Activities outside official job included mostly agriculture, followed by small scale business and livestock – note that rural and poor environment does not encourage private medical business.

Non financial incentives are summarized in Tables 36. In the first category, from the list edited by the Global Health Workforce Alliance (2008), working conditions deserved a particular attention as workers seemed to be largely dissatisfied, especially in Newala. The main reason mentioned in all district was a lack of basic working equipment. Other reasons were heavy workload associated with staff shortage, difficult working environment (no electricity, no water, tininess, security problem in some places, etc.), shortage of drugs, and poor or inadequate management. Concerning support for career development, quite many respondents have been sponsored by their current employer for upgrading, especially in Newala. In all districts, workers received mainly diplomas/advance diplomas and one-year course trainings. Workers less often benefited from training and/or short courses; in Biharamulo, workers from public institutions were the most frequent beneficiaries from such trainings. There was no significant difference between man (20.4) and woman (13.8), with $p=0.10$; except in Newala where higher proportion of men benefited of training (33% versus 8%, $p=0.008$). The main short courses were voluntary testing and counselling with home based HIV care (40%) and family planning (29%). Granting of promotions was subject to important differences between districts without reflecting the exact situation. Again that particular subject is described more in details in the next paragraph.

Table 36: *Non-financial incentives received*

	B	K	N	M	All
1. Positive work environment					
Workers finding work conditions satisfactory (%)	25.7	18.8	9.2	20.8	18.3
Associated reasons * (%)					
Shortage/lack of working equip	50.0	54.3	81.7	66.0	62.9
Workload and staff shortage	44.1	48.6	26.8	42.0	40.2
Shortage/lack of water/electricity	22.1	5.8	19.8	16.0	15.8
Poor environment	23.6	10.0	7.0	12.0	13.1
Shortage/lack of drugs and supplies	1.5	4.3	23.9	12.0	10.4
Poor/inadequate management	11.8	17.1	7.0	2.0	10.4
2. Support for career development					
W who benefited from upgrading (%)	30.0	37.0	54.1	28.0	38.2
Per Health Facility (HF)					
District Hospital	39.0	44.2	40.5	38.1	40.8
Other HF	17.2	28.9	71.9	20.7	35.2
P value ^{&}	0.043 [†]	0.12	0.007 [†]	0.15	0.20
Per owner					
Public	16.7	42.4	No private institution		35.6
Private Not-For-Profit	37.0	13.3			31.1
P value ^{&}	0.066	0.031 [†]			0.35
Per Qualification					
Not qualified	36.4	50.0	45.7	22.7	40.9
Qualified	27.1	26.7	61.5	32.1	36.3
P value ^{&}	0.30	0.027 [†]	0.13	0.34	0.26
Per sex					
Man	23.1	11.5	54.5	50.0	30.3
Woman	38.7	49.1	53.8	21.1	42.6
P value ^{&}	0.12	<0.001 [†]	0.58	0.060 [†]	0.029 [†]
Workers per type of up-grading **					
One year course	38.1	63.3	45.0	46.2	49.0
Two year course	14.3	13.3	27.5	7.7	18.3
Diploma-Advanced diploma	47.6	26.7	35.0	53.8	37.5
Workers who received training (%)	17.4	16.0	16.0	15.4	16.2
Per Health Facility (HF)					
District Hospital	2.5	9.3	6.8	13.6	7.4
Other HF	37.9	23.7	29.0	16.7	26.6
P value ^{&}	< 0.001 [†]	0.072	0.012 [†]	0.54	< 0.001 [†]
Per owner					
Public	45.8	18.2	No private institution		25.6
Private Not-For-Profit	2.2	6.7			3.3
P value ^{&}	< 0.001 [†]	0.25			< 0.001 [†]
Per Qualification					
Not qualified	22.7	11.1	2.9	9.1	10.5
Qualified	14.9	20.0	26.8	20.0	20.2
P value ^{&}	0.32	0.22	0.004 [†]	0.25	0.022 [†]

* Several choices were possible; percentage calculated on respondent basis, n (%)

** Example of a one-year course: medical attendant to become nurse assistant; example of a two-year course two year course: an attendant to become assistant in laboratory; example of a diploma-advance diploma: clinical officer to become assistant medical officer.

&: Fisher exact

Table 37 presents the incentives that were viewed by respondents as necessary to motivate health workers. Non-financial incentives with adequate working equipment were the element most often mentioned in all districts, before salary or allowances. Other important motivating factors concerned children education, staff increase, better working environment, and access to services.

Table 37: *Incentives requested to perform properly the work*

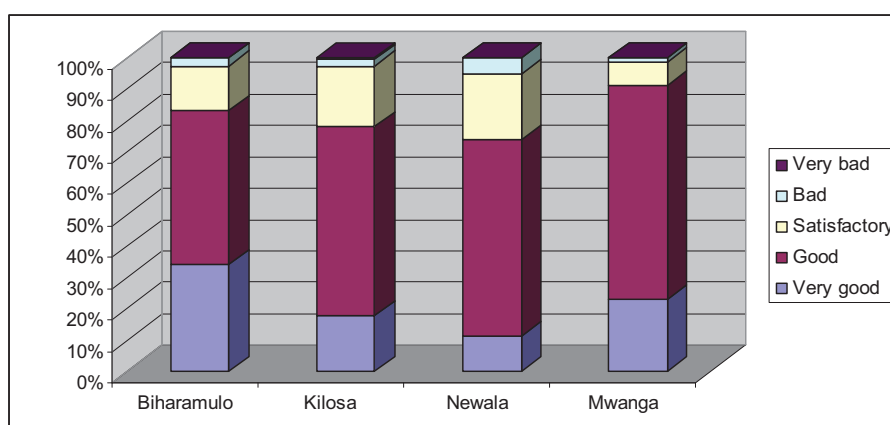
Incentives mentioned* (%)	B	K	N	M
Respondents n	69	79	81	50
Financial incentives				
Allowances	47.8	53.2	37.0	30.0
Better salary	40.6	45.6	32.1	28.0
Non financial incentives				
Adequate working equipment	49.3	62.0	76.5	46.0
Up-grading/Training/Seminars	34.8	44.3	28.4	40.0
Increased staff	33.3	41.8	18.5	22.0
Better working environment	24.6	26.6	27.2	24.0
Transport	13.0	11.4	19.8	20.0
Good house	17.4	11.4	11.1	20.0
Enough drugs and supplies	8.7	2.5	23.5	10.0
Better management	7.2	16.5	8.6	4.0
Others	5.8	5.1	1.2	8.0

* Several choices were possible; percentage calculated on respondent basis, n

4.2. From structured patients questionnaires

Patients at the facility were asked to qualify the staff attitude in their HF; they had to select one solution among 5 proposed. Figure 48 presents the main results. For analysis we grouped in two categories, one for very good and good and the second for other possibilities. For the 4 district (n=528), 20.1% found attitude very good, 58.9 good, 17.0 satisfactory, 3.6 bad and 0.4 very bad. Newala has a significant lower score in proportion who found staff attitude good and very good.

Figure 48: *Staff attitude perceived by patients*



In general the scores are very good but they should be cross-checked with FGD in the community. It is well known that interviewing people where and when they are getting care gives and overestimate of satisfaction rate. The possible associated factors checked were type of HF, the type of owner, the type of patients (in vs outpatients and urgent vs

others), the sex of the patient and the occupation of the patient. None associated factor was found.

Table 38: *Time needed to complete care for outpatients*

	B	K	N	M	All
n	64	106	83	78	
Median (H)	4.0 (2.2-6.2)	2.0 (1.0-4.0)	3.0 (2.0-4.0)	1.0 (0.5-2.0)	2 (1.0-4.0)
Range	0.4 – 10.0	0.3 – 8.0	0.3 – 4.0	0.1 – 6.5	0.1 – 10.0
Per HF					
DH	7.0 (4.0-8.0)	3.0 (2.0-5.0)	3.0 (2.0-4.0)	4.0 (2.8-6.5)	3.0 (2.0-5.0)
Other HF	3.0 (2.0-4.0)	2.0 (1.0-3.0)	3.0 (1.3-4.0)	0.5 (0.3-4.5)	2.0 (1.0-3.0)
P value*	<0.001 [†]	0.012 [†]	0.987	<0.001 [†]	<0.001
Per owner			No private institution		
Public	3.0 (2.0-4.0)	2.0 (1.0-4.0)			2.0 (1.0-4.0)
PNFP	6.5 (4.0-8.0)	4.0 (2.5-5.5)			6.0 (3.0-8.0)
P value*	<0.001 [†]				<0.001 [†]

* : Fisher exact

Through questionnaires, we also investigated the time needed to complete treatment from exit outpatients' interviews. Table 38 gives the main results by district with the median in hours. Except in Biharamulo where more than 50% of the patients need 4 hours to be treated, the results look reasonable. Logically this time is significantly higher to get treated at hospital and again especially in Biharamulo. The difference seen between public and private is explained by the fact that most of respondents were from Biharamulo hospital.

4.3. Actor points of view from IDI and FGD

Some interviewees at **CHMT** acknowledged that with health sector reforms, there has been an improvement on different areas that had positive impact on workers' motivation and morale. The areas were the benefit package such as salaries and some extra allowances, allocation of funds to facilitate local trainings and short courses. Some CHMT members commented that although there has been improvement of the workers' attitudes and adherence to work ethics as a result of training and increased community knowledge about their rights at the dispenser's desk, still there are reports of misconducts and controversial attitudes. The reasons associated to this include poor living conditions, especially absence of proper accommodation, inadequate incentives according to their work environment and workload. Along with an attractive working environment, CHMTs had a feeling that absence of transfers is one of the factors affecting health workers in rural areas. Some pointed that most health workers live and work at one facility for a very long time; for them this contribute to inefficiency and development of indifference among health workers. However, others warned that transfers shouldn't be taken as foci de facto to improving workers attitudes and adherence to their work ethics but rather, they should be accompanied with provision of incentives for such hardship situations.

At HFs level, some of the in-charge commented that despite efforts to motivate health workers by increasing salaries, the differences in pay among health workers have been persistent; this is because of the long term unequal promotions. Most respondents reported that health workers were obliged to involve themselves in what they called coping mechanisms (njia za kujikimu) which include petty business and more often involvement in small scale farming. In contrast to what was reported by CHMTs, the in-charge at the lower levels were of a different opinion about extra allowances, some were

quite unaware of the existence of the allowances in practice although they knew they were entitled to various pay including allowances in theory. Others were frank enough to declare that they didn't know about allowances and how they are being paid. In all districts, the respondents admitted that there has been increase of seminars and short training courses. For them, these have been a motivating factor for they are paid some money for these trainings. Despite such appreciation of the trainings offered, these respondents remarked that the seminars have not been distributed fairly and equitably among health workforce; some favouritism was reported. Nevertheless, positive development, that has increased motivation in most health workers, was reported and concerned the change of supervisory techniques, from a controlling one to a supportive one; it has increased work relationship between health workers in the lower facilities and the health managers at the district level. At community level, despite variation in perceptions concerning health workers' attitudes, participants to FGD measured individual health worker's attitude through the following: warm reception, attention to patient's explanations and problems, timely service provision and patience to patient's behaviour (respect). Most of the participants admitted to have noted some changes in some health workers' attitudes especially at the lower level facilities because of good relationships they have developed with the community members. Participants who commented on the health centres and district hospitals differed in their feeling because the attitude of health workers can vary from one person to another.

In Biharamulo

CHMT members talked about the salaries; they had increased appreciably under the reforms. Some pointed that although it was not yet satisfactory, it indicates that the government is serious in dealing with workers issues. It was also noted that there has been a renewed provision of allowances to health workers and a new open performance appraisal system that can help workers promotions and increasing accountability.

At HFs level, the question of **salary** was among the dominant concerns. Some pointed that workers' salary increase is not proportional to the realities of life in Tanzania. *"It's sad, although they say they have increased the salary, my basic salary is ninety six thousand shillings (equivalent to USD 80); the amount that can't sustain anybody. Still you have children and you need to send them to school"* (Dispensary IDI). And *"I can hardly meet expenses for 2 weeks from my salary. I have to live at a low standard compared to the status I hold. This is degrading"* (Dispensary IDI). This situation was pointed to force them to look for other strategies to cope with the insufficiencies. Most strategies related to activities outside their official work including cultivation, drug shops and petty business. It was also mentioned that there are clear inequalities between people working in facilities and those in the administrative offices at district level. While salaries of workers in the lower health facilities are perceived as being insufficient to maintain an adequate standard of living, some had a feeling that health managers were satisfied and had no reason to stand for salary increments of their subordinates. The reasons for such situation were associated with big differences in salaries and incentives associated with their positions such as extra-duty allowances, per-diems when attending meetings and frequent trainings. These are noted to create differences between site health workers and their superiors in the offices.

The question of **extra-allowances** raised a lot of unrest as they declared there was hardly any change apart from increased responsibilities. The given example was that health workers should work at twenty four hour basis without any financial compensation. Sometimes health workers are aware on their entitlement to some form of allowances like outreach allowances but they complain about obstacles to access and

to receive them. These included delays in allowance payments and bribes that workers felt obliged to pay to the managers for their allowances.

Another important matter of concern was about **promotion**⁶⁶. It was pointed out that promotional problems received remarkable attention after reforms but they were also viewed as a strategy to calm workers who have been struggling for a long time for their rights. One of the reasons for this allegation was the absence of payment associated with the said promotions; situation that causes dissatisfactions and lamentations for most health workers. *“I have been here for six years but I haven’t been promoted, then I thought going to a clinical officer’s course to be eligible for a promotion. However, even after graduating I had to wait one year before being promoted, and up to now I haven’t received any payment for that... the problem is that they recognize me as a clinical officer in terms of duties and responsibilities, but not in terms of pay”* (Dispensary IDI).

Concerning **supervision**, interviews revealed a positive relationship and increased understanding with the district health managers especially after initiation of supportive supervision. *“Reforms have fostered better supervision of facilities by the district because they are now more human than before, when supervision was like a war, instead of being taken as a learning ground.”* (Dispensary IDI). However, the frequency of supervision was reported to be less frequent compared to the past.

Trainings, seminars were recognized as an important motivating factor among workers; nevertheless, like allowance, some favouritism and even bribes were reported. *“There is an issue of ten percent....when some are nominated to attend a seminar, they give something to the bosses at the district, this put them in a good position to be solicited next time; this situation is prevalent even in allowances”* (Dispensary IDI). There was a feeling that despite the reforms, it was not possible to challenge the established systems to access advantages and the long tradition of the networks that some personnel had built overtime with their superiors.

Lack of decent accommodation was found to demoralize most of the public health workers. Interviews with the in-charge of the DDH indicated that most of workers in the higher ranking cadres like the doctors and nurses were provided with housing so as to attract them to work in this district. Unlike interviews of the in-charge at DDH and mission dispensary, lack of housing was an important challenge that cut across all cadres in the district. The in-charge interviewed declared that this was as one of the greatest challenge in attracting and retaining some health workers in this rural district. Interviewees further added that this problem doesn’t only affect human resource, but has acted as an impediment to access health services for most community members as health workers live far from the facility thus when problems arise at night there is no way to access the service.

At community level, concerning workers’ attitudes and ethics, there were variations between those who commented on dispensaries and for health centres and district designated hospital. Those who commented on workers at DDH were of the opinion that workers’ attitudes differ because there are some who are humble and others are harsh. *“My opinions on health workers are that there are some who are humble and well mannered while others are abusive, for example for us who are coming from rural villages, we are treated with contempt and most pregnant women are insulted”*. (Nyatimba FGD). However, some believed that sometimes at DDH harsh behaviours among health workers prevailed because of workload. Unlike community members who commented on workers attitudes at DDH, some FGD in villages served by health

⁶⁶ In Tanzania, promotion is job rating advancement that should, in theory, be considered every 3 years with higher scale of salary and responsibility.

centres reveal that workload has less to do with an individual's behaviour; there are some who just don't care and they can do whatever they wish. Nevertheless, it was also reported that villagers sometimes bypass some HFs (or for pregnant women deliver at home) because of workers attitudes like abusive language, carelessness and alcoholism.

In Kilosa

Interviews with CHMT members revealed that with health sector reforms, there has been an improvement in terms of incentives to health workers. It was noted that health workers were motivated in three main ways: First, through **trainings** that are held with members of the CHMT and during these trainings health workers are paid some amount of money. *"We use the same money (from basket fund) to motivate the available staff through trainings and seminars. These are particularly important because in spite of using them as motivation, we also fill the gap of the available staffing by conducting on-job trainings to medical attendants who are in most cases left to run the dispensaries"* (CHMT IDI). Second, is through facilitating health workers to go for further education like **refresher courses and up-grading**. Thirdly, payment of **extra duty allowances**, such as outreach. In the past, we had no source of fund to pay them. In addition, it was said that **increased salaries** among health workers have had a great impact on the workers morale over time.

Observations at DH revealed some briberies activities where patients paid directly amount of money to some health workers.

The in-charges in the lower facilities indicated that despite significant increase in **salary**, still the government has to reconsider provision of incentives to health workers in the dispensaries. About **allowances**, as the government insists on 24 hours health service delivery, it is important to provide extra-duty allowances. Considering **promotion**, they said although there has been an accelerated process which has helped to reduce a long term problem, however, it was not helpful because no increment in pay was associated. Furthermore, **lack of decent accommodation** was another factor that demoralizes health workers in Kilosa. *"Sometimes you may think as if you are being punished! I am coming from a decent home but the government forces me to stay in that hut (showing her house)." (Dispensary IDI)*. **Supervision** was noted as an important factor of motivation that has improved over the past few years. In general, the in-charge in the lower HFs seemed to appreciate the new changes in supervision since relationships to their superiors has improved through tighter working relationships. Despite such appreciation on improvement of the nature of supervision, it was pointed that supervision is not frequent.

In the communities, concerning workers attitudes, participants commented that in most cases, workers in rural dispensaries were in good terms with the members of the community, helping when possible. Nevertheless, it was reported that there was cases where health workers do maltreat patients and segregate them according to material possessions. Some participants in FGD noted that patients from the remote villages, who are normally poorly dressed, can stay at the queue for a long time while others are just taken by the nurses and the doctors to the offices for medication at the district hospital. Another problem pointed during FGD was the absenteeism of health workers from the facilities. Two reasons were pointed as contributing to this situation; first was that some health workers engaged themselves in other activities apart from attending patients. *"When health workers are brought into villages, most of them start their own activities instead of doing their job, some start farming while others engage in business activities"* (village FGD). The second reason mentioned was the absence of housing in the vicinity of health facilities. For the DH, participants pointed that sometimes health

workers create shortage of services at the hospital and tend to refer to the private own by themselves.

In Newala

Interviews of members of CHMT revealed that with health policy change, several strategies have been introduced and adopted by the district to influence human resources. One of the acknowledged strategies was the increase in salary for health workers. It was explained by one district manager that, this has not only been acted as an incentive but a pool factor for health workers to seek employment in the public health sector. Giving an example on how this attracts health workers. *“After noting that the situation was improved in the public sector (serikalini), we decided to quit Ndanda mission hospital to be employed here, and because of my education I was given a good position in the CHMT as well as my wife in the DH”* (CHMT IDI). This example indicates a promising situation for the public sector as it attracts more personnel, some of whom are qualified. In Newala, on-job trainings have been adopted and being implemented not only as a quality improvement strategy, but also as a motivating aspect to health workers. A good example was that all respondents at district level (CHMT and DH) attended at least three trainings related to their daily activities. Concerning promotion of workers, the prolonged absence of promotions became a reason for most workers’ complaints and disappointments about their work. However, with health sector reform, promotions have become faster than before as decentralisation has given the power to the district to carry-out accelerated promotions commonly known as group promotions. Considering the efforts and strategies adopted, CHMT members agreed that still different challenges remained. A big one concerned staff shortage that was already discussed. Other ones included absence of housing facilities, workers rights after promotion (*stahili za watumishi baada ya kupandishwa vyeo*), and other incentives like extra-duty and outreach allowances. Respondents had a feeling that despite adoption of good strategies to increase numbers of health workers and training, the strategies are deemed useless if the conditions remain crude.

At lower HF’s level, respondents observed that although there were increases in **salary** for health workers, the amounts are not realistic compared to life situation in the country and not sufficient to motivate them. Also there are workers who reported that their salaries were not changed because of delay. Like elsewhere, workers had concern about **extra allowances**, because no one is known to be paid. The only incentive mentioned as being an offer to health workers concerns uniforms only, but nothing else. *“Despite increased activities on health workers like writing reports including those of VCT, PMTCT and others, we are not paid anything more”* (dispensary IDI). And *“there is no risk allowance, no extra duty allowances...nothing at all, while life expenses have increased. I think sometime they need to consider the realities of life rather than just mentioning the salaries”* (HC IDI). One respondent explained that such lack of incentives among health workers, doesn’t only affect the nature of services provided to patients, but also the reporting systems thus having more consequence to the general district health department. Substantiating on this, the in-charge pointed that sometimes he is obliged to use his own resources to travel to the district health office and sometimes pay for accommodation without any form of refund. *“There is no hurry, when I get money or when I go for my salary; that’s when I send their reports”* (HC IDI).

At community level, respondents were quite dissatisfied on the nature of health services provided in health facilities because of delays in obtaining health services (DH), lack of drugs and other medical supplies despite cost –sharing. Attitudes among some workers were criticized. Actually it was reported that some health workers

intentionally created shortage of services at the district hospital and they tend to refer patients to the private facilities. An example that was often cited was that of laboratory technician, who opened the laboratory very late and closed early even when people mushroomed at the door. Following such strict schedule, the technician referred patients to his own private laboratory outside of the hospital. Another discouraging aspect at the DH as expressed by participants in FGD was what they referred to as strategic payment seeking. This was mentioned as a form of bribery that the care seekers had to understand instinctively. Health workers do not ask directly for payment, *“but their actions tells you that they want you to pay because when you go to the health facility, nobody cares, they walk around until when you decide to give them something”*. And *“If you give him/her 5,000/=Tsh you will have all services and, if possible, you might be escorted to the gate”* Nangwara FGD). Another workers’ tendency mentioned by participants in FGD was the segregation based on wealth again in the DH. This was mentioned particularly as a feature of Newala district hospital. Although drugs are noted to be unavailable, some respondents reported that those with money, and vital social statuses in the community, have no problem in accessing the scarce services in Newala district. These discussions in the villages revealed that as under the table payment bolsters, some mothers are obliged to go to the traditional birth attendants because hospital services become indirectly expensive. It was further stated that, in some instances, people stay at home and use some herbs or go to the traditional healers instead of seeking for conventional treatment. This was for them affordable, and they paid for a service, while at hospital services, where they say they “paid for nothing”.

About HC and dispensaries, the common complaints of most villagers was that there were delays in provision of services when they attended at the facility. When probed on the reasons for the delays, in the five groups, the participants consented that it was because of the number of workers compared to the patients number, while the rest pointed the tendency of health workers to be rude and uncaring.

In Mwangi

Interviews of members of CHMT identified the same efforts undertaken by the government to deal with the problem of human resources at the district level like recruitment, provision of training and up-grading, change in performance appraisal system and promotions, increased salary and supervisions. In the other hands, some members of CHMT explained that even if the government has reviewed health workers’ salary scales, it isn’t enough to sustain a living in a month. This situation was mentioned as one of many aspects that demoralized health workers in their day to day health service delivery. Other demoralizing aspects are less consideration of issues of incentive among health workers: extra-duty allowances, timely salary increments, housing, transport leave allowances. As a result, most of the goals set to be achieved after these reforms remain un-implementable. As an example is the lack of houses close to the facility inhibit provision of services twenty four hours in most dispensaries; one reported that at Usangi hospital for example there are workers who live in Kiriki village which is more than two hours walking. About promotions, although reforms have “accelerated” the process, most are “empty promotions” as the rights associated with those promotions are delayed or not provided. Interviewees at CHMTs felt that because of these constraints in addressing problems of human resources, morale among workers on their activities was low. The district initiative to deal with this problem was to use their internal resources to pay call allowances only at the district hospital as the district health officer explained:

“what we do is to pay call allowances to workers at the district hospital, though at a very minimal amount ... they complain but what can we do... these depend on the amount we collect”(CHMT IDI).

At HFs’ level, workers motivation was noted to be a function of multiple factors, although payment of allowances is important but it is “not enough to motivate an employee”. These facets include: availability of working equipments, drugs; provision of transfers, seminars and other training opportunities to update workers knowledge and ability to deal with their day-to-day working challenges; good proportion between activities and number of staff at the facility; equity in provision of workers incentives like promotions, allowances, trainings and seminars. Examining the district performance using these criteria, the in-charge noted that the government in Mwanga has still a lot to do in order to motivate health workers in the district. At the district hospital, interviewed members of the district health board complained about **non-payment of extra-duties** to health workers. Despite non-payment of such allowances, which sounded demoralizing among interviewees at the DH, reports of increased **seminars, on-job training and improved availability of working equipments** partly motivate health workers. The matron further explained that because of such slow changes (improvement), workers become tolerant hoping that things will be better in future. Complaints on non-payment of extra-duty allowances weren’t unique at DH, as the interviews with the in-charge at the lower level facilities revealed they were entitled to extra-allowances but they were never paid. It was also revealed that absence of allowance, low salary, and unequal provision of seminar and training opportunities amongst health staff in the facilities demoralized health workers in Mwanga. *“There are lots of activities compared to the number of health workers; so most of us are obliged to work for long hours without extra-payment”* (Dispensary IDI). And *“Salaries are very low compared to life expenses”* (Dispensary IDI), and *“There are people who stay at the facility without attending seminars, sometime they can say those who go for the same should work as they are privileged”* (HC IDI). Another important problem facing health workers was the absence of **housing** at the facility. Interviewees commented that the government should build houses for health workers as, currently, most are obliged to live far from the facility and some lived in one of the hospital rooms. Following the meagre pay some explained that health workers sometimes are obliged to find other sources to earn a living, commonly termed as “njia ya kujikimu”. It was interesting to find that these “njia za kujikimu” had to be done after work hours but some are done there, when there are no clients at the facility. This situation sometimes hampers health service delivery and availability.

In the community, most of the participants admitted to have noted some changes in some health workers’ attitudes, especially at the lower level facilities. *“They are very good because even if you are sick around two at night they will come to help”* (Village FGD). On the other hand, participants who commented on the health centres and district hospitals differed in their feeling. Most of them had a view that attitudes of health workers varied because there are some listen to the patients regardless their economic situation while others look for earning opportunity out of their patients, and some are rude. *“There are doctors who prioritize money, while others don’t”* Mwanga FGD).

5. Health financing at district level

Summary

- It was difficult to obtain data on sources of finances and expenditures (except in Mwanga); it was not possible to evaluate the budget performance.
- The grants from governments and basket funds have increased during the period of evaluation as well as the amount of health expenditures.
- Health basket Funds (HBF) represent 5 to 17% of the health district budget.
- With reforms, districts have been more autonomous for deciding on procurements and allocation of funds from various sources that contributed to improving health service delivery at different district levels.
- Council Health Management Team (CHMT) complained of delay of money transfer from central government to Council authorities that hampered quality and timely implementation and reporting on the activities.
- The amount of funds collected from cost-sharing remained limited and varied between districts, from 1.5 to 5% of total incomes. When reported at lower HFs level it became quite less.
- Only one third of interviewed patients had to pay for services. Exemption system is well known at all levels and reported to be roughly respected; very few cases of bribes were reported and observed (Kilosa and Newala).
- Exemption for under-five children was respected in 95% of all cases and was significantly better respected for patients treated in public HFs.
- Managers reported that the number of categories of exempted people targeting the most frequent attendants to the facilities compromised efforts to collect funds and contributed to failure of the CHF's initiative.
- There was some confusion on how to get back and use the money collected at HFs especially at lower level; sometimes lack of transparency was reported by communities.
- CHF was not functioning at all in three districts. Most reasons mentioned were in relation with broad exemption system, shortage of drugs, absence of laboratory facility, limited coverage in term of services (transport not cover) and in terms of place to be treated (district, public HFs), unfair workers attitude for subscribers, misinformation or absence of information (Biharamulo), no trained and specific personnel attached to the task. The poverty of communities was not pointed out as a reason, except in few villages (Newala).

It was really difficult to get all information on the total income and the expenditure for health at district level. Therefore, assessment of possible increasing of the share from the resources during the evaluation period was sometimes not possible.

5.1. District reports

In the districts, annual budget was established from January to December. Then in 2004, it was decided to follow the national fiscal year period from 1st of July to 30th of June. So in the collection of data, we have voluntarily skipped the first 6 months of 2004. The budget allowed to MSD by the government was not available at district level

Unfortunately, it was not possible to evaluate at district level, the budget performance by measuring the degree of correspondence between budget estimates, budget releases and actual expenditures. Sometimes we could find the release of resources compared to budget estimates. The report depended, of course, of data availability and willingness to share the information. Also the number of people who could correctly understand/report of these budget questions were rare and not always present during the visits.

Block grant and Health Basket Funds

We have already reported about the increased budget for Personnel Emolument (PE) in Human Resources for Health section. Concerning the second component of block grant, the “Other Charges” (OC), the data from 2005 and above are the most reliable and trustable because there were found in “Local government finance information website” (<http://www.logintanzania.net/>). Table 39 reports OC (with data available and certified by competent authorities) and the Health Basket Funds (HBF) in the 4 districts per fiscal year. In absolute, the total amounts given to the districts have increased.

Table 39: *Other Charges (OC) and Health Basket Funds (HBF) allocations to Council by district and by Fiscal Year (FY)*

OC TzSh 10 ⁶	B	K	N	M
2004-05	256	450	124	255
2005-06	324	1,223	130	118
2006-07	433	939	252	315
2007-08		401		
HBF TzSh 10 ⁶	Started 2004			Started 2003
2001			68	
2002		189	75	
2003		213	80	62
2004-05	171	228	100	68
2005-06	191	285	106	73
2006-07	229	337	125	86
2007-08		654	139	

Cost-sharing, National Health Insurance Fund and Community Health Fund

Differences occurred between districts.

In Biharamulo, data on funds collected through user-fees and National Health Insurance Fund (NHIF) were not available. The Community Health Fund (CHF) has started late, in February 2006 and it was functional for a very small number of households; if we consider that district collected 5,600,000 TzSh in 2006, it represents 1120 households (5000/household) or 0.016 % of total households. According to district authorities, there was delay in training implementation and the village leaders did not inform properly the population. Looking at HF level, we found complete report for the DDH concerning the cost-sharing collection (the example of source of funds for DDH with expenditure will be given below). For other HFs, reports were not available everywhere.

In Kilosa, we could find some report about user-fees collection with an increase at DH (from around 2 millions in 2000 to 36 millions in 2006). That increment was not noted at HFs level. Kilosa was among the 10 districts that have started CHF on Tanzania and the opening was in June 1999. The district was given a starting of 20 millions of TzShs. The first year, 3% of household subscribed and the percentage increased to 8% the next fiscal year before starting to drop (2.7 % in 2002). Reduced percentage of household subscription was confirmed at HFs level for example, at Ulaya HC, it dropped from 8.5 % between 2000 and 2006).

In Newala, cost sharing collection has also dropped. CHF started in 2004 and the subscription number decreased; 3% of households subscribed in 2004 for only 1% in 2007. No information was available at HFs level.

In Mwanga, money collected from user-fees and CHF increased every year. The example is given below as it was the only district where it was possible to get more or less complete information data on finances. The CHF has started in July 2003 and is

quite functional if compared to other districts; 3% of household subscribed in 2003 for 9.8 in 2007 (it reached a peak in 2005 with 13.4%).

Other sources of funds

Vertical specific funding projects, external donors, NGO, etc can also contribute to finance health sector and their contribution varies from one district to another. Again, the data were not always available. Kilosa reported several vertical projects (for specific diseases) and Newala reported numerous projects supported by different donors.

Expenditures

Expenditures had increased every year and not only for PE. Nevertheless, no data were available in Kilosa and Newala.

Mwanga example

Since 2003, complete data were available and they can provide good idea of sources of finances and the different cost centres for expenditures. Table 40 shows the increase of total amount in income sources. The incomes from HBF and from cost-sharing collection are almost similar and represent only 5% each of the total. The donors were an important source of income but only in 2006. This was very different in other districts. In Kilosa and Biharamulo in 2006, the HBF represented around 17% of total sources of incomes when cost-sharing represented only 3% in Kilosa (no information was available for Biharamulo) and in Newala in 2005, HBF represented 5% of total source of income and cost-sharing was only 1.5%.

Table 40: *Main sources of income and amount (TzSh) in Mwanga District*

	2003	2004-05	05-06	06-07	07-08
Personnel Emolument	404,721,894	573,828,819	416,048,400	670,816,483	1,439,041,000
Other Charges			254,670,100	118,000,000	314,822,000
Receipt in kinds*	200,171,698	115,211,230	110,853,094	136,798,304	
Basket Fund	61,808,265	68,392,460	72,811,100	86,333,000	
Cost-sharing**	23,709,332	44,545,797	59,331,780	88,671,258	
Donors				126,875,045	
Joint Rehabilitation Fund			188,559,500		
Others					
Total	690,411,189	801,978,306	1,102,273,974	1,614,280,500	

* Medical Store Department, Vaccines, etc. ** Cost-sharing includes user-fees, National Health Fund, Community Health Fund

Table 41 shows the increase over years of total expenditure with description per unit cost and per kind of expenses.

Table 41: *Details of expenditures (TzSh) in Mwanga District*

	2003	2004-05	05-06	06-07
Total	670,092,276	813,730,881	918,548,905	1,427,232,678
Per unit cost				
Council health department	92,982,041	94,180,127	87,431,520	134,874,989
	14%			
District Hospital	165,276,106	212,515,901	249,350,134	379,110,584
	25%			
Health Centre	144,308,137	183,653,328	168,652,273	334,354,514
	22%			
Dispensary	262,334,325	302,494,294	287,204,027	479,765,006
	39%			
Community initiatives	6,191,667	20,887,230	17,017,228	24,021,308
	1%			
Per kind of expenses				
Salary and wages	309,675,445	472,236,230	427,013,836	819,101,467
	46%			
Allowances, including training and supervision	35,228,836	34,901,000	42,827,317	71,896,022
	5%			
Other pay roll cost		12,240,000	12,600,000	7,837,621
Other Charges	325,187,991	287,116,950	329,722,028	453,291,291
	49%			
Some details				
Medical supply	72,608,220	192,124,520	207,020,386	245,976,210
	11%			
HF running cost	154,656,879	35,467,304	48,026,939	62,714,751
	23%			
Trainings		26,913,500	8,654,519	56,417,501
Repair/maintenance	37,327,690	24,599,798	5,097,646	30,031,302
	6%			
Transfer to Health Facility Committees for rehabilitation			108,893,723	75,106,277
Vehicle running cost	10,855,267	14,089,180	14,624,555	16,387,920
	2%			
Allowances to community	5,179,667	13,792,500	11,188,078	13,971,808
Buildings community		7,094,730	5,829,150	6,839,500

Biharamulo DDH example

Tables 42 and 43 illustrate the sources of income and the expenditures from a DDH. PE increased like for other public institutions and the OC has started to drop alarming the management. 12% of incomes came from external donors, almost the same from the cost-sharing collection and HBF. Government grants, especially through the MSD accounts, continued to be the main source of income.

Table 42: *Sources of incomes (TzSh) for the DDH at Biharamulo*

	2000	2001	2002	2003	2004	2005	2006
PE	97,989,400	153,620,947	148,005,079	164,373,158	122,214,428	182,781,395	198,752,060
OC	26,690,000	65,837,548	50,440,567	68,461,783	52,825,396	69,312,800	42,158,730
Grants to MSD	40,190,400	70,875,000	71,805,900	125,751,200	91,568,800	80,971,200	109,982,750
HBF	-	-	-	47,344,300	47,117,590	57,656,820	65,498,720
CS	25,823,034	30,063,775	32,265,190	36,570,950	68,240,797	88,900,980	69,269,380
Ext fund	39,618	28,887,000	37,072,100	13,183,000	36,072,900	41,152,200	65,982,190
Others					12,058,650	13,885,285	12,998,095
Total	190,732,452	349,284,270	339,588,836	455,684,391	430,098,561	534,660,680	564,641,925

PE : Personnel Emolument
MSD: Medical Store Department

OC: Other charges
CS: Cost-Sharing

HBF: Health Basket Fund
EXT: external

Table 43: *Details of expenditures (TzSh) Biharamulo DDH*

	2000	2001	2002	2003	2004	2005	2006
PE	94,604,397	125,554,910	120,913,943	123,517,413	122,214,420	143,378,650	193,470,350
Allo		11,805,084	10,814,700	12,745,200	9,056,000	24,750,000	32,628,000
Drug& Supply	33,702,158	31,849,825	48,473,830	79,676,253	126,361,253	64,981,300	135,401,870
Repair	3,654,660	11,854,891	33,611,850	38,776,474	44,127,790	34,688,055	41,385,200
Capital	11,708,500	69,715,700	29,180,700	35,712,300	17,557,300	40,875,000	35,880,000
Others		48,575,700	51,787,100	68,713,080	58,678,755	93,413,800	103,781,570
Total	143,669,715	299,356,110	294,782,123	359,140,720	377,995,518	402,086,805	542,546,990

PE : Personnel Emolument

Allo: Allowance

Financial accessibility and fees exemption

Proportion of patients who paid for health care was low; only less than one third of interviewed patients at different HFs had to pay for services and the proportion was even lower in Mwanga. Table 44 reports the findings in relation with different factors. There was no difference between in and outpatients ($p=0.19$), neither between male and female patients ($p=0.18$). Associated factors were age and HF owner. Logistic regression to explain the proportion of patients who paid gave an OR = 0.05 [0.02 ; 0.10] ($p<0.0001$) for under-five patients and OR = 0.40 [0.19 ; 0.80] ($p=0.010$) for patients treated at public institutions. It was interesting to observe that **exemption for under-five** was respected in 95%, and if we removed patients from private institution that percentage rose to 97%.

Table 44: *Proportion of patients who paid for health care and main reasons of exemption*

	B	K	N	M	All
n	135	163	127	110	535
Patients who paid (%)	31.1	31.9	41.7	13.6	30.3
Per Health Facility (HF)					
District Hospital	36.1	29.6	51.4	4.1	32.6
Other HF	25.4	34.1	28.3	21.3	27.8
P value ^{&}	0.12	0.33	0.007 [†]	0.008 [†]	0.13
Per owner					
Public	18.2	30.5	No private institution		27.3
Private Not-For-Profit	40.0	55.6			41.6
P value ^{&}	0.006 [†]	0.117			0.012 [†]
Per Age category					
0 - < 5	11.8	1.6	2.4	5.0	5.1
≥ 5	42.9	50.5	61.9	15.6	42.6
P value ^{&}	< 0.001 [†]	< 0.001 [†]	< 0.001 [†]	0.193	< 0.001 [†]
Reasons of exemption	n=93	n=111	n=73	n=97	n=374
Under-five children	50.5%	55.9%	56.1%	21.6%	45.7%
CHF subscriber	2.2%	18.9%	9.6%	55.7%	22.5%
Pregnant women	16.1%	11.7%	9.6%	4.1%	10.4%
NHIF subscriber	12.9%	3.6%	11.0%	5.2%	7.8%
Others	18.3%	9.9%	13.7%	13.4%	13.7%

[&]: Fisher exact

The main reason for exemption was to be a child under 5 years (except in Mwanga where the main reason was CHF). “Other” included people coming from institutions having contract with HF for their employees/students, poor people, or patients with chronic diseases.

The proportion of paying patients who could afford was very high, 94% for all interviewees (n= 150); it was 89% for Biharamulo, 98% for Kilosa, 92% for Newala and 100% for Mwanga. No associated factors was found but, when we compared patients from private to patients from public HFs, we found respectively 98% and 88% (p= 0.077).

5.2. Actor points of view on budgeting at district level

With the reforms, district councils have become more autonomous. Some of the powers were decision making such as planning, budgeting and deciding on procurements and allocation of funds from various sources such as basket funds, community health funds and user fees. Respondents from CHMT commented that this has helped to reduce unnecessary bureaucratic procedures thus hastening the process of health service delivery. However, despite the changes from top-down to bottom-up, there were various shortfall such as: (i) strict rules and guidelines to resource allocation and utilization at district level impede planning and decisions (not allowed to pay allowances or to buy drugs and supply), (ii) districts have limited autonomy as the central government has remained the only structure for disbursing funds which are often delayed in a way that sometimes planned activities are done in a hurry to catch-up with another plan, making it difficult or even impossible to careful implementation and reporting on the activities, (iii) District Executive Directors (DED) sometimes compromise the use of funds because of their extended controls, (iv) in all districts, in-charges of HFs complained about the difficulties of getting back the money collected through CHF and user fees.

Finally, most respondents from CHMT were not welcoming the idea of complete decentralisation, partly because they feel lacking important capacity for financial control and to initiate health financing mechanisms at district level; a few commented on the possibility of being overburdened with activities while drawing examples of their current involvement in CHMT.

In Biharamulo

It was pointed out that with decentralisation of the budget development processes, managers should use district information (number of buildings that need to be rehabilitated, number of pit-latrines to be built, number of health workers required to receive training, etc.) to better perform health service delivery. *“At least now, there has been an increased capacity to respond to the needs of the population at the local level and this includes improving equity in the allocation of resources across the district as it is possible to know the requirements of all facilities through their facility committees”* (CHMT IDI). For the district health managers, this situation has become a blessing, not only to health workers, but also to the villagers. As an example, from the basket funds, health workers, especially those who went for outreach services, were being paid their allowances, and, at the same time outreach health service visits have become possible and more frequent than before these reforms. *“It has become easier to meet the needs of both the community and the health workers than before. Example, when we plan for outreach services or for distribution I do not struggle much about fuel and paying workers involved. Currently there are basket fund, we fuel the cars and drive to the field without any problem compared to few years ago when we were obliged to wait for vertical allocations, which was problematic and led to delays in provision of services to the community and sometimes we postponed outreach services”* (CHMT IDI).

In Kilosa

With the reforms, financial allocation could be done by the CHMT according to their specific needs and a good example was the HFs expansion and rehabilitation activities. Following such re-definition of the roles under reforms, district health managers pointed that the autonomy has not only been transferred to the district level but also to the health facilities, especially for the management of programmes and resources. Granting autonomy include authorizing the health facility committees through the district councils to introduce other sources of income generation to smoothen health service delivery, like initiation of the referral support fund that everyone contribute 200/= TzSh during a visit for medication at the facility. It was also noted that HBF and CCHP have required integration of most of the vertical programs into the annual plan. The advantage of such reforms in health financing was pointed as contributing to reduce duplication of health programs and wastage of resources.

In Newala

Most of the interviewed from the CHMT pointed that the most important change in health financing was the introduction of the basket fund for health sector. This has been appraised as having a direct and physical impact on health service delivery at district level. Major contributions of this fund include: rehabilitation of health facilities, buying some medical equipments that were difficult to purchase following the former financing mechanisms, and, in organizing some internal trainings to health workers so as to improve the quality of services delivered to the community. However, it was reported that the District Executive Directors sometimes compromise the use of funds because they have extended controls. The example of health workers who were not paid for their extra-activities allowances because the DED refused to endorse the given payments.

In Mwanga

From the district point of view, the reform with decentralisation brought availability of funding through the HBF and CHF that facilitated local activities and helped to accomplish various goals set. *“An important success we have achieved is the availability of funds (kupata fungu la pesa); if there is a shortage of medical equipments, you can just buy without waiting to be supplied by MSD, this is very good”* (CHMT IDI), and *“Nowadays there is a joint donor fund [basket fund] that target at improving health services; this has been very helpful because formerly even going for supervisions was difficult due to absence of funds but now, it is possible”* (CHMT IDI). Although there has been appreciation of the contribution of these reforms on increased funding for health activities in Mwanga, the unequal distribution of funds to the districts was pointed out by CHMT members. A counter argument was that some districts like Mwanga were big, hilly, and with scattered populations, thus serving these districts was more expensive than small districts with high population concentrated in one area. Therefore, for them, it would be necessary to re-consider other factors than population in allocating health resources to the districts. Another problem with funding was reported concerning the delay to receive funds from the ministry that lead to unpractical implementation strategies, which lead into rush-work, thus, reducing the possibility of its effectiveness. *“The flow of funds is not good. For example, in last financial year we received money from the basket fund at the end of May, which were expected to be used to implement activities of half a year and they had to be finished during that financial year..., this is very difficult and a report for utilization of such funds has to be written without delay!”* (CHMT IDI).

5.3. Actor points of view on exemption system

In these rural districts, exemptions were found to be potential mechanisms for reaching the vulnerable groups with health services. CHMT members pointed that when drugs and supplies were available, patients in the exempted categories do not need to incur any expenses for such services. Others added that with introduction of exemptions and associated knowledge among people in the community, the number of patients attending to the health facilities has increased. This has been possible because all public HFs follow the exemption rules. However, respondents had a feeling that there are too much categories of people who are exempted, and this compromises efforts to collect funds for sustainable health service provision in the districts. It was arguably established that, as these exemptions target the most frequent attendants to the facilities (i.e. children, pregnant women and the poor old people), it causes a burden to the districts in terms of supporting the health costs of these people and, in the same time, it contributes to failure of the CHF's initiative.

The in-charge of the lower health facilities acknowledged giving exemptions to the legible groups. However, most remarked that there were terminological confusions among community members concerning some categories especially when it comes to the “poor” and old people. Such confusions led to exclude some people among those supposed to be beneficiaries of exemptions.

In villages, people were aware that children and pregnant women are exempted from payments. Other categories, especially “old”, brought more discussion with uncertainty (e.g. unclear lower limit of age).

In Biharamulo

CHMT members recognized that exemptions were essential for social inclusion. Moreover, some were negative about it because *“there are too much exempted groups in the community”*. This situation was noted to compromise the council's effort to

increase sources of funds and more sustainable provision of quality health services. In the lower health facilities, interviews revealed that exemptions are provided to the legible groups. However, most remarked that there were terminological confusions among community members concerning some categories, especially when it comes to the “poor” and old people. Also, some health providers were not willing to recognize old people as beneficiaries of the exemption scheme. *“It is better to exempt a twenty years poor young man than an old man who can afford”* (Dispensary IDI).

Knowledge of exempted groups among community members was fair. However, implementation of the exemptions raised suspicion among community members. For example, while pregnant mothers are exempt from paying user fees, they were asked to pay some costs during antenatal clinics like buying gloves, a plastic sheet, or razor blades. It seems that in some areas, such payments have been legalized. *“They tell you that pregnancy is not an emergence so you need to pay for it”* (Village FGD). In a group of women, a participant acknowledged that sometime women do delay to seek antenatal services searching for money because of the payment expected for them when they go to the dispensary. Others however, explained that they preferred services offered by Traditional Birth Attendants during delivery especially when they had no served money for payment at hospital, and sometimes when they had no means to reach the facility. At the same time, there were complaints from participants that there are some groups which are entitled to exemption but they are not considered by the health staff. *“We have families that are very poor and we all know that they cannot afford to pay for health services, but we all see how much they suffer when they are sick”* (Village FGD).

In Kilosa

Three out of four council health management team members commented that exemptions were difficult to implement as it was contradicting other health financing initiatives such as CHF and NHIF. One noted that, as the number of population that was eligible for exemption in the rural districts was large, the whole process compromised sustainability of CHF, as most community members who attend the facilities more frequently are being exempted. Another problem raised was on how to identify the poor for exemptions; four in-charge of the lower level HF said that the whole process is executed by the village government; while two pointed that the government guideline for the poor wasn’t explicit and generally contradicting.

Despite reluctance in administering exemptions to some eligible groups, all health facilities in the district provided exemptions to children of less than five years, pregnant women and those with degenerative diseases like TB and HIV/AIDs.

Discussions with the community members in focus groups indicated that although most knew the exempted groups such as children, pregnant women, the poor and old people, most didn’t know the criteria for such exemptions as some despite of belonging in those groups paid. *“My neighbour is very old and has no one to assist her, in the past three consecutive years, she applied for an exemption through the village government but she didn’t get any feedback from the district”* (Ludewa – FGD). Other participants commented that most of the essential services covered under such exemptions were always unavailable, thus they were told to buy from drug shops.

In Newala

CHMT members and in-charge of HFs explained that most of the exempted groups received free services). The frequently mentioned groups include children under five, pregnant women, disabled, and elderly as determined by the community leadership.

Although all community members involved in the FGD were aware that children are exempted, shortage of drugs and other medical supplies make exemption for these groups impractical. In some instances, participants to FGD felt that their children were not given appropriate medication because they weren't paying the user-fees. *"I know that children are not supposed to pay, but not here; I went to the dispensary with my 2 years old baby and, the nurse was staring at me; I understood that there were drugs but she was afraid of my pocket, then I told her that my husband will pay for that, and she took the money"* (Village FGD). Moreover, other FGD reported that procedures for getting exemptions, especially for elderly and poor, were not clear.

In Mwanga

Interviewed people of CHMT and HFs confirmed that children under five, pregnant women, people with chronic diseases, the poor were exempted in Mwanga.

Community members were aware of the groups of people who are legible for exemptions with just some confusion, especially when it came to poor and elderly and the specific age at which one can start being exempted. Some also complained that there was some favouritism in getting exemptions from village government leaders.

5.4. Actor points of view on CHF

From CHMT members, it was widely appreciated that CHF is a positive initiative. In some districts, like Mwanga and Kilosa, it was linked to improved availability of drugs and supplies. Some added that CHF is an important source of health financing that need to be fostered if health service provision in rural areas is to be improved. A few discussants also pointed that contribution to CHF increased a sense of community ownership of services provided in the facilities. Despite some enthusiastic views, the implementation of this scheme was reported to be slow and in some areas regressing compared to its initial stages. Failure to meet the expectations of the households (reliable drugs and supplies availability, prompt service delivery in association with increased number of qualified staff) acts as a barricade toward attracting more people to join CHF while some members often do not renew their membership cards after their first experience.

It was also pointed out that the establishment of CHF wasn't always backed up by strong advocacy. In some village people were not aware of the advantages of CHF. Apart from operational aspects, some respondents added that low and un-reliable incomes among community members were aspects of consideration when discussing impediment to implement CHF in rural districts. However, it was important to point that despite the alleged poverty, people were willing to pay for CHF as long as services are improving (availability of drugs and supplies).

Health workers in HFs shared those different points of view. They added that, despite they are collectors of funds and the major link to the community, they did not received trainings on that. Other demotivation factor concerned the fact that they collect and deposit funds in a special account which is held by the council, and most of them are not well informed on how they can get back and use these funds for facility activities.

In the communities, most participants showed a positive view about the CHF theory allowing access to health services without cash in hand. However, discussants indicated that weak health services provided in health facilities like unavailability of drugs, lack of clinical equipments for diagnosis, and rude providers' behaviours are hindrances for many households to join the community health fund. Others openly pointed out that even if you contribute the money, you will buy the drugs from private pharmacies anyway. In some areas, they revealed lack of adequate knowledge about the importance of this scheme to individual households as some asked questions like: "what if I

contribute and I am not sick the whole year, does it mean my money go for free?” Others pointed that they don’t know well all procedure and mechanisms. In areas where some progress have been achieved it was reported that there has been lack of involvement of the members to discuss about the use of the funds collected, and even to know how much they have in their account at the council. In certain villages, some commented on the limitations on use of the CHF cards in the district without choice of health providers even if you are closer to a HF in another district. Further, poor attitude of health workers towards members of CHF especially at the district hospital in favour of those with cash money were reported in 2 districts.

In Biharamulo

CHMT members said CHF was a good initiative but its implementation has been slow. In the same way, interviewed members were a bit reluctant to discuss much on this initiative, because either they were not clear on the functioning of this initiative or it was not functional. This was evident in the lower health facilities where very few people joined CHF. Interviews with in-charge of HFs further revealed that initiation of CHF didn’t consider health workers at the lower health facilities as they did not receive any training on CHF and funds management as well as any information on how to use the collected funds.

Participants to FGD lacked knowledge concerning CHF. In most groups, few were able to explain though inappropriately after much efforts of probing and changing terminologies.

In Kilosa

According to CHMT members, contribution of the CHF have partly helped the district to deal with several major problems related to health service delivery, such as buying drugs and laboratory reagents. Despite the noted contribution to health service delivery, they reported that community members were reluctant to join the CHF, the reasons of which are diverse and are service dependent. Some members admitted that health services provided in most public health facilities have some weakness that discourages member enrolment. These include shortage of health workers at all levels and drug run-out in the facilities. Apart from weak service delivery, subscribers expect to receive a full range of services at all levels in the district referral system, including the private health service units which is not the case. Another reason of low enrolment noted was the lack of advocacy on CHF at community level. *“During introduction of this initiative in the district, advocacy sessions were conducted to the ward level with expectations that the ward officials will communicate the initiative in their villages, however most did not do it, while some did but not accordingly”* (CHMT IDI).

In the lower health facilities, the in-charge considered CHF as an important scheme for covering the poor who could not afford expenses of health services from their daily incomes. However, it was noted that there was a steady annual decrease in number of CHF members. Three main problems with the quality of services were identified as contributing to this drop-out and lack of community enrolment to CHF. These include: shortage of drugs and essential medical supplies; inappropriate diagnosis due to lack of diagnostic equipment, limited range of services provided and lack of possibility to use health facilities of members’ choice, coupled with referral problems. It was further evident that there was a lack or unclear definition of the power of the local communities over collected funds and it raised scepticism and distrust on the use of funds collected from community members.

In the community, members understood CHF as a form of payment for health services in which households had to contribute 5000/- TzSh to cover health service expenses.

Although most participants seemed knowledgeable, most of them didn't join the scheme. During FGD, four major problems related to quality of health services were mentioned: (i) health workers' unresponsiveness to the patients' problems was discouragingly as pointed by participants who got services directly from the district hospital (delay, absence of drugs), (ii) the attitude of some workers like asking for bribes from patients which was revealed as a humiliating practice that dominated several departments at the district hospital, like maltreating and having bad language with CHF subscribers patients, (iii) shortage of diagnostic equipment, (iv) lack of choice of health facility and poor referral system emerged as another reason for low enrolment to CHF. In some facilities there were shortage of health workers and sometimes they were absent from their offices, however members were not free to go to other facilities for treatment using a CHF membership card. In some villages, inability to pay membership contributions was the most important barrier to enrolment. Another reason for poor enrolment mentioned by participants was the availability of higher quality and competitive services available at private not for profit HF.

In Newala

The members from CHMT and the in-charge of HFs commented that CHF was not successful. It was explained that community members are being discouraged by the nature of services offered in the facilities with the absence of drugs and weak health services in terms of equipments, timely service provision and referral system. These interviews further revealed that community members initially had high expectations on CHF, and thought that after their contributions, services would improve compared to the past. However, failure to meet these expectations could explain that members did not renew their subscriptions. *"We were progressing very well in the first two years, but the number has now decreased"* (Dispensary IDI).

In the community, it was also pointed that lack of drugs at HF was the main reason for not subscribe to CHF. *"There is no problem about paying that money if the drugs are available"*. Another pointed that *"the problem is not money, when it comes to illness; it is a must that you will find money to help the patient, so the problem is a lack of drugs."* Negative experiences among CHF members concerning the services provided hinder other members to join CHF. *"Those who are in the scheme complain of absence of drugs and poor services, why should we join then?"* (Nangwara FGD). In other villages, polygamous families faced problems in joining the scheme as it is stipulated that only one wife and her children can be considered for coverage. *"They restrict to only one wife per man, but our men have up to four wives, now who should be registered and who should be left? This program will raise conflicts among people"* (Chihagu FGD).

In Mwanga

Generally, implementation of CHF in Mwanga was mentioned as one of the successful approaches of health sector reform as it contributes abundantly to improve health service provision in various ways. It mostly included better availability of drug and supply. It was also revealed that CHF has been identified as being potential in covering referral expenses for members, especially from the district hospital to the higher level facilities like the regional hospital. The participants pointed that advocacy to the community members was behind the success in implementing CHF.

The community members were knowledgeable about CHF and were satisfied with its implementation because it helped to improved health services in the facilities like availability of drugs and equipment, to reduce expenses for the poor, and to allow access when there is no cash in hand. Despite such appreciation, participants in FGD noted several weaknesses in implementation of CHF: (i) lack of information on how the

money collected is used, (ii) still sometimes drugs are not available that raises scepticism among community members, (iii) limit to seek for service in the district only (*“I think CHF should be regional, meaning that when I contribute 5000 TzSh, I should be treated wherever I want in this region; this would help us immensely because if we find that drugs are not available here then we go to KCMC for treatment instead of being charged once again”* (Kigonogoni FGD) and especially for patients who live close to another district, (iv) CHF does not cover transport, it exists only from DH to regional hospital and that sounded “irritating” among community members especially when they live far from DH.

6. Referral system

Summary

- No real improvement observed and reported by health workers and community.
- Poor communication system and lack of transport, especially at lower HFs level.
- At dispensary level, most of patients must arrange transfer by themselves.
- Referral for severe cases remain a struggle and a challenge in remote and poor areas

6.1. District reports

In Biharamulo

Communication system is necessary to call the DH in order to arrange and send a car to come and collect patient at dispensary level. The elements of this system were radios for $\frac{3}{4}$ of HFs and private mobile phones.

Concerning transport system, from the 9 functional vehicles, 3 were at the DDH and 3 in the HC (1/HC). A contribution to pay fuel is requested from patients but transport is supposed to be free for pregnant women (special funds from district to cover the expenses). In fact, if patients are closed to main roads, they arrange by themselves the transport to the DDH.

Information collected from the DDH confirmed the existence of a radio open 24 hours in maternity ward and a functional vehicle with driver available also 24h. They can go and collect patient from lower level HFs and transfer the patient to the regional hospital. It is far and it needs an all day drive explaining a cost around 250 USD for such transfer.

In the two visited HC, the vehicles were functional but were only used to bring patient to the DDH (around 100 in one year) and never to collect patients from dispensaries. The cost of transport is done in term of buying 30 litres of fuel (around 1 USD/L).

In the four visited dispensaries there was no radio-call and no transport available. People must arrange by themselves the transfer (rent private car, taxi, etc.).

In Kilosa

The communication system worked with 12 radios (for DH, 5 HC and 6 dispensaries) and private mobile phone. The district health team has 10 working vehicles but only 2 were used for patients transport, one at DH and one was supposed to be used in one HC but in fact that one was out of order and not replaced. Only one vehicle to cover so huge territory explains that system does not work very well. In theory, transfer of patients by car is free as there was budget for it.

At DH, HC and dispensaries, one can call to request the car to collect patient. However, many dispensaries are too far or don't have means to communicate with the DH.

In the first HC, the vehicle was out of order since 2003. There was a radio and they can call the DH which can send the car. Transport is in theory free. When the vehicle is not available, patients take the bus. During the night there is no radio and no bus, which is a real problem. In the second visited HC (PNFP with almost hospital status), everything was there to assure transfer in correct condition (communication, staff, ambulance); patients have to pay for fuel but they can pay later.

In the visited dispensaries, there was no radio and just private mobile phone. Patients have to look themselves for transport.

In Newala

The communication between HFs is only made by private mobile phones when network is available. In the district, there were 5 vehicles but only one was functional and not used to collect patient. In fact ambulance was bought in December 2006 and got accident in May 2007. So everywhere in the district, patients have to arrange their transport for referral by themselves.

In Mwanga

The communication between different HFs is made by telephone or mobile phone. Radio is not necessary in that district as network is available everywhere. There were 5 functional vehicles and 3 were posted for DH and HC. In usual transfer were done from HC to DH and from DH to regional hospital and not from dispensary to DH. However, when we visited the HC, two had no vehicle and patients rent private car when necessary. The third one had one car and the cost for transfer was around 20 US\$ (it was free for CHF members). At dispensary level, people were used to hire vehicle for transfer.

6.2. Actor points of view

CHMT members reported some improvement like ambulance service, or increased number in radio and development of mobile phone network. However, respondents of all levels admitted that referral system was still a challenge. In addition, for low level facilities, there was still no reliable communication network. In terms of services, there was a little or no difference between health centres (referral points for dispensaries) and dispensaries because of staffing level and supply of drugs and equipments. As a result, many patients do bypass the health centres.

The discussion in the community revealed that despite of having ambulance in some districts, their use is unaffordable. In addition, many villages have infrastructural difficulties: roads are impassable, there is no reliable ambulance, and public transport is lacking. In some areas, there is private transport but prohibitively expensive.

In Biharamulo

Findings from CHMT members indicated that there has been some improvement in terms of availability of ambulance at least in some health centres and DDH. "At least now, we have cars for ambulance in some health centres, these help to rush patients to the DDH" (CHMT IDI).

However, interviews with in-charge of the dispensaries showed that the referral system was still a problem as people have to find means of travelling to the DDH. This situation is accentuated by lack of communication in some areas, facilities like radio call sets and mobile phones are lacking. With such difficulties in accessing the referral services, Biharamulo authorities have instigated a referral revolving fund, which requires every patient to contribute a compulsory 200 shillings (0.17 USD) when visiting the facility for a service.

“You might receive a patient with a severe post partum haemorrhage, you can’t tell the relatives to take a bicycle to the referral post, so if relative cannot afford payment for hiring car, we loan them from this fund” (Dispensary IDI).

Discussions with community members revealed that despite having cars for ambulance in some health centres, the cost of using them is unaffordable. They were obliged to pay between 30,000/= shillings and 50,000/= shillings (25 to 40 USD) as contribution for fuel. In the two villages representing service areas of health centres, it was evident that there is lack of clear policy guiding the payment for use of ambulance. In general, respondents were not clear as to when and who decided the amount to be charged on the patients. Following the difficulties faced by people living in the remote villages like Nyantimba, some villagers contribute money to hire a car while others are obliged to sell their precious belongings like crops or a piece of land.

In Kilosa

Among the appreciated achievements of the health sector reform in Kilosa include an increase in transport facilities and an improvement in communication, especially availability of mobile phones in some parts of the district, while in others, radio call sets have been installed. These were mentioned to have helped to hasten referral pattern from lower level health facilities to the district hospital. Although CHMT members reported an increase in number of cars to eleven, only one car was allocated for an ambulance in the district, and none of health centres have ambulance. Number of cars in vertical programmes have strict rules on use (e.g. EPI, TB and Leprosy, HIV/AIDs etc). Moreover, CHMT members in Kilosa were concerned about the referral system. *“I can say the situation is not good because there are areas where people are obliged to carry patients using a bed or using donkeys, others use a bicycle, but in the hilly sides they use beds. We have only one ambulance, but if we look at supervisory activities and distribution, we have enough cars”* (CHMT IDI).

In the lower health facilities, the in-charge remarked that the referral system in their district was still discouraging. It became evident that despite availability of radio call sets in some health centres, most of them are not working. At one health centre, the clinical officer in-charge pointed that although they had a radio call set installed at their facility, it was not working for six months and no one seemed to be concerned about the situation despite having reported the issue to the district. This coupled with absence of ambulance sometimes result in fatal outcomes. *“You know this is a health centre that is expected to receive patients from dispensaries, but there is no way we can help them, everyone struggle to bring the patient on his/her own ways, if the case is complicated and we can’t handle it we just tell them to go to the hospital which is very far for some patients to survive”*. (HC IDI). Despite problems with radio call sets, presence of mobile phones does not help to solve the problem of communication. Interviews revealed that in most cases, they used their own funds to communicate with the district hospital to send an ambulance for ferrying the patients and it was an economic burden considering their salaries. In some areas, the in-charge remarked that the infrastructural difficulties were common as various areas were usually cut from the district centre during rain seasons. Further, most roads were impassable while both public and private transport facilities were lacking.

In focus group discussions, community members mentioned lack of reliable roads and absence of cars both public and private as contributing to hardships when they have patients. In areas where private cars were available, expenses were the major barrier. In Kilosa for example, travelling cost to the referral centre, the district hospital ranged from 30,000 to 60,000 TzSh (25 to 50 USD). Another difficulty in accessing referral services was the delays in making referrals from the dispensaries.

In Newala

One of the most challenging aspects in health service delivery in Newala is the referral system. Both CHMT members and the in-charge of the lower health facilities pointed that when there were referral cases *“people struggle a lot”*. Although there are mobile phone services in some villages, absence of a car for ambulance services in the district make the former useless. *“The question of ambulance is a problem here because currently we don’t have a functional car, thus community members use bicycles, this is terrible because the road is sandy and sometime they use baskets destined to carry tomatoes from the field”* (CHMT IDI). And *“We make referrals but not in a way it is supposed to be... “The commonly used means of transport include hammocks, bicycle and hiring private cars. In general, the referral service is bad”* (CHMT IDI).

When community members were asked to talk about the nature of referral system in Newala, most indicated the same difficulties as already mentioned by health providers. They added the expenses they are obliged to pay if they hire a more comfortable means of transport; it ranges from 40,000 to 70,000 TzSh (35 to 60 USD). These amounts were lamented to be very high considering their incomes.

In Mwanaga

Members from of CHMT pointed that the situation has improved thanks to better communication system with radio-call sets, and better availability of vehicles with one ambulance at DH and two more for HC. Although there were some improvements, access to referral services for rural communities was still seriously affected by poor roads and absence of reliable transportation. Taking into consideration the geographical difficulties of Mwanaga district, the available three cars for the whole district were not enough and, in areas where there were no cars, relatives must carry the patient themselves by hiring a private car where available, and this cost too much to the people from rural areas. For a common village person, it represents heavy burden that inhibit some families to send patients to the referral hospital and force them to find other alternatives (auto medication, traditional healers). The poorly connected villages remain effectively marginalized from virtually adequate health-care facilities above their village dispensary.

Interviews with in-charges of HC revealed that sharing of health department’s resources by other departments at the district level impeded health service delivery activities. Thus, that was not uncommon for health department cars to be allocated other activities at the district council office making them unreliable for health activities like referral services. *“An ambulance is always packed at the district director’s office and sometimes allocated to other official activities; this risks lives of people because most of the time, it is not available when needed”* (HC IDI).

Interviews with in-charges of lower HFs confirmed that in case of extreme illness, patient relatives had to organize themselves and think how to send a patient to the district hospital first. *“The referral system is very difficult here because there is no ambulance, and there are very few who can afford to hire a private car, thus most use helicopters... this is a register in this village meaning a hammock... to carry the patient to the referral centre”* (Dispensary IDI).

Discussions in the villages revealed difficulties that people find when seeking a referral service. *“There is no such service... you just die, we have only one a passengers’ car per day that leaves in the morning to town and returns in the evening”* (Nyabinda FGD). This was noted as very dangerous for pregnant women as their situation changed abruptly and was very likely to cause death. *“Pregnant women are dying because of long distance; hiring a car is impossible”* (Nyabinda FGD). In most groups, community

members explained the expenses they were obliged to incur when seeking services from facilities above their dispensaries, as prohibitive in accessing care. Considering the economic situations of most villagers in rural and isolated villages in Mwanga with no ambulance, social network is the only way that helps people to access referral services in higher level facilities than their dispensaries. Sometimes, a sick patient is obliged to sell his/her belongings (like a piece of land, serials and others) to raise money for health care and there were times when the villagers had to contribute money to help a victim to the facility.

7. Health Information System

Summary

- Theoretical changes were reported in terms of computerization and appointment of specific personnel responsible of data.
- Practically, misuses of computer and corrupted/damaged data files were frequent.
- At district level and at HFs level, getting data is “parcours du combattant.”
- At HFs’ level, there were delays, incomplete, or mistakes in reports. Health workers complained about the tasks of reporting which cost too much time to fill all MTUHA books plus other files from various vertical projects.
- District data are not really trustable.

7.1. District reports

Observation on data system at district level and HFs level pointed many dysfunctions except in Kilosa. First, it was always very difficult to obtain the complete data from the district, especially from the previous years. Often DMO did know where to get them. Computers were not working or were damaged by virus that corrupted the files. Paper format reports were found with lots of difficulty or not found at all or given lastly with unwillingness. Sometimes evidence of mistakes in report appeared clearly, especially when the population was not adapted every year or when reports from some HFs were not available at all or when some value were just copy-paste from one year to another without correction. At lower level HFs, it was worse especially with the accuracy of data when available. The same data reported through several books could appear different in every book; or simple and rapid recalculation that gave different totals than the ones reported. Also many report books were not available, some were lost, some burned, other eaten by rat or insects, some let at district level.

So, the impression about the data collection at district level was not convincing at all, leading up to lost trust in district outcomes reports.

7.2. Actor points of view

To strengthen data collection in the districts, health workers, especially the in-charges of the facilities, were trained in the new MTUHA system. For data management, computerization was introduced in all districts; a specific person was also appointed to be responsible for data (issue from all district level) collection and compilation. Despite those reported changes, still data management faced several problems. First, inadequate computer skill and use were responsible of lost and damaged data files. Secondly, it was commonly reported incomplete and/or wrong information. All Councils use the data for preparing their CCHP.

At HFs’ level, the in-charges complained that data collection is a burden considering the staffing level and the number of reports; sometimes they are obliged to do it overnight at home. Beside the 12 books for the national system, several vertical programs continued to use specific report system which is another cause of overworking and

delays in reporting. All HF staff interviewed noted that there was not much quality feedback on the content and meaning of their data reports from CHMT. The only kind of received feedback concerns how to correct calculation errors, rather than on how to interpret the data or utilise them.

8. Supervision

Summary

- Increased funds and planning autonomy helped in improving frequency and quality of supervision of HFs.
- Change in attitude, from controlling to supportive supervision with more discussions and learning, which helps to improve health service provision to the community was reported.

8.1. District reports

In theory, supervision visit of each HF should take place once per quarter. During CHMT supervision, the members follow a standard check list. The main areas of supervision concern collection of data, inventory of drugs, supplies, equipment, infection control, referral system, and RCH with set-up of vaccination, cold chain records and outreaches. Supervision is also a good moment to inform about new changes and new policies.

After the visit, the retro-information is given directly on the spot. During the next visit, the team starts with the previous observations noted. The supervision is qualified as supportive.

In usual, in all districts and HFs, supervision was perceived as useful and supportive. Sometimes, formulated recommendations were beyond HF capability.

In Biharamulo, the frequency of HF visit could no be respected because of overworking. The CHMT members complained that because of poor qualification of supervised staff, effects of supervision were not very effective, that despite seminars and trainings performances remained poor. At the DH, nobody could remember the date of the last supervision as they don't come very often. The HC and dispensaries got 2 to 3 visits a year.

In Kilosa, with the area of the district and the number of HFs (should visit 6 per week), it was impossible to respect the theoretical number of visit per year. Also, some villages were not reachable during the rainy season. At the DH, even close to CHMT office, it was reported that supervision took place once twice a year. At HC, the district team came as expected, once quarterly. At HFs, the visits occurred from 2 to 6 visits per year.

In Newala, the frequency of the visits depended on transport availability. At the DH, it was said that the CHMT never come to supervise. The HC were visited two times in one year, and to dispensaries it varies from one to 4 visits per year.

In Mwanga, the proportion of visited HFs was 80% in 2004 and 95% in 2005. At HFs, the visits took place regularly and almost as expected.

8.2. Actor points of view

At CHMT level, it was reported that initiation of HBF at district level has consolidated and enhanced supervisory activities. Visits to the lower HFs were more frequent than before because of availability of cars, funds to buy fuel, and to pay allowances, as reported in Biharamulo and Kilosa. Nevertheless one respondent from CHMT of Biharamulo revealed that the new supervision system, called "integrated supervision", was responsible to less frequent supervision visit: *"After the reforms, supervisions are rare, with the new integrated supervision, a single head of department at the district*

can't reach out for supervision alone (which was the case before); it requires 3 to 4 CHMT members for a single route. Now, although there is a schedule, and when you tell someone to plan for supervision, you find everyone busy with his or her own activities, so you decide to postpone because you are not allowed to go alone" (CHMT Biharamulo IDI).

At lower HFs' level, the in-charge seemed to appreciate the new change in general orientation of supervision, from controlling to supportive. That has increased work relationship with health managers at the district level. The procedure brought more discussions and learning, which help to improve health service provision to the community. Despite such appreciation, few respondents pointed that supervision was not frequent.

CHAPTER VIII – DISTRICT CASES: PATIENTS SATISFACTION RATE

Summary

- Around 70% of patients were satisfied with health service delivery except in Newala (55% only).
- Satisfaction rate was significantly higher for patients treated in private not for profit HFs.
- The only existing tool to measure patient/community satisfaction was a suggestion box at facility level that does not work.

The evaluation of the different elements in the chapter of HFs and Quality of care at community level through FGD gave us already the perception of villagers. The following is the general satisfaction level of the patients met at different HFs. Unfortunately; it gives a unique transversal result as we missed previous data on that. However, it makes sense when connected with preceding chapters.

1. Patient satisfaction rate at HFs level

Figure 49 illustrates the degree of satisfaction expressed by the patients at HFs level. Almost 70 % of interviewed patients (n=536) were satisfied or very satisfied except in Newala.

Figure 49: *Proportion of patients per degree of satisfaction for health services received*

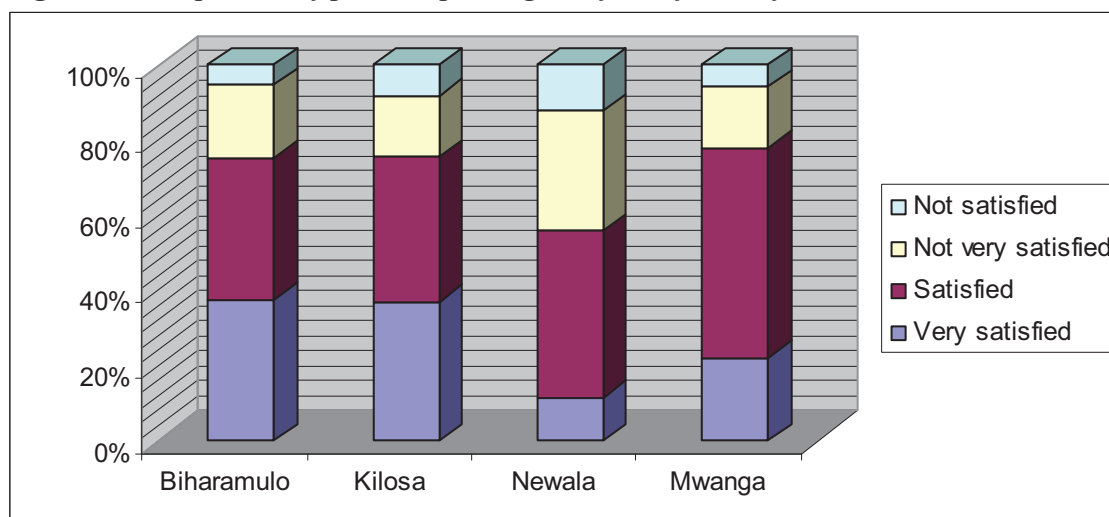


Table 45 gives more details about potential associated factors. For making analysis easier, we have grouped satisfaction rate in two categories, satisfied (for satisfied and very satisfied) and not satisfied (for not very satisfied and not satisfied). The logistic regression (Table 46) confirms the difference between districts and the fact that satisfaction was higher for patients receiving services from PNFP HFs; the odds to be satisfied in those HFs is 4 times higher than in public HFs. Nevertheless, when we asked to patients why they are going to a specific HF, most replied this is because it was close to their living place.

Table 45: *Satisfaction rate for received services*

	B	K	N	M	All
n	135	164	127	110	536 d
Proportion of patients who are Satisfied (%)	73.3	70.7	55.1	77.3	69.0
Per Health Facility (HF)					
District Hospital	80.6	72.8	54.1	73.5	69.9
Other HF	65.1	68.7	56.6	80.3	68.1
P value ^{&}	0.033 [†]	0.34	0.46	0.27	0.36
Per owner			No private institution		
Public	60.0	69.0			66.7
Private Not-For-Profit	82.5	100.0			84.3
P value ^{&}	0.004 [†]	0.040 [†]			<0.001 [†]
Per patient sex					
Men	57.4	77.0	64.3	72.2	68.2
Women	84.0	65.6	47.9	79.7	69.6
P value ^{&}	<0.001 [†]	0.075	0.048 [†]	0.26	0.40
Per Type of patient (Out/inpatient)					
No significant difference P value	0.23	0.16	0.24	0.36	0.27
Per occupation of patient					
No significant difference P value	0.31	0.46	0.47	0.51	0.43

[&]: Fisher exact

Table 46: *Factors associated with the proportion of patients who are satisfied with services*

	OR	95% CI	P-value
Hospital patients	0.89	[0.58 ; 1.39]	0.62
Outpatients	0.97	[0.62 ; 1.52]	0.90
Urgent/referred patients	1.08	[0.48 ; 2.42]	0.86
Male patients	1.09	[0.74 ; 1.61]	0.66
Farmers	1.18	[0.71 ; 1.96]	0.53
Patients from public HF	0.25	[0.11 ; 0.59]	<0.001 [†]
Districts			
Biharamulo	1.00		
Kilosa	1.72	[0.90 ; 3.27]	0.10
Newala*	0.43	[0.25 ; 0.73]	0.002 [†]
Mwanga	2.72	[1.31 ; 5.64]	0.007 [†]

2. Tools for measuring the client satisfaction at district and HF levels

Assessments in the community or exit interviews are never planned as it is not a routine activity. The only existing tool is represented by a suggestion box that should be placed in every HF. That box was visible in around 1/3 of visited HF and reported being empty most of the time, except in few HFs like DH (main complains were about bad staff attitude, bribery practices, delay to be treated, and shortage of drug). It was not clear who should open the box, at which frequency. It appeared that even if something is found, nothing is done accordingly. In fact, the opinion of the community should be reported to the new HF committees.

CHAPTER IX – DISTRICT CASES: COMMUNITY PARTICIPATION & OWNERSHIP

Summary

- Reforms were accepted positively by all respondents.
- CHSB and HFC were in place and majority was functional with regular meeting.
- The main activity of committees was to discuss the problems of drugs, staff, funds, buildings and other routines activities.
- Planning and management activities were never found at district level (CHSB and HGC) which differed with CHMT discourse.
- Monitoring, controlling resources, and management remained in the hand of CHMT and Hospital management team.
- The sense of HF's ownership in the communities has increased (with cost-sharing and active participation in technical activities).

1. District reports

The Council Health Services Boards

This type of committee was established in 2003-2004 and it worked in the 4 districts. Meetings took place regularly, every 3 months with all expected members. The main agenda were about information (new reforms, policies, decrees, etc.), activities reports, and CHF. We could not find discussion concerning preparation, validation or evaluation of CCHP.

The Hospital Governing Committees

In Biharamulo (with PNFP HF), we found an advisor committee which had almost the same rules and functions. Usually, agenda were brought by the community representatives and were about relationship with district authorities, high turnover of staff moving to public institutions, infrastructures (buildings, electricity), and collect of funds. Nothing was found in relation with planning and management activities.

In Kilosa, the HGC was not in place. In Newala and Mwanga, the committees were functional with regular meeting, almost monthly in Mwanga and every 3 months in Newala. Discussions on drugs shortage were dominant in Newala.

From all HGC agenda we consulted, nothing was found in relation with planning and management activities.

Primary Health Facility Committees

Table 47 summarizes the report after visiting all HF's in the different districts. All HF have a PHFC (except in Biharamulo where one PNFP HF has no committee at all) and the majority is functional. The main discussions concerned daily and routinely problems of a HF, but planning activities were rare and concerned few HF's.

Table 47: *Functional Primary Health Facility Committees (PHFC) per district and main agenda*

Districts and number of visited HF	Number of existing PHFC	PHFC functional (with regular meetings)	Agenda
Biharamulo 6 HF	5	2 functional 1 not functional («Nothing to discuss, no need to meet»), 2 without available information	Share Information (policy, rules, etc) CHF & User-Fees, how to collect funds Activities Repairs
Kilosa 8 HF	8	2 functional 5 with few meetings (1 or 2/year) 1 not functional	Repairs Reports Equipment
Newala 7 HF	7	5 functional 2 not functional (“no motivation”)	CHF Repairs Planning Epidemics
Mwanga 8 HF	8	5 functional 1 not functional 2 without available information	Staff house Transport problem for staff Drugs & equipment Use of CHF funds to buy drugs Watchmen salary Repairs Electricity and water

2. Actor points of view

At CHMT level, HSR were generally understood as “a strategy to change health managerial and delivery system by ensuring close participation of the community in various activities that concerns health service delivery in their villages” (Mwanga CHMT IDI). Members of the CHMT commented that the establishment of the facility committees has changed the perception about the ownership of health facilities. It was said that every health facility has a committee concerned with all administrative aspects including decision making, planning and priority setting at their facility level. This was reported to work relatively well because the HF is close to the members, committee members are regular users, and their contributions have reportedly resulted in visible changes/improvements. “Reform has given the community with ownership role; therefore people in the community see HF as “their” a different perception than some years ago when they referred to belong to the government” (CHMT Mwanga IDI). And “from reforms, community participation and community ownership of HF have become paramount. The community has understood that when it comes to health service provision, they are equally responsible as opposed to the past when people thought that the government should provide everything to them” (CHMT Kilosa IDI), and “In the past all plans and decisions were made at the ministerial level, but reforms intend at transferring them to the consumers themselves, therefore the community plans, and decides on what is good for them. In short it means autonomy and decisions are put in the hands of the citizens themselves” (CHMT Kilosa IDI). A positive aspect of community participation that was reported by CHMT members concerned infrastructures for which villagers contributed in terms of money, material and workforce. Nevertheless it was also reported that some divisions or wards were not represented in the CHSB. Explanations given were shortage on enough qualified people or absence of interest from people.

At HF's' level, opinions were diverse. The in-charges admitted that through these committees, the district health priorities would be a reflection of the community needs. However, for most of them, majority of members in these committees are less educated and therefore less active during discussions and decision making leaving health personnel to decide. The respondents put the success of participatory policy in resolution of practical matters like infrastructure rehabilitation, constructions, looking for watchmen, control of drugs and CHF. The in-charge of the facilities pointed that success in rehabilitation of infrastructures was partly due to the involvement of the community. Facility committees (representing the community) have been responsible in organizing and supervising all activities while villagers contributed their labour and money to facilitate activities. *“Community members are involved in building, to carry building sand, water and to do some cleanliness”* (Dispensary Newala IDI). And *“The community is involved in manual activities like carrying stones, sand and to contribute some funds for a building, while those who work in masonry help us with their service”* (HC Mwanga IDI). And *“members of the village health committee usually come to see the received drugs and whenever there are problems they are told”* (Dispensary Mwanga IDI). It was also noted that the meetings were useful to inform population about rules, campaigns, etc. We found also in-charges who denied any community involvement in the health services, and others who complained that community representatives know nothing. *“As far as I know, community members have to be involved in the boards and committees. Currently, there is a CHF board where people have to participate, but they just stay and they know nothing, therefore I can't say there is a community involvement. In short, there are members elected but they know nothing and the activities which they are to perform are not even known/clear”* (Dispensary Newala IDI). Another complains was that some members of committees appeared to be interested for themselves rather than for the community; especially when they expect to get advantage from their position, like free health services.

At community level, views were also very different from one district to another and from one village to another. All respondents found participation as an important element for better service delivery and were willing to contribute. Generally there was an increasing sense of ownership of the HF's among the community as in the FGD they referring to “our” dispensary, (“hapa kwenye kituo “chetu”). Also in most FGD, people mentioned that the facilities belonged to the community and the government. This sense of ownership of the HF's has been strengthened by the cost-sharing system. Currently, people think that their money contributes to sustain health services in their facilities. Then, it was maintain by the community participation (finances or in kinds), in various aspects of the HF's (buildings repairs, construction, watchmen, etc.). In some villages, participants complained that they were not involved at all and some were not involved in important issues concerning management and planning. In such cases, people referred facilities as being owned by either the government or their village chair person and his cabinet.

CHAPTER X – DISTRICT CASES: HEALTH OUTCOMES

This chapter gives the available data on health outcomes in the four districts during the evaluation period (1999-2006). All given data (except infant and under five mortality rates) were extracted from local documents and reports. Some indicators were calculated with available data. As reported in HMIS, all those numbers should be taken with caution.

Summary

- Apart from reduction of infant and under-five mortality rates, indicators collected at district level don't show significant changes between 2000 and 2006, except a better vaccination coverage in Kilosa and Mwanga.
- When the local staff calculated the percentage of delivery by trained personnel they include deliveries done par Traditional Birth Attendants. Also, deliveries that occurred at HF were sometimes done by not qualified attendants and it overestimated indicators.
- The caesarian section rate was very low compared to recommended international standards except in Newala.
- There was a trend to a reduced Malaria Case Fatality Rate but unfortunately, confirmation could not be obtained (missing data).
- Bed occupancy rate was globally low at hospital level.

1. Biharamulo district

At CHMT level (Table 48), no data could be found for 1999 and lots of data were missing for 2006. Data available on antenatal clinic coverage concerned only one visit, as it was always around 100%; therefore we did not report that indicator. Under five, infant and maternal mortality rates reported at district level took in account the deaths reported at hospital only. The caesarean section rate is very low compared to recommended international standards (5-15%). From the national bureau of statistics we got the following data: IMR was 134/1000 in 1988 and 94/1000 in 2002, the U5MR was for the same years 227/1000 and 153/1000 respectively (National Bureau of Statistics, Tanzania 2006).

Table 48: *Main health indicators in Biharamulo district*

	2000	2001	2002	2003	2004	2005	2006
Population	292,516	300,122	410,794	430,512	451,177	472,833	495,529
Immunization coverage rate (%):							
- Measles		97.0	87.3	80.2	84.0		
- Polio3		98.6	91.0	88.4	94.0		
- BCG		99.9	93.0	97.0	100		
- DPT3	95	98.3	87.3	88.4	92.0	95.6	
Malaria CFR for under5 (%)	5	3	4.1		4.0	1.4	
Under5 severe underweight rate	2	2.7	0.4	0.6	0.5	0.3	0.4
TB new cases total	149	323	312	375	426	516	426
Caesarean section per expected birth (%)	2	0.9	1.2	1.4	1.1	1.1	1.6
% of delivery assisted by trained personnel	51	43	52	57	43	51	55
FSB by deliveries reported (%)	1.3	0.5	0.4	0.4	0.1	0.1	0.1
Number of measles cases reported	86	6	12	0	0	2	4
% of blood donors HIV positive	11.3	9.5	6.9	13.0	19.0	19.8	10.4

BCG: Tuberculosis Vaccin (Bacille de Calmette et Guérin)

DPT3: Diphtheria, Pertussis, Tetanus vaccine-3 doses

CFR: Case Fatality Rate

TB: Tuberculosis

FSB: Fresh Still Birth

Apart from reduction of children mortality rates, indicators collected at district level don't show significant changes between 2000 and 2006. Malaria CFR (Case Fatality Rate) seems to have decreased but unfortunately we could not calculate it for 2006 to confirm the trend.

At district hospital, data were available as annual reports are prepared timely and kept in office. Table 49 shows increased activities in term of outpatients and inpatients admissions. Nevertheless BOR (Bed Occupancy Rate) remains low. Tendency of under-five malaria CFR reduction is confirmed for 2006. Under-five malnutrition related condition CFR is quite high. The number of post-operative infection was never recorded. The number of blood transfusion was not recorded for the last 4 years.

Table 49: *Main health indicators in Biharamulo DDH*

	1999	2000	2001	2002	2003	2004	2005	2006
Beds	160	160	160	160	160	160	160	160
OPD cases	10,861	18,160	10,070	21,076	8,165	19,087	29,062	55,549
Admissions	5,641	6,991	6,598	8,240	7,215	7,613	8,035	8,125
BOR	71	95			65	48	50	50
Major operations	278	393	388	426	435	518	580	515
X-ray	157	66	242	1026	1413	1845		1725
Ultrasounds					124	289		384
Deliveries	1172	1314	1758	1702	1306	1648	1875	1815
Caesarean in %	6.1	6.8	5.9	7.9	11.9	10.0	11.6	10.2
Direct maternal deaths	6	5	3	0	3	5	4	1
Uterine rupture		9	2	8	12	8	5	4
Number of FSB	49	43	36	34	17	8	10	12
Under5 malaria CFR (%)		4.1		4.7		1.9	2.3	2.9
Under5 malnutrition CFR (%)		17.1		7.1		8.7	8.1	13.9

OPD: Out-Patient Department
CFR: Case Fatality Rate

BOR: Bed Occupancy Rate
FSB: Fresh Still Birth

At HC level, both offered inpatients and delivery services. In one HC, laboratory services stopped in 2007 because the assistant went for up-grading and was not replaced.

Table 50: *Record cases of outpatients (OP), inpatients (IP) and deliveries in 2 HC (Biharamulo district)*

	1999	2000	2001	2002	2003	2004	2005	2006
OP Nyakahura	9,790	5,552	6,768	8,938	9,463	8,075	11,254	10,407
OP Bwanga	12,322	8,209	5,163	11,373	9,482	12,547	11,959	7,808
IP Nyakahura	743	162	178	376	536	621	834	905
IP Bwanga	189	188	308	878	1,192	1,003	1,802	1,500
Deliveries Nyakahura	115	80	58	87	147	144	242	297
Deliveries Bwanga	319	352	371	516	545	674	770	618

Table 50 gives the volume of activities in terms of consultations, admissions and delivery from 1999 to 2006. Admissions and deliveries have increased significantly after 2002. In average, the number of OP cases is around 20 to 30 per day or 30 to 40 if removed week-end days.

At Dispensary level, one had laboratory service (PNFP), one could only do blood smear for malaria, one stopped services in 2005 because staff moved without replacement, and the last one has never offered such services. In one dispensary neither

report nor record was available at all. Volume of activities differed quite a lot between dispensaries as shown in Table 51. The 4th one (PNFP) appeared less busy but functions without CO. For the others, we found 20 to 30 outpatients (OP) per working day. In the busiest dispensary, 2 clinicians were present.

Table 51: *Record cases of outpatients (OP) and deliveries in 4 Dispensaries (Biharamulo district)*

	1999	2000	2001	2002	2003	2004	2005	2006
OP Ilemera			5,397	7,347	7,238	8,572	6,500	7,813
OP Ichwankima	NO INFORMATION RECEIVED							
OP Buziku	11,018			5,389	3,554	4,283	6,881	5,000
OP Katoke					631	1,610	2,150	2,344
Deliveries Ilemera			47	39	107	100	201	253
Deliveries Ichwankima	NO INFORMATION RECEIVED							
Deliveries Buziku	118			927	957	204	346	506
Deliveries Katoke					9	3	4	3

2. Kilosa district

At CHMT level (Table 52), very few data were available for 1999. Data and reports were available for the other years of evaluation period. Unfortunately, we could not calculate the CFR for malaria for several years, and like Biharamulo, a tendency or reduction was observed. After 2002, a significant increase in vaccination coverage can be observed and the more impressive improvement concern Polio3 and DPT3. Nevertheless measles cases did not disappeared completely despite good coverage. We have calculated ourselves the percentage of delivery at HF because local staff calculated the percentage of delivery by assisted personnel and included the ones done par Traditional Birth Attendants (TBA) which are not any more accounted as qualified staff, explaining the difference between the 2 indicators. On the other hand, deliveries that occurred at HF are sometimes done by attendants who are not qualified and then even our calculation gave an overestimate indicator. The caesarean section rate is below the standards. From the national bureau of statistics, IMR was 112/1000 in 1988 and 101/1000 in 2002, the UFMR was 186/1000 and 166/1000 respectively for the same years; the MMR was 529/100,000 in 2002 (National Bureau of Statistics, Tanzania 2006). The antenatal clinic coverage (one visit) was close to 100%.

Table 52: *Main health indicators in Kilosa district*

	2000	2001	2002	2003	2004	2005	2006
Population	445,902	467,360	489,513	502,240	515,298	528,695	542,442
Immunization coverage rate (%):							
Measles	63	88	82	91	92	93	96
Polio3	32	38	64	94	92	94	97
BCG	74	83	83	96	97	98	99
DPT3	71	88	65	91	93	94	97
Malaria CFR for under5 (%)			5.8	3.8			2.4
Under5 severe underweight rate	1.0	1.1	0.9	0.6	0.8	0.8	0.5
TB new cases total					181	486	547
Expected deliveries	17,836	18,695	19,581	20,090	20,612	21,148	21,698
Delivery at HF (%)		28	31	29	31	33	41
Caesarean section per expected birth (%)	2.0	2.0	2.1	2.1	3.1	3.1	3.6
% of delivery assisted by trained personnel	40		64	73	64	47	47
Number of measles cases reported	47	49	0	0	29	2	47
% of blood donors HIV positive	8.2	4.1	4.3	4.9	6.1	3.8	4.8

BCG: Tuberculosis Vaccin (Bacille de Calmette et Guérin)

DPT3: Diphtheria, Pertussis, Tetanus vaccine-3 doses

CFR: Case Fatality Rate

TB: Tuberculosis

At district hospital, almost all data were available and available at CHMT level. Table 53 shows a reduction of OP cases activities (around 200/day in 2001 to 100 in 2006). The tuberculosis ward was closed in 2003, explaining the reduction of bed numbers. The number of admission remains stable with low BOR and increased number of major operations and deliveries. Nevertheless BOR (Bed Occupancy Rate) remains low. Tendency of under-five malaria CFR reduction is not observed at district hospital level and under-five malnutrition related condition CFR is quite high. The number of post-operative infection is never recorded. The number of blood transfusion has been reduced by 65% between 1999 and 2006.

Table 53: *Main health indicators in Kilosa DH*

	1999	2000	2001	2002	2003	2004	2005	2006
Beds	150	150	150	150	150	130	130	130
OPD cases	27,509	27,486	75,448	63,340	69,063	39,743	48,194	38,831
Admissions	4,499		6,860		6,190	7,159	7324	7,578
BOR (%)					21	43	49	51
Major operations	273	243	319	224	297	380	437	446
Blood transfusions	1,522	1,389	1,229	1,129	1,113	1,172	1,493	984
X-ray	1,707	2,294	2,502	2,683	2,475	2,111	1,899	1,993
Ultrasounds					84	104	85	108
Deliveries	1,171	1,393	1,466	1,462	1,400	1,654	1,758	1,780
Caesarean in %	11.6	9.8	12.4	9.6	13.1	19.0	16.0	17.3
Maternal deaths	11	8	10	11	12	15	16	9
Number of FSB	16				19	19	30	28
Under5 malaria CFR (%)	7.1				3.2	4.9	4.0	3.9
Under5 malnutrition CFR (%)	26.5				0	10.0	22.9	19.1

OPD: Out-Patient Department

BOR: Bed Occupancy Rate

CFR: Case Fatality Rate

FSB: Fresh Still Birth

At HC level, one PNFP HC (Mikumi) was almost offering all services like a hospital when the other visited HC (public one) could not even offer laboratory services. That explains the difference when looking at volume of activities (Table 54), from 16 OP cases per day (1999) to 12 (2006) for Ulaya HC and from 86 (1999) to 60 (2006) for Mikumi HC. This HC multiplied by 4 the number of admissions between 1999 and 2006.

Table 54: *Record cases of outpatients (OP), inpatients (IP) and deliveries in 2 HC (Kilosa district)*

	1999	2000	2001	2002	2003	2004	2005	2006
OP Ulaya	5,792	5,106	5,613	5,805	5,013	4,467	4,263	4,190
OP Mikumi	31,421	32,641	21,772	21,064	22,724	28,036	31,579	21,279
IP Ulaya	0	605	1,092	1,214	1,462	1,828	1,390	1,927
IP Mikumi	1,528	2,4420	2,265	2,050	2,231	3,060	4,842	6,638
Deliveries Ulaya	111	192	271	219	229	257	284	234
Deliveries Mikumi	333	524	439	517	462	515	520	487

At Dispensary level, none of the 6 visited dispensaries had laboratory services. Complete data for the 8 years were available only for one dispensary (Msingisi). As shown in Table 55, and despite that all of them have a clinician, the volume of activity did not seem very high (around 12 to 25 patients per working day) and for some dispensaries, there was a very low number of deliveries.

Table 55: *Record cases of outpatients (OP), and deliveries in 6 Dispensaries (Kilosa district)*

	1999	2000	2001	2002	2003	2004	2005	2006
OP Rudewa			3,894				2,619	4,032
OP Kivungu	3,387		1,283	3,762	3,235	2,864	2,844	3,387
OP Magole					8,504	9,053	6,370	6,448
OP Mvumi	2,576		964	759	4,269	983	3,049	3,613
OP Chakwale						5,560	9,403	2,599
Op Msingisi	7,167	2,938	3,487	2,171	3,772	1,508	2,877	5,674
Deliveries Rudewa			14					27
Deliveries Kivungu	51		55	55	39	49	24	42
Deliveries Magole					155	116	105	129
Deliveries Mvumi	13		23	31	39	25	49	43
Deliveries Chakwale							6	5
Deliveries Msingi	0	6	3	4	3	7	0	3

3. Newala district

At CHMT level (Table 56), some data were missing, like antenatal coverage and maternal death. Only one significant change appears and it concerns vaccination coverage. Nevertheless, for Polio 3 and DPT3, performance remains unsatisfactory with coverage of 80%. The total number of deliveries done by TBA was higher than deliveries recorded at HFs, therefore the number of deliveries reported to be done by qualified staff was overestimated. The caesarean section rate meets the recommended international standard. IMR and UFMR were still very high compared to other districts; IMR was 132/1000 in 1988 and 117/1000 in 2002, the UFMR was 223/1000 and

197/1000 respectively for the same years (National Bureau of Statistics, Tanzania 2006).

Table 56: *Main health indicators in Newala district*

	1999	2000	2001	2002	2003	2004	2005	2006
Population	142,377	144,664	145,821	183,930	185,770	187,646	189,335	190,826
Immunization coverage rate (%):								
Measles	81	74	105	75	78	90	97	97
Polio3		52	104	76	79	79	86	80
BCG	67	84	101	71	99	113	110	94
DPT3	61	77	104	78	74	81	82	80
Malaria CFR for under5 (%)	?	5.2	4.9	3.7		3.1	3.0	3.2
Under5 severe underweight rate	1.8	0.8	2.6	3.5	1.1	1.2	0.8	1.7
TB new cases	582	402	563	387	429	344	386	284
Expected deliveries	5,695	5,786	5,833	7,357	7,430	7,506	7,573	7,633
Delivery at HF	2,610	4,084	2,082	2,102	2,133	2,431	2,610	2,746
Delivery - TBA	2,423		2,846	2,745	2,880	3,418	3,781	3,025
Delivery at HF (%)	46		36	29	29	32	35	36
Caesarean rate (%)	3.7	5.2	5.4	3.3	3.0	5.6	5.2	5.4
FSB (%)		1.7	1.5	0.8	0.8	.6	1.7	0.8
Measles cases		20	4	4	26	29	57	18
% of blood donors HIV +	6.5	6.6	7.8	7.1	5.1	?	3.1	2.8

BCG: Tuberculosis Vaccin (Bacille de Calmette et Guérin)

DPT3: Diphtheria, Pertussis, Tetanus vaccine-3 doses

CFR: Case Fatality Rate

TB: Tuberculosis

TBA: Traditional Birth Attendant

FSB: Fresh Still Birth

At district hospital, almost all data were available and available at CHMT level. Table 57 shows stability in volume activities, cases activities like OP cases (around 80 to 100 OP/day), admissions, operations, deliveries and X-rays. The under-five malnutrition related condition CFR could not be calculated. Like in other districts, the number of post-operative infection was never recorded.

Table 57: *Main health indicators in Newala DH*

	1999	2000	2001	2002	2003	2004	2005	2006
Beds	155	155	155	155	155	155	155	155
OPD cases	30,844	33,351	32,187	27,593	33,955	39,386	35,339	35,422
Admissions	?	7,273	6,726	7,898	6,650	7,788	?	6,565
BOR (%)	59.1	65.8	60.7	65.4	52.0	61.0	54.2	57.6
Major operations	508	695	639	651	717	823	917	687
Blood transfusions	1,639	507	770	1,583	1,534	1,748	1,362	2,415
X-ray	2,328	1,728	2,468	1,718	1,587	915	2,505	1,972
Ultrasounds	0	0	0	0	260	1,377	939	608
Deliveries	1,680	1,796	1,604	1,466	1,527	1,797	1,855	1,704
Caesarean in %	12.5	16.9	19.6	16.4	14.8	23.3	21.1	24.2
Maternal deaths	?	?	10	12	13	16	6	7
Under5 malaria CFR (%)	?	4.7	4.9	4.4	5.3	3.9	3.9	?

OPD: Out-Patient Department

BOR: Bed Occupancy Rate

CFR: Case Fatality Rate

At HC level, both HC offer laboratory services but microscope was not working for more than 4 months in one of them. The volume of activities (Table 58) in term of OP is low and comparable to dispensary level with only 8 OP per working day (Chiangu). When looking at Kitangari, the reduction of OP cases between 2004 and 2006 looks very strange and not trustable.

Table 58: *Record cases of outpatients (OP), inpatients (IP) and deliveries in 2 HC (Newala district)*

	1999	2000	2001	2002	2003	2004	2005	2006
OP Kitangari	11,690	14,831	14,557	6,516	10,154	10,212	2,809	3,460
OP Chiangu	3,475	3,152	4,289	6,174	5,615	4,042	2,409	2,112
IP Kitangari	606	867	783	659	609	923	833	723
IP Chiangu	759	520	516	228	283	321	199	239
Deliveries Kitangari	113	203	96	77	92	86	83	75
Deliveries Chiangu	28	23	14	29	57	53	37	51

At Dispensary level, none of the 5 visited dispensaries had laboratory services. Complete data for the 8 years were available for 2 dispensaries. As shown in Table 59, for all dispensaries there was a decrease in volume activity. The 5th one recorded only 4 patients per working day when one clinician was there for 2006, knowing it was around 30 to 35 before 2004. For Mtunguru and Malatu, the number of cases per working day was also low (6) but there was no clinician, only a nurse. The number of deliveries was also very low.

Table 59: *Record cases of outpatients (OP), and deliveries in 5 Dispensaries (Newala district)*

	1999	2000	2001	2002	2003	2004	2005	2006
OP Makonga	1,551		8,277	6,263		3,779	2,183	2,032
OP Mtunguru	-		5,039	4,419	4,114	6,551	1,099	1,726
OP Mkunya	8,718		8,004	6,773	4,223	6,323	2,274	4,613
OP Malatu	3,100	5,753	5,445	3,148	1,567	4,401	2,357	1,618
OP Mnyambe	7,929	8,260	7,607	8,820	9,603	4,018	2,358	973
Deliveries Makonga	35	44	28	23	21	0	14	11
Deliveries Mtunguru	-		9	47	102	29	6	61
Deliveries Mkunya	22		47	28	13	27	66	83
Deliveries Malatu	27	29	9	2	2	2	24	48
Deliveries Mnyambe	45	4	34	9	14	31	42	33

4. Mwanga district

For the population, there was a national census in 2002, and for other years, it is an estimate using the growth rate. It explains the big difference of population between 2001 and 2003, which can also have affected the calculation of coverage for vaccination and other indicators. Also the population count pastoral tribes (Masai) that move regularly. **At CHMT level** (Table 60), some data were missing. Vaccination coverage has increased during the last few years. BCG coverage remained quite low compare to other vaccines. Like for other districts, percentage of deliveries by qualified personnel included TBA and then was not reported here. Caesarean section rate is below recommended standards. Malaria CFR for children is very low compared to other districts. IMR and UFMR were also lower compared to other districts and also compared to national rates. IMR was 69/1000 in 1988 and 47/1000 in 2002. The UFMR was 108/1000 and 68/1000 respectively for the same years (National Bureau of Statistics, Tanzania 2006).

Table 60: Main health indicators in Mwanga district

	1999	2000	2001	2002	2003	2004	2005	2006
Population	122,736	125,313	127,947	115,620	117,420	119,299	120,760	122,692
Immunization coverage rate (%):								
Measles	95	85	85	75	76	96	96	94
Polio3		82	78	78	72	98	96	94
BCG	95	80	104	74	72	101	89	89
DPT3	97	84	86	78	72	98	94	95
Malaria CFR for under5 (%)				1.2	0.9	0.2	1.0	0.9
Under5 severe underweight rate	1.7	1.5	1.2	0.7	0.2	0.2	0.1	0.2
TB new cases	90	92	68		88	97	79	98
Expected deliveries	4,910	5,013	5,118	4,625	4,697	4,772	4,831	4,908
Delivery at HF (%)	53	49	55	54	56	55	55	57
Caesarean rate (%)	2.8	3.2	3.2	3.7	3.3	5.0	3.4	3.7
FSB (%)		0.2	0.2	0.4	0.2	0.4	0.6	0.5
Measles cases	156		0	1	0	6	1	6
% of blood donors HIV +	3.2	8.6	12.6	2.9	7.4	10.1	?	10.0

BCG: Tuberculosis Vaccin (Bacille de Calmette et Guérin)

DPT3: Diphtheria, Pertussis, Tetanus vaccine-3 doses

CFR: Case Fatality Rate

TB: Tuberculosis

FSB: Fresh Still Birth

At district hospital, some data were missing. Table 61 shows an increase in volume activities like OP cases (around 50 OP/day), admissions, deliveries, and X-rays (no record found for ultrasounds). The under- five malnutrition related condition CFR could be calculated only twice and it was very high. The under- five malaria CFR that could be calculated gave higher values than in the whole district. As for other districts, no information was available concerning post-operative infections.

Table 61: Main health indicators in Usangi DH

	1999	2000	2001	2002	2003	2004	2005	2006
Beds	100	100	100	100	100	100	100	100
OPD cases	10,801	5,526	8,421	10,515	14,444	15,280	16,836	19,230
Admissions	1,470	1,263	2,083	2,143	2,114	2,318	2,851	3,526
BOR (%)					48.5	61.0	69.3	62.5
Major operations	211	223	254	306	263	295	206	254
Blood transfusions	172	185	204	134	182	151	168	114
X-ray	467	806	411	838	222	0	489	698
Deliveries	643	697	822	830	760	936	939	947
Caesarean in %	21.2	22.7	20.2	20.6	20.5	25.4	17.4	19.1
Maternal deaths	1	1	0	2	2	0	0	1
Number of FSB	7	2	6	8	6	14	3	10
Under5 malaria CFR (%)					1.4	0.8	2.9	3.1
Under5 malnutrition CFR (%)					25.0	0	25.0	?

OPD: Out-Patient Department

BOR: Bed Occupancy Rate

CFR: Case Fatality Rate

FSB: Fresh Still Birth

At HC level, all visited HC visited offer laboratory services. For two of them, the volume of activity (Table 62) was higher and has increased over the past years (almost 40 OP per day); Mwanga HC is located in the main town of the district where most

people are living. Data on IP were missing for 2 HC. Oddly, the number of deliveries per year remains quite low.

Table 62: *Record cases of outpatients (OP), inpatients (IP) and deliveries in 3 HC (Mwanga district)*

	1999	2000	2001	2002	2003	2004	2005	2006
OP Kisangara	16,060	?	6,346	8,574	9,190	12,940	14,688	13,441
OP Kigonigoni	2,315	7,945	5,980	6,424	4,921	5,063	5,309	4,285
OP Mwanga	15,749	8,755	8,271	11,699	15,790	12,737	12,840	13,988
IP Kisangara	3,131	2,598	1,362	1,135	1,425	1,922	3,218	1,861
IP Kigonigoni	0	174	300	?	230	?	?	?
IP Mwanga	723	1,003	443	450	632	?	?	?
Del Kisangara	201	115	146	124	101	79	75	55
Del Kigonigoni	99	47	52	72	44	62	51	53
Del Mwanga	210	237	181	223	183	167	180	165

At Dispensary level, none of the 5 visited dispensaries had laboratory services. Complete data for the 8 years were available for 3 dispensaries. As shown in Table 63, no real significant change was observed in volume activity. The number of OP per working day varies between dispensaries (4 to 17) but remains quite low when clinicians were present in 4 dispensaries; in one there was only a nurse assistant (Mruma). The number of deliveries was also very low.

Table 63: *Record cases of outpatients (OP), and deliveries in 5 Dispensaries (Mwanga district)*

	1999	2000	2001	2002	2003	2004	2005	2006
OP Nyabinda	7,544	2,578	2,263	2,679	2,322	2,218	1,964	1,600
OP Chomvu	-	-	-	-	-	295	4,122	4,352
OP Mruma	1,927	6,641	5,047	5,449*	1,037*	1,416	1,399	1,084
OP Jipe	3,526	3,778	4,679	3,889	3,896	2,806	3,276	3,803
OP Mgagao	4,586	2,560	2,489	2,812	1,846	1,151	1,455	1,260
Deliveries Nyabinda	25	23	22	37	11	21	17	8
Deliveries Chomvu	-	-	-	-	-	0	4	0
Deliveries Mruma	59	73	69	45	31	42	61	42
Deliveries Jipe	73	19	30	16	17	24	19	25
Deliveries Mgagao	59	10	65	67	59	48	26	83

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ANNEXES

ANNEXE 1 – TOWARDS A NEW PARADIGM OF DEVELOPMENT AID: WHAT CONCLUSIONS CAN BE DRAWN REGARDING THE SECTOR- WIDE APPROACH?

In *"Le défi de l'équité et de l'accessibilité en santé dans le tiers-monde: entre droit fondamental, justice sociale et logique marchande"* [The challenge of fairness and access to healthcare in the developing world: between fundamental rights, social justice and commercial logic]⁶⁷

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Authors: Véronique ZINNEN, Samia LAOKRI, Elisabeth PAUL

INTRODUCTION

Cooperation agencies, particularly the World Bank, have for the past fifteen years been engaged in a far-reaching evaluation of their actions and operating methods in response to mounting criticism and questioning of the effectiveness, or even the legitimacy, of development aid. These investigations have highlighted the limits on traditional modes of intervention and have given rise to a shift in the international aid system towards a "new partnership-based paradigm" of aid management.

This new approach is based on the common desire to rise to various challenges: ownership, joint responsibility, partnership, a global vision, poverty reduction and governance. This desire was given concrete form in a mutual commitment made by partner countries and donors to support the principles laid down in the Rome Declaration (2003) and the Paris Declaration (2005), and was further fleshed out by the European Code of Conduct on Complementarity and the Division of Labour.

The international community now recognises the need to integrate cooperation programmes into national structures, supporting the policies developed by recipient countries and, wherever possible, using management systems that are harmonised or actually produced by recipient countries.

It is in this context that sector-wide approaches emerged and must be analysed.

EVOLUTION OF AID MODALITIES

The major development indicators have shown little or no improvement in spite of the large amounts of aid that many developing countries have received over considerable periods in the hope of assisting their development and overcoming poverty (World Bank 1998).

AID VIA THE PROJECT-BASED APPROACH

Since development cooperation began, the project-based approach has been the main vehicle of aid. It was not until the mid-1990s that this was first called into question.

LOGIC BEHIND THE CHOICE OF THIS TYPE OF APPROACH AND ITS ADVANTAGES

For a long time development economists were of the opinion that the principal constraint to development was a lack of investment, and hence that projects were the most efficient way to deliver capital investment (European Commission 2003). Indeed, projects are able to select a manageable set of problems from a complex reality and prescribe the inputs needed to foster local development (OECD 2001). This approach

⁶⁷ Translation made by "Centre Traduction Louvain – Université catholique de Louvain".

also appeared attractive and reassuring to donors (Yamada 2002) for several reasons. Firstly, project outcomes can be highly visible both for the recipient country and for the donor country, as the logical framework allows concrete and measurable results to be guaranteed. In addition, projects often make use of clear, simple technologies, which are in fact often simply the transfer of a technique already available in the donor country. Finally, this type of aid overcomes the lack of transparency and efficacy of the systems used to manage public finances and public-sector contracts in recipient countries, and is therefore a good way of minimising the risk of financial malfeasance (European Commission 2003).

Overall, the project-based approach is logically the only possible option in situations where visible short-term results are needed or where direct control over the funds committed must be retained. It is also still the optimum approach for countries that are less dependent on external aid (Lavergne & Anneli 2003) (see discussion).

PROBLEMS ASSOCIATED WITH THIS APPROACH

The literature contains several criticisms of this approach. It is hardly conducive to ownership of development projects by government and local populations. A multitude of donors necessarily implies a multitude of projects, procedures and management methods, which can, in the absence of concerted and coordinated action, increase the risks of duplication of efforts and inconsistencies, lead to an excessive workload for local authorities, create imbalance in the sectors and regions receiving aid, and can also entail very high transaction costs (European Commission 2003; Lavergne & Anneli 2003). Furthermore, if the systems and structures operated by the local authorities are simply ignored or bypassed, they will not be improved or strengthened. Finally, large numbers of projects take up the time of skilled local staff, who are already in short supply (Lavergne & Anneli 2003), and many projects do not fit into national development strategies and processes. If projects do not take account of their socio-economic context, they can only provide specific outcomes and can have no real impact on a country's overall development.

AID VIA THE MACROECONOMIC APPROACH

The macroeconomic approach was adopted as a kind of “emergency solution” in the early 1980s, when the debt crisis of poor countries was threatening the stability of the international financial system. This strategy involved providing macroeconomic budget support in return for the adoption of stabilisation and structural adjustment measures by the recipient countries (cutting public deficits, increasing exports to improve the balance of payments, etc.). This movement was led by the International Monetary Fund (IMF), a leading proponent of structural adjustment programmes (SAPs), and taken up by the major multilateral donors, including the World Bank and the European Community, along with some bilateral donors, which converted part of their development aid into direct budgetary aid aimed at supporting the balance of payments and structural reforms as a whole.

This strategy, focused as it was on various reforms with a purely economic objective and based on “one size fits all” solutions imposed on all countries without taking their particular situation into account, contained inherent contradictions and has been heavily criticised. Not only was it relatively ineffective (it had a limited ability to stimulate economic growth, led to a fall in domestic demand, and increased economic and financial dependence on donors); it also had ambivalent or even disastrous effects on the social sectors of recipient countries, as health and education budgets in particular were slashed.

REASSESSMENT

The events of the 1990s changed the environment for foreign aid. On the one hand, the budget deficit problems faced by donor countries caused them to cut their development aid (which in most cases was already less than 0.5% of their GNP). Consequently, resources became scarcer and needed to be used more efficiently. On the other hand, the end of the Cold War opened up new horizons, as aid was no longer subject to strategic objectives and should be targeted better at its prime function of promoting long-term economic growth and reducing poverty (World Bank 1998).

In the second half of the 1990s, this shift in context, together with a recognition that the SAPs (structural adjustment programmes) had failed, gave rise to a new evolution in cooperation strategies. Poverty reduction took over from structural adjustment as the focus of development efforts. The adoption of the Millennium Development Goals (MDGs) also reflects the increased desire of the international community to tackle the various facets of poverty.

On the subject of aid effectiveness, several studies commissioned by donors, and a broad-ranging reassessment on development cooperation approaches, highlighted the following five points:

- ambiguous relationships between aid, growth and poverty reduction, and the general lack of improvement in major development indicators in respect of funds committed;
- the fungibility of aid, arguing for less targeted aid;
- the perverse effects of conditionality;
- the increasing frustration of “assisted” governments, particularly in relation to the perverse effects of the project-based approach (insufficient national ownership, lack of coordination between donors, failure to integrate aid into national policies, etc.);
- the fact that aid has little effect in poorly governed countries, whereas good governance allows financial aid to have a positive impact on growth, poverty reduction and improvement of social indicators (World Bank 1998).

The authors of the World Bank’s reference work, “Assessing Aid” (World Bank 1998), which summarises the findings of several studies and assessments, conclude that several reforms to the aid system were vital in order to make aid more effective and reduce poverty. They refer in particular to better-targeted financial support, a better match between aid instruments and the reform timetable, adjusting activities to the conditions prevailing in the country and sector in question, and boosting national capacities and governance.

In addition, the numerous assessments commissioned by cooperation agencies suggested new options for relations between donors and beneficiaries, in an attempt to move away from a relationship in which one party is economically and politically dominant towards one predicated on responsibility and mutual respect (Hill 2002).

THE SECTOR-WIDE APPROACH

The wish of both donors and recipients to develop new mechanisms that take into account the social and political context in which they operate, and that place more responsibility on recipient governments, has led to the creation of the sector-wide approach (SWAp). This is a new paradigm of development aid management, characterised by a shift away from a model in which constraints devised by donors (IMF, WB) are applied towards a situation in which developing countries enjoy greater

freedom in designing aid programmes and managing aid, in return for accepting more responsibility (Paul 2003). The key players in this move have been the World Bank, the WHO and Scandinavian countries, and the approach has been largely adopted by most of the international community (European Union, the Development Assistance Committee [DAC] of the OECD, bilateral agencies, etc.).

Moving towards a more holistic approach means adopting a new frame of reference, a new model and a new vision, which will underlie the selection of new analyses and modes of action (Dujardin 2003).

DEFINITION

This is no single definition of a sector-wide approach, but a review of the literature reveals that it is a process, an operating method between government and donors working together to achieve:

- the gradual introduction of a complete and coherent sector policy and strategy, i.e. a common approach for the whole of a given sector;
- development of leadership and ownership on the part of local government, which must be in the “driving seat”;
- coordination between donors;
- harmonisation of procedures and a move towards using local government procedures for fund management, monitoring and evaluation;
- setting up a system of consultation and participation in which all local stakeholders are involved (Cassels 1997; European Commission 2003; EuropeAid 2007; OECD 2006).

The sector-wide approach is therefore a process rather than a blueprint, designed to be flexible and capable of adapting to a specific environment. It therefore requires a dynamic vision: the important thing is the direction of change rather than the progress already made on the various aspects of the approach at any given moment.

As to what constitutes a sector and what area it covers, this can be as broad as the government managing the process wishes. However, in order to minimise administrative and organisational complexity and improve efficiency, preference has been given to a narrower definition of “sector” as being the area under the responsibility of a single sector ministry (EuropeAid 2007). Sectors can also be seen in terms of broad themes such as poverty or the environment, but the lack of appropriate institutional structures has made this an unacceptable solution.

OBJECTIVES

The sector-wide approach represents a gradual evolution away from support for specific activities towards a process within which aid is transformed into co-funding of a policy with the partner country and donors, according to objectives defined by government (ownership, leadership) in the context of a coherent public spending programme.

This approach must enable a full and realistic sector policy to be devised, aimed at:

- greater coherence (coordination, harmonisation);
- reducing the number of projects and their transaction costs;
- lessening the dissipation of administrative capacity;
- boosting local capacity in respect of financial, management, planning, monitoring and evaluation systems;
- increasing the influence of donors over policy, sector reforms and evaluation;

- achieving the sector objectives to provide effective and efficient aid (EuropeAid, 2007).

GOOD PRACTICES

The guidelines of the OECD's Development Assistance Committee (DAC) on sector-wide approaches (OECD 2006: 38-39) are based on the following guiding principles:

- Support government ownership and leadership;
- Work with government to strengthen institutional capacity and accountability;
- Set the sector programme in context;
- Take a long-term, strategic view;
- Be pragmatic and flexible.

As for the good practices identified with regard to the sector-wide approach, the experience collected by the DAC (OECD 2006: 39-42) indicates that the following factors are essential to the successful implementation of a sector-wide approach: political and macroeconomic stability, broad and effective government ownership and a broad consensus between government and donors on sector policy and management issues.

On the issue of sequencing activities, the DAC stresses that partners should avoid being too ambitious, that the partner government's efforts to design its sector policy and strategy should be supported, that implementation mechanisms matter, that common arrangements can be very tricky, and that there should be collaboration with other donors.

Finally, on the question of sector policy and strategy, good practices show that documents must have the following characteristics: they must be authored by the government, they must explicitly address the role of government in the sector, they must define the allocation of responsibilities across government, they must focus on the whole sector's resource requirements, they must have a strong results orientation, and they must set out clear mechanisms for monitoring, reviewing and updating policy.

IMPLEMENTATION INSTRUMENTS

The sector-wide approach is put into practice through a Sector Programme, which is based mainly on a sector policy and a stakeholder coordination mechanism. Donors then develop instruments to fund and support this sector programme.

THE SECTOR PROGRAMME

The government, its partner donors and other stakeholders work together in the context of a sector-wide approach to devise a sector policy and an updated plan of action. The European Commission has identified three vital components and two other key elements of a sector programme (EuropeAid 2007):

- Firstly, a sector policy and strategy, specifying what government aims to achieve in the sector and how. This must generally form part of, or relate to, a sector that is a priority for a national development strategy, usually a Poverty Reduction Strategy Paper (PRSP);
- Secondly, a medium-term expenditure programme for the sector with a comprehensive, realistic and clear action plan incorporating all available internal and external resources and all proposed expenditure for the expected outcomes, and which has been validated at senior political level;
- Thirdly, a sector coordination framework, under the government's leadership, comprising coordination of all national stakeholders and all donors.

The other two key elements identified by the Commission are the development of the institutional setting and local capacities to reinforce national systems, enabling local governments to take control, and a performance monitoring system to measure progress towards the achievement of policy objectives and targeted results.

Two additional elements will influence the performance of a sector programme: the macroeconomic policy, which provides a fairly stable environment, allowing predictable resource levels, and public finance management, which ensures that policy priorities are reflected in budget allocations (EuropeAid 2007).

It should be noted that a sector programme should also include a systematic mechanism of consultation with clients and beneficiaries of government services and with non-government providers of those services. The concerns of these groups should be understood and factored into the design of sector policy and strategy (European Commission 2003).

We must not forget that sector programmes are constantly developing. The components mentioned above may not all be present in some contexts, or, more generally, each of these components must be produced in a basic form before being refined later (European Commission 2003). Nevertheless, there is a need to balance three requirements. Firstly, the requirement for technical improvements to the components, which take account of their inter-relationship and the need for coherence. Secondly, the necessity for these improvements to be adopted and respected by all major stakeholders, which will require continuous consultation. Finally, and most importantly, the imperative to continue to run government activities and deliver services; to put it plainly, this means that it is essential to recognise that devoting too much attention to reform could interfere with day-to-day operations (European Commission 2003).

INSTRUMENTS SUPPORTING SECTOR POLICY

Donors will develop instruments to provide technical and financial support to the partner government's sector programme. The European Commission, for example, refers to its instrument as a "Sector Policy Support Programme" (SPSP). But this is more than just a funding instrument. It implies a consistent and informed engagement with processes within the sector. It entails a structured contribution to sector policy development and to action planning, budget preparation and performance monitoring for the sector as a whole (European Commission 2003).

From an operational point of view, the type of support may vary depending on the donor or various factors such as the different components of a sector programme that are already in place or as they evolve, according to the macroeconomic framework, local management capacity, or other aspects. The most common types of financing instruments for sector programmes are general budget support, sector budget support, pool funds, specific funding (projects), and of course a combination of the various existing types of aid.

General budget support helps to finance the government's overall programme, including activities for the sector in question. Sector budget support aims to have an effect on a particular sector. It supports that sector using the budget procedures of the State in question. It is intended to support the coherent national strategies defined in the sector programme.

Pool funds (or basket funds) are specially designed systems for bringing together resources from various sources of funding (provided by various donors and, in certain cases, by the government), but which are kept separate from the government's budget.

These funds may be managed either by the government or by donors. They may finance the whole sector programme or, as is more common, may be earmarked for specific items of expenditure or specified sets of activities. They may use procedures that are modelled on government systems, on the systems of a particular donor organisation, or may be custom-designed. All this depends on the government's management capacity and the wishes and/or specific rules of donors.

Pool funding is particularly appropriate when the situation is ready to go beyond the project financing stage, but when public expenditure management is not effective enough for sector budget support to be used. This form of financing is therefore often regarded as a transition mechanism between project financing and sector budget support (EuropeAid, 2007).

There is a range of intermediate solutions between managing aid purely through projects and doing so entirely via general budget support. In practice, donors often combine a variety of different instruments and put these new financing methods in place gradually via a dynamic process. Little by little, this changes the way in which donors and government operate.

We are seeing a gradual shift away from the project-based approach towards budget aid and pool funds, however (Lavergne & Anneli 2003).

THE SECTOR-WIDE APPROACH APPLIED TO THE HEALTH SECTOR

THE HEALTH SECTOR AND ITS REFORMS

Several governments introduced healthcare reforms in the 1980s in an effort to rectify the many problems facing the sector.

Five main objectives generally underpin the reforms undertaken: efficiency, quality, fairness, listening to patients and the viability of health systems (Dmytraczenko, Rao & Ashford 2003).

It is important to note that national approaches to healthcare reform vary enormously from one country to another. However, most reforms can be placed into one of three broad categories:

- financing reforms, aimed at dealing with scarce resources, i.e. finding alternative sources of income by developing cost recovery policies, mutual associations, insurance schemes, etc.;
- organisational reforms, aimed at overcoming the weakness of management structures and the lack of performance-based incentives in the public sector via policies of decentralisation, public-private partnerships, integration of service delivery and improvement in procedures;
- political reforms, including defining programmes with priorities, legislation and regulations (Dmytraczenko, Rao & Ashford 2003).

The process of reforming the health sector is more than just a technical exercise. It is a highly political activity in which donors can play a vital role. Their financial contribution can facilitate the reform process, their technical skills can be used to help design and implement reforms, and they are themselves actors in the process (Dmytraczenko, Rao & Ashford 2003).

THE HEALTH SECTOR AND THE SECTOR-WIDE APPROACH

In 1993 the World Bank (WB) affirmed its role in international health policy by publishing a world development report entitled "Investing in Health" (WB 1993), which was to trigger the large-scale adoption of the health sector reforms referred to above.

These reforms were then broadly accepted as the key to improving health in developing countries (Buse & Gwin 1998, Hill 2002).

In 1995 the WB expanded the role of health financing and legitimised its leadership by creating models of international health priorities and directions (Buse & Gwin 1998).

In 1997 the Danish government and the WB financed a donor conference aimed at reaching a consensus on the sector-wide approach and its role in healthcare. The results of these discussions were published in “A guide to sector-wide approaches for health development” (Cassels 1997). This is how the sector-wide approach came to be adopted firstly in the health sector and later in other sectors as well, particularly education.

The authors of this first guide identified two main objectives for sector-wide approaches in the health sector: firstly, to improve the functioning of the sector in order to improve the quality of care and health outcomes, and secondly to create the conditions that allow better interaction between government and donors (Cassels 1997). The principles underlying sector-wide approaches were then further elaborated as the concept was tested in practice, before the current definition was established.

The sector-wide approach in health contains all the features of the sector-wide approach described above. In particular, it involves a shift from a project-based method of planning and management to an overall (political, institutional and financial) working framework in which healthcare is delivered (Cassels 1997). It takes the form of a long-term partnership between host government and donors (Dmytraczenko 2003). The development process is placed in the hands of national authorities, and takes account of the needs of the sector as a whole. It explores ways in which government and donors can use joint management and planning systems and move gradually towards an ever-more comprehensive sector programme by pooling their funding resources (Hill 2002). It includes policy and strategy development, reinforcement of institutional capacity and institutional reform, on the basis of joint planning, management and monitoring mechanisms.

The term “health sector” may not be universally familiar, and its interpretation is often a matter for debate (Cassels & Janovsky 1998). A global definition should describe this sector as including all institutions that are related to health (with reference to its multisectoral nature). In practice, however, the term is used to refer to organisations that are financed, managed or regulated by the Health Ministry, thus failing to recognise the contribution made by other ministries and non-governmental agencies.

There is now a broad spectrum of health experience with the sector-wide approach, and many countries are discussing improvements to sector policy and joint working approaches with donors (European Commission 2000).

EVALUATING AND MONITORING A SECTOR-WIDE APPROACH

The creation of joint monitoring and evaluation mechanisms is one of the cornerstones of sector-wide approaches. The question of performance monitoring and evaluation arises at various levels:

- Evaluating the sector policy itself;
- Evaluating the feasibility of sector policy (macroeconomic framework, leadership, consensus, etc.);
- Identifying indicators for the annual monitoring process;
- Monitoring the final results (impact), such as MDGs (available indicators) and those laid down in Poverty Reduction Strategy Papers (indicators defined by individual countries and in specific papers).

Adopting an approach focused on results is, according to the OECD Development Assistance Committee and several bilateral agencies, one of the key principles underlying aid effectiveness (Lavergne & Anneli 2003). Similarly, one of the fundamental objectives of the Commission in engaging in sector programmes and in budget support is to be able to work with governments to direct attention towards the results of development spending (European Commission 2003).

A monitoring and evaluation framework is developed so that the evolution of any sector affected by a sector programme can be tracked, along with progress towards achieving targeted outcomes. This framework includes a set of indicators that can be classified according to various typologies. The quality and usefulness of the indicators will be constrained by the available data and by the methods used to collect and measure this data, taking account of the full range of factors influencing the outcomes and impacts of development spending (European Commission 2000).

DISCUSSION

This section sets out a number of questions raised by the sector-wide approach but does not discuss them in detail. Readers should refer to the articles and works mentioned for further information on these questions.

WHAT ABOUT THE PROJECT-BASED APPROACH?

Despite an increased desire to move away from the project-based approach as a benchmark modality, some comments need to be made. The shift to the sector-wide approach is a relatively slow process, and the transitional period may very well benefit from projects to prevent the decline or disappearance of some vital activities.

One aspect that must not be neglected is the heavy dependence of recipient countries on external aid (Lavergne & Anneli 2003). Indeed, it is logical that countries that are less dependent on aid will have little or no interest in a sector-wide approach, as it implies donor involvement in producing the budgets of the recipient country, with the consequent partial loss of sovereignty on the part of the country in question. Countries such as India, Vietnam and Latin American states will usually show more interest in having particular needs met via a project-based approach, which makes the most of the comparative advantages of the donor country.

The project-based approach would also appear to be the only possible option for countries facing a crisis, those that have poor structures, are unstable, whose governments are disreputable, and/or in which minorities are persecuted or face the risk of kidnap. Similarly, this type of aid has also been shown to be effective in emergency situations. This also seems relevant and useful in the context of research, demonstration or learning (Dujardin 2003).

Furthermore, projects can still be a perfectly acceptable financing model in the context of a sector-wide approach provided that they meet a certain number of criteria, such as (Lavergne & Anneli 2003):

- Integration into a development programme and compatibility with defined priorities;
- Implementation in partnership with other institutions, while encouraging leadership by the recipient countries;
- Use of local procedures for managing, monitoring and evaluating activities;
- Pursuing outcomes within the programme.

DECENTRALISATION

The impact that sector-wide approaches can have on decentralisation is a question that has attracted considerable interest (Lavergne & Anneli 2003). Sector-wide approaches have often been introduced in the context of fundamental institutional change (health sector reforms), in which particular attention is paid to promoting decentralisation in order to achieve greater flexibility, boost efficiency and encourage more responsible use of resources.

The objectives of a sector-wide approach and those of decentralisation are by no means incompatible. Both seek to improve the effectiveness and efficiency of resource use and regard the views of local stakeholders and beneficiaries as very important. So they are complementary rather than contradictory. However, both are complex processes demanding significant administrative and management capacity. Implementing both processes simultaneously may involve particular risks and challenges (European Commission 2003):

- Coordinating two parallel reform processes, often led by different bodies with different interests;
- Transitional problems common in the early stages of decentralisation, such as insufficient managerial or technical capacity and weaknesses in accountability systems;
- Transitional problems common in the early stages of the sector-wide approach, which can be characterised by a number of centralising influences, which may create problems in terms of coherence with decentralisation reforms. The need to ensure that enhancing the role of central-level ministries, arising from the sector-wide approach, does not undermine decentralised structures is a substantial challenge.

THE STAKEHOLDERS

A sector-wide approach should be based on a comprehensive view and should therefore involve inputs from all key stakeholders, including public and private sectors, non-profit organisations, civil society, academics and the users of government services (European Commission 2003). Defining the appropriate roles of different stakeholders and then establishing appropriate mechanisms of consultation and decision-making represent major challenges.

In practice, sector-wide approaches are generally not very participatory processes and are run by central authorities. Communities and districts have a particularly low degree of involvement in defining sector programmes. Furthermore, information rarely reaches grassroots level. This lack of participation may be related to the difficulty in managing a participatory process, which is a complex task. Managing the dialogue between donors and partner country is already a sufficiently complex undertaking. However, lack of participation risks making sector programmes less relevant and effective. This is why more thought should be given to devising ways of incorporating a participatory consultation process in the creation and subsequent monitoring of sector programmes, and to developing mechanisms that will allow the general public to influence the way in which health services are organised.

SECTOR-WIDE APPROACH AND VERTICAL APPROACHES

In general, vertical programmes often run counter to the objectives of sector-wide approaches in various respects, such as ownership, development of national capacity, reduction of transaction costs, harmonisation of procedures, etc. In addition, the sector-

wide approach may be less effective, less coherent and more difficult to manage if some donors maintain separately financed projects (Brown 2001). This is why most sector-wide approaches attempt to integrate vertical programmes, supported by pool funds, into the national system (Brown 2001). However, many donors and partner countries are somewhat reluctant to abandon some vertical programmes, fearing a loss of quality and efficiency.

The development of new worldwide initiatives such as the Global Fund to Fight AIDS, Tuberculosis and Malaria offers considerable funding, sometimes in excess of the budget earmarked for the sector. This throws sharply into focus the problem of parallel structures re-emerging, which could have a devastating impact on the gains made by the sector-wide approach: demotivation, delocalisation, brain drain, etc. (Sundewall & Sahlin-Andersson 2005).

FURTHER REFORMS NEEDED IN THE PUBLIC SECTOR

Many political instruments and institutional arrangements vital to the improvement of a sector – decentralisation, staff incentives, management and bookkeeping systems, disbursement mechanisms, etc. – cannot be introduced by a single ministry. Changes will therefore depend on broader, more general reforms of the public sector organised by the government (Cassels 1997).

OWNERSHIP AND LEADERSHIP

The “driving seat” position occupied by the partner government, which gives it greater control over external aid in general, is a prerequisite for the sector-wide approach (Cassels 1997: 30). Indeed, the lack of direction and poor management on the part of partner governments are two aspects that are often put forward to explain the key role donors continue to play in coordination (Hill 2002).

COORDINATION BETWEEN DONORS

For some considerable time, donors have not demonstrated any great commitment to coordination (Hill 2002). If they gain influence in the sector-wide approach, they also lose their direct control. The arrival of a lead donor in the group participating in the sector-wide approach can also create tension. Some may worry that their influence will be eroded. Ironically, the greater the number of donors involved, the greater the risk of withdrawal (Hill 2002). Much remains to be done in this area, requiring serious reassessment by donors and an imminent change in behaviour.

HARMONISATION OF PROCEDURES

The rhetoric of the sector-wide approach stresses the fact that donor countries must use the mechanisms of partner governments in the allocation and distribution of resources, and in monitoring and evaluation (Hill 2002).

This rarely happens on an operational level. The gap between theory and practice is partly explained by the need to respect rules imposed by the governments of some donors, rules that are incompatible with those of the partner governments, which means that those donors then continue to follow alternative paths.

The Paris Declaration of 2005, which was adopted by 91 countries and around 40 international organisations, reaffirms, however, the commitment already made in Rome in 2003 to harmonise aid so as “to increase the impact aid has in reducing poverty and inequality, increasing growth, building capacity and accelerating achievement of the MDGs”. An agreement was also reached on the choice of twelve indicators for

monitoring this process, marked by the third High-Level Forum on Aid Effectiveness held in Accra in September 2008.

DEFICIENT HEALTH SYSTEMS

Increasing resources for health is essential but not sufficient, as health systems in developing countries are too fragile and fragmented to deliver the volume and quality of services to those in need (WHO Task Force on Health Systems Research 2005). Data from several authors (Becerra-Posada et al 2004; Travis et al 2004; WHO Task Force on Health Systems Research 2005) and recent evidence indicate that most of these countries will certainly not meet the MDGs, at least in the area of health, by 2015.

CONCLUSIONS

It is clear that the sector-wide approach is regarded as a change in paradigm in development aid, with new concepts and new realities. Improving coordination between donors, the importance attributed to local ownership, policy frameworks and sector strategies, and the transformation of management and financial systems will all be a lasting legacy that must underpin the bases for the type of cooperation and aid. As with all paradigms, it will take time for the sector-wide approach to be fully integrated and for all its elements to come into play. Again, as with all paradigms, the context in which it is experienced or applied will affect its implementation or definition.

Sustainable improvements in the health sector depend on improving the way the health system functions, and particularly on the functioning of the health system in its entirety. The sector-wide approach can certainly play an important role here (Goodburn & Campbell 2001), especially in helping devise sector policies that are more coherent than in the past, even if the direct results of the sector-wide approach in terms of the general performance of the sector have not yet been shown. There are certainly real difficulties in assessing the impact, as health systems are extremely complex, multisectoral systems in which context plays a crucial role.

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Paris Declaration on Aid Effectiveness

Ownership, Harmonisation, Alignment, Results and Mutual Accountability

OWNERSHIP

Partner countries exercise effective leadership over their development policies, and strategies and co-ordinate development actions

Partner countries commit to:

- Exercise leadership in developing and implementing their national development strategies through broad consultative processes.
- Translate these national development strategies into prioritised results-oriented operational programmes as expressed in medium-term expenditure frameworks and annual budgets.
- Take the lead in co-ordinating aid at all levels in conjunction with other development resources in dialogue with donors and encouraging the participation of civil society and the private sector

Donors commit to:

- Respect partner country leadership and help strengthen their capacity to exercise it.

ALIGNMENT

Donors base their overall support on partner countries' national development strategies, institutions and procedures

- **Donors align with partners' strategies**
- **Donors use strengthened country systems**
- **Partner countries strengthen development capacity with support from donors**
- **Strengthen public financial management capacity**
- **Strengthen national procurement systems**
- **Untie aid: getting better value for money**

HARMONISATION

Donors' actions are more harmonised, transparent and collectively effective

- **Donors implement common arrangements and simplify procedures**
- **Complementarity: more effective division of labour**
- **Incentives for collaborative behaviour**
- **Delivering effective aid in fragile states**
- **Promoting a harmonised approach to environmental assessments**

MANAGING FOR RESULTS

Managing resources and improving decision-making for results

Managing for results means managing and implementing aid in a way that focuses on the desired results and uses information to improve decision-making

MUTUAL ACCOUNTABILITY

Donors and partners are accountable for development results

- **A major priority for partner countries and donors is to enhance mutual accountability and transparency in the use of development resources**
- **This also helps strengthen public support for national policies and development assistance**

ACCRA AGENDA FOR ACTION

Ministers of developing and donor countries responsible for promoting development and Heads of multilateral and bilateral development institutions endorsed the following statement in Accra, Ghana, on 4 September 2008 to accelerate and deepen implementation of the Paris Declaration on Aid Effectiveness (2 March 2005)

Strengthening Country Ownership over Development

- **We will broaden country-level policy dialogue on development**
- **Developing countries will strengthen their capacity to lead and manage development**
- **We will strengthen and use developing country systems to the maximum extent possible**

Building More Effective and Inclusive Partnerships for Development

- **We will reduce costly fragmentation of aid**
- **We will increase aid's value for money**
- **We welcome and will work with all development actors**
- **We will deepen our engagement with civil society organisations**
- **We will adapt aid policies for countries in fragile situations**

Delivering and Accounting for Development Results

- **We will focus on delivering results**
- **We will be more accountable and transparent to our publics for results**
- **We will continue to change the nature of conditionality to support ownership**
- **We will increase the medium-term predictability of aid**

Goals, targets and indicators

The internationally agreed framework of 8 goals and 18 targets was complemented by 48 technical indicators to measure progress towards the Millennium Development Goals. These indicators have since been adopted by a consensus of experts from the United Nations, IMF, OECD and the World Bank.



Goal 1: Eradicate Extreme Hunger and Poverty

Target 1. Halve, between 1990 and 2015, the proportion of people whose income is less than \$1 a day

Indicators

1. Proportion of population below \$1 (1993 PPP) per day (World Bank)
2. Poverty gap ratio [incidence x depth of poverty] (World Bank)
3. Share of poorest quintile in national consumption (World Bank)

Target 2. Halve, between 1990 and 2015, the proportion of people who suffer from hunger

Indicators

4. Prevalence of underweight children under five years of age (UNICEF-WHO)
5. Proportion of population below minimum level of dietary energy consumption (FAO)



Goal 2: Achieve Universal Primary Education

Target 3. Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

Indicators

6. Net enrolment ratio in primary education (UNESCO)
7. Proportion of pupils starting grade 1 who reach grade 5 (UNESCO)
8. Literacy rate of 15-24 year-olds (UNESCO)



Goal 3: Promote Gender Equality and Empower Women

Target 4. Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015

Indicators

9. Ratio of girls to boys in primary, secondary and tertiary education (UNESCO)
10. Ratio of literate women to men, 15-24 years old (UNESCO)
11. Share of women in wage employment in the non-agricultural sector (ILO)
12. Proportion of seats held by women in national parliament (IPU)



Goal 4: Reduce Child Mortality

Target 5. Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

Indicators

- 13.** Under-five mortality rate (UNICEF-WHO)
- 14.** Infant mortality rate (UNICEF-WHO)
- 15.** Proportion of 1 year-old children immunized against measles (UNICEF-WHO)



Goal 5: Improve Maternal Health

Target 6. Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio

Indicators

- 16.** Maternal mortality ratio (UNICEF-WHO)
- 17.** Proportion of births attended by skilled health personnel (UNICEF-WHO)



Goal 6: Combat HIV/AIDS, Malaria and other diseases

Target 7. Have halted by 2015 and begun to reverse the spread of HIV/AIDS

Indicators

- 18.** HIV prevalence among pregnant women aged 15-24 years (UNAIDS-WHO-UNICEF)
- 19.** Condom use rate of the contraceptive prevalence rate (UN Population Division)
- 19a.** Condom use at last high-risk sex (UNICEF-WHO)
- 19b.** Percentage of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS (UNICEF-WHO)
- 19c.** Contraceptive prevalence rate (UN Population Division)
- 20.** Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years (UNICEF-UNAIDS-WHO)

Target 8. Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases

Indicators

- 21.** Prevalence and death rates associated with malaria (WHO)
- 22.** Proportion of population in malaria-risk areas using effective malaria prevention and treatment measures (UNICEF-WHO)
- 23.** Prevalence and death rates associated with tuberculosis (WHO)
- 24.** Proportion of tuberculosis cases detected and cured under DOTS (internationally recommended TB control strategy) (WHO)



Goal 7: Ensure Environmental Sustainability

Target 9. Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources

Indicators

25. Proportion of land area covered by forest (FAO)

26. Ratio of area protected to maintain biological diversity to surface area (UNEP-WCMC)

27. Energy use (kg oil equivalent) per \$1 GDP (PPP) (IEA, World Bank)

28. Carbon dioxide emissions per capita (UNFCCC, UNSD) and consumption of ozone-depleting CFCs (ODP tons) (UNEP-Ozone Secretariat)

29. Proportion of population using solid fuels (WHO)

Target 10. Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation

Indicators

30. Proportion of population with sustainable access to an improved water source, urban and rural (UNICEF-WHO)

31. Proportion of population with access to improved sanitation, urban and rural (UNICEF-WHO)

Target 11. Have achieved by 2020 a significant improvement in the lives of at least 100 million slum dwellers

Indicators

32. Proportion of households with access to secure tenure (UN-HABITAT)



Goal 8: Develop a Global Partnership for Development

Target 12. Develop further an open, rule-based, predictable, nondiscriminatory trading and financial system (includes a commitment to good governance, development, and poverty reduction?both nationally and internationally)

Target 13. Address the special needs of the Least Developed Countries (includes tariff- and quota-free access for Least Developed Countries? exports, enhanced program of debt relief for heavily indebted poor countries [HIPC] and cancellation of official bilateral debt, and more generous official development assistance for countries committed to poverty reduction)

Target 14. Address the special needs of landlocked developing countries and small island developing states (through the Program of Action for the Sustainable Development of Small Island Developing States and 22nd General Assembly provisions)

Target 15. Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term

Indicators

Official development assistance (ODA)

- 33.** Net ODA, total and to LDCs, as percentage of OECD/Development Assistance Committee (DAC) donors' gross national income (GNI)(OECD)
- 34.** Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation) (OECD)
- 35.** Proportion of bilateral ODA of OECD/DAC donors that is untied (OECD)
- 36.** ODA received in landlocked developing countries as a proportion of their GNIs (OECD)
- 37.** ODA received in small island developing States as proportion of their GNIs (OECD)

Market access

- 38.** Proportion of total developed country imports (by value and excluding arms) from developing countries and from LDCs, admitted free of duty (UNCTAD, WTO, WB)
 - 39.** Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries (UNCTAD, WTO, WB)
 - 40.** Agricultural support estimate for OECD countries as percentage of their GDP (OECD)
 - 41.** Proportion of ODA provided to help build trade capacity (OECD, WTO)
- Debt sustainability
- 42.** Total number of countries that have reached their Heavily Indebted Poor Countries Initiative (HIPC) decision points and number that have reached their HIPC completion points (cumulative) (IMF - World Bank)
 - 43.** Debt relief committed under HIPC initiative (IMF-World Bank)
 - 44.** Debt service as a percentage of exports of goods and services (IMF-World Bank)

Some of the indicators listed below are monitored separately for the least developed countries, Africa, landlocked developing countries, and small island developing states

Target 16. In cooperation with developing countries, develop and implement strategies for decent and productive work for youth

Indicators

45. Unemployment rate of young people aged 15-24 years, each sex and total (ILO)

Target 17. In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries

Indicators

46. Proportion of population with access to affordable essential drugs on a sustainable basis (WHO)

Target 18. In cooperation with the private sector, make available the benefits of new technologies, especially information and communications technologies

Indicators

47. Telephone lines and cellular subscribers per 100 population (ITU)

48. Personal computers in use per 100 population and Internet users per 100 population (ITU)