2011: ‘Capable’ Institutions for Achievement of the Millennium Development Goals

Stephanie Chan, Mergen Dyussenov, Feng Feng, Abhishek Gupta, Ryoji Kamaga, Snezhina Kovacheva

COLUMBIA | SIPA
School of International and Public Affairs
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**ACRONYMS**

African Development Bank (AfDB)
Alternative Medicine (AM)
American College of Nurse-Midwives (ACNM)
Bureau for Development Policy (BDP)
Canadian International Development Agency (CIDA)
Capacity Development Group (CDG)
CHPS Technical Assistance (CHPS-TA)
Civil Society Organization (CSO)
Community Emergency Transportation System (CETS)
Community Health Activity Plans (CHAP)
Community Health Centers (CHC)
Community Health Nurse Training Schools (CHNTS)
Community Health Nurses (CHN)
Community Health Volunteers (CHV)
Community Health Worker (CHO)
Community Resource Persons (CORPs)
Community-based Health Planning and Services Initiative (CHPS)
Consumer Price Index (CPI)
Department of Traditional and Alternate Medicine (DTAM)
Development Assistance Group (DAG)
Development Partners (DPs)
Directorate of Rural Water Supply (DRWS)
District Health Information Management System (DHIMS)
District Health Management Team (DHMT)
Ethiopian People's Revolutionary Democratic Front (EPRDF)
Faith Healers (FH)
Federal Ministry of Health (FMOH)
Gesellschaft fur Technische Zusammenarbeit (GTZ)
Ghana Health Service (GHS)
Ghana Poverty Reduction Strategy (GPRS)
Global Alliance for Vaccines and Immunization (GAVI)
Government Hospitals (GHSP)
Government of Ethiopia (GOE)
Government of Ghana (GOG)
Gross Domestic Product (GDP)
Growth and Poverty Reduction Strategy II (GPRS II)
Health Centres (HC)
Health Extension Programme (HEP)
Health Extension Workers (HEWS)
Health Sector Development Plan III (HSDP III)
Highly Indebted Poor Country (HIPC)
Human Development Index (HDI)
Human Immunodeficiency virus/ Acquired Immune Deficiency Syndrome (HIV/AIDS)
Human Resource Development Centre (HRDC)
Internally Generated Fund (IGF)
International Health Partnership Compact (IHP)
International Monetary Fund (IMF)
Japan International Cooperation Agency (JICA)
Joint Financing Arrangement (JFA)
Local Water Point Committee (LWPC)
Local Water Point Associations (LWPA)
Medium Term Health Strategy (MTHS)
Millennium Development Goals (MDG)
Ministries Departments and Agencies (MDA’s)
Ministry of Finance and Economic Development (MoFED)
Ministry of Finance and Economic Planning (MoFEP)
Ministry of Health (MOH)
Mission Based Providers (MBP)
Non-Governmental Organization (NGO)
Poly Clinics (PC)
Private Hospitals and Maternity Homes Board (PHMHB)
Private Medical and Dental Practitioners (PMDP)
Protection of Basic Services (PBS)
Quasi Government Institution Hospitals (QGIH)
Reproductive Health and Family Planning (RH/FP)
Rural Water Extension Officer (RWEO)
School of International and Public Affairs (SIPA)
Spanish Agency for International Development Cooperation (AECID)
Swedish International Development Cooperation Agency (SIDA)
Tanzania Essential Health Interventions Project (TEHIP)
Tanzania-Ghana Health Partnership (TGHP)
Teaching Hospitals (THOSP)
The Expanded Program on Immunization (EPI)
The Global Alliance for Vaccines and Immunisation (GAVI)
The Integrated Management of Childhood Illnesses (IMCI)
The Navrongo Health Research Centre (NHRC)
The United Nations Development Programme (UNDP)
Traditional Medical Providers (TMP)
Tuberculosis (TB)
Turkish International Cooperation Agency (TICA)
U.S. President’s Emergency Plan for AIDS Relief (PEPFAR)
UK Department for International Development (DFID)
United Nations Children’s Fund (UNICEF)
United Nations Development Programme (UNDP)
United Nations Population Fund (UNFPA)
United States Agency for International Development (USAID)
Water Management Act (WMA)
Water Point Association (WPA)
Water Point Committee (WPC)
Water Supply and Sanitation Sector Policy (WASP)
World Health Organization (WHO)
ACKNOWLEDGEMENTS

The views expressed in this report are independently those of the SIPA team, and are not to be construed as necessarily representing UNDP, or its Executive Board. The Team has received substantial support both from SIPA faculty and UNDP. We are specifically grateful for the invaluable guidance provided by SIPA Professors J. Lawrence and E. McGill. Our sincere appreciation extends to Tsegaye Lemma, who has patiently reviewed our progress and has been the major contact person at UNDP; Alessandra Casazza for her invaluable disposition to organize and overview the project from UNDP perspective, as well as other UNDP representatives.

Finally, we would like to thank those whom the Team interviewed over the course of the project. This project would not have been possible without their help.
I. EXECUTIVE SUMMARY

World leaders have pledged to achieve the Millennium Development Goals (MDGs), including the overarching goal of cutting poverty in half by 2015. The Outcome Document from the 2010 MDG New York Summit has called for “renewed commitment, effective implementation and intensified collective action” to work on national development strategies, policies and approaches that have proved to be effective, with strengthened institutions at all levels, increased mobilization of resources for development, increased effectiveness of development cooperation and an enhanced global partnership for development.”¹ UNDP is expected to play a significant role in assisting countries in acting upon these Summit calls, and has outlined in its International Assessment what it will take to reach the Goals by their 2015 deadline.

Within UNDP’s current Strategic Plan, capacity development has been designated as the agency’s ‘over-arching contribution’ in UNDP’s development programming. UNDP’s Capacity Development Group (CDG) has looked at the institutional capacity constraints beleaguering MDG achievement. The MDG diagnostic studies currently available suggest that behind any lagging MDG there are one or more weak institutions with attendant weak delivery systems. After rigorous analysis, UNDP has identified the six most common implementation bottlenecks²:

1. Breakdown in the supply chain for delivery of public services³
2. Inability to deploy skilled personnel where they are most needed
3. Mandate mix-ups and lack of clarity in roles and responsibilities among delivery agencies
4. Depleted and overstretched basic country systems
5. Challenges in reaching the last mile
6. Institutional arrangements unsuited to deal with emerging complex problems

This report contributes to CDG’s ongoing research agenda through a case-study analysis on institutions in three different countries: the International Health Partnership Compact (IHP) and Health Extension Programme (HEP) in Ethiopia; the Community-based Health Planning and Services Initiative (CHPS) in Ghana, and the state-owned water supply corporation NamWater and local Water Point Committees (WPCs) in Namibia. In each case, the team analyzed the capacities developed in the identified institutions and how these capacities have contributed to successfully addressing the relevant bottlenecks, which in turn has contributed to progress on MDG targets. The focus of the analysis is specifically on institutions and MDG achievement. Each institution/ pair of institutions have been examined have been examined through the lens of the six implementation bottlenecks to reaching MDG targets.

¹Outcome Document [A/65/L.1], Section 9
²A “bottleneck” is a phenomenon where the performance or capacity of an entire system is limited by a single or limited number of components or resources (Stein, 1997). In the context of development work and CDG’s analysis, the term “bottleneck” is used to signify limited implementation capacity, which can lead to the failure of an institution to achieve its mandate and to advance broader development goals.
Based on the research findings from each case, the Team then distilled the following concise list of cross-cutting conclusions (across the three cases) in view of the bottlenecks framework:

- If there is significant positive progress on one bottleneck, sometimes efforts are needed on the second bottleneck to avoid progress reversal
- The bottlenecks in supply-chain services (1) and the last mile (5) are closely associated. The research from three case studies suggests that both these bottlenecks seem to move in synchronized manner.
- The resolution of one bottleneck can sometimes negatively reverse progress on another bottleneck. Research shows that a narrow focus on targeting one bottleneck can worsen another bottleneck.
- An across-the-board stakeholder engagement in the development process is a common theme in successful bottleneck resolution
- Community-based management is instrumental for solving the last mile (5)
- Technical training combined with soft skills (negotiations and communications skills) training positively impact the skills bottleneck (2)
- An aligned and targeted channeling of resources, combined with enhanced managerial capacity, can positively affect the supply-chain bottleneck (1)
- Government can create an enabling environment in capacity development to tackle the skills bottleneck

On the basis of the above-mentioned conclusions, the Team has come up with a list of cross-cutting recommendations, which are intended to serve as a tool for CDG to engage in development activities that enhance the promotion of more capable, sustainable institutions across countries:

- Formulate capacity-building strategies for institutions with a long-term outlook to holistically address key bottlenecks.
- Design institutions, which take into account the possibility of long-term tensions between bottlenecks
- Institutionalize and integrate skill-building into organizational planning
- Channel resources in an integrated manner to the identified key institution(s).
- Improve coordination between community-based organizations and institutions especially in the case of last-mile bottlenecks.
- The public sector should continue exploring innovative private-sector and civil society solutions for creating an enabling environment.
- Conduct further research on whether linkages justify an integrated approach to the last-mile and supply-chain bottlenecks.
- Conduct further research to explore causal relationships between bottlenecks.
II. INTRODUCTION

The United Nations Development Programme (UNDP) is the UN’s major development agency, and is at the core of the UN system’s global development network. It advocates for change and connects countries to knowledge, experience, and resources to help people build a better life. It currently works on the ground in 166 countries, helping nations meet their development objectives, in particular the Millennium Development Goals (MDGs) by 2015.

Capacity development has been designated in UNDP’s current Strategic Plan as the agency’s ‘over-arching contribution’ in its development programming. UNDP defines capacity development as a “process through which individuals, organizations and societies obtain, strengthen and maintain the capabilities to set and achieve their own development objectives over time”. UNDP’s work in the area of capacity development has been to target government institutions that enhance “effective state capacity, providing the largest number of people benefit over time from development.”

The Capacity Development Group (CDG) was established in 2002 under the Bureau for Development Policy (BDP) of UNDP in order to more systematically address UNDP’s support of national and local capacity development. CDG has prioritized four core issues: institutional arrangements, leadership, knowledge and accountability as thematic ‘drivers’ for consideration in defining, fostering and helping countries effectively manage national capacity for development.

The CDG’s examination of institutional capacity constraints beleaguering MDG achievement and its MDG diagnostic constraints currently available suggest that behind any lagging MDG there is one or more weak institutions with attendant weak delivery system. Irrespective of country, continent, region, or base endowments, almost every diagnosis of the MDGs takes the view that implementation capacities are the most commonly occurring bottleneck.

The term “bottleneck” is similarly applied across disciplines – management, engineering, software development – to signify a process in a chain of processes such that its limited capacity reduces the capacity of the whole chain. In other words, a “bottleneck” is a phenomenon where the performance or capacity of an entire system is limited by a single or limited number of components or resources. In the context of development work and CDG’s analysis, the term “bottleneck” is used to signify limited implementation capacity, which can lead to the failure of an institution to achieve its mandate and to advance broader development goals.

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7 Capacity Development Group, 2008, p.4
8 UNDP Capacity development Group, 2009, p. 6
9 UNDP Bureau for Capacity Development, 2010
10 UNDP Bureau for Capacity Development, 2010
11 Goldratt, 2004
12 Stein, 1997
UNDP’s capacity diagnostics have identified six most common implementation bottlenecks:
1. The breakdown in the supply chain for public services
2. Distortions in skills reaching where they are needed
3. Mandate mix-ups and lack of clarity in roles and responsibilities
4. Depleted and overstretched basic country systems
5. Challenges in reaching the last mile
6. Complex problems that need breakthrough thinking in institutional arrangements.

Building upon two previous SIPA workshop reports, the UNDP 2011 Workshop Team (the Team) examined the main determinants of the institutions’ capacity to successfully address the six bottlenecks and thus contribute to the achievement of the MDG. After a discussion with UNDP-CDG, the Team chose to examine efforts relating to achieving MDGs 4A, 5A and 7C.

III. RATIONALE

An increasing number of international aid organizations, from large multilaterals to small community development organizations, are placing the cultivation of national-to-local capacity at the center of their programming efforts. Renewed interest in capacity development stems from an intersectoral commitment to improving the effectiveness of governance, explicitly bottom-up, from local-to-national levels, with the ultimate objective of improving lives and livelihoods of people in developing countries. Countries rely on the capacity and resourcefulness of their citizens for successful development. Lessons learned from the past 60 years of development indicate that sustained, positive, long-term impacts from development interventions require as much attention to knowledge and organizational management as infrastructure, goods, and other objects with the potential for limited short-term impact. UNDP summarizes this trend by noting that “while financial resources are vital to success, they are not enough to promote human development in a sustainable manner.” The field of capacity development has become an essential component of the development sector and has yielded a wide variety of programs that have been applied to a range of different sectors, including governance, sustainable development, and health. In 2001 UNDP was one of the first organizations to begin serious examination of the relationship between capacity as an outcome, and capacity development as a process. Other multilaterals and donors are now beginning to follow suit.

The term ‘capable’ is applied to describe those government institutions that improve overall state capacity through the effective way they carry out their mandate. ‘Building and strengthening ‘capable institutions’ is at the heart of ensuring that individuals, their organizations and communities throughout civil society organize and work together towards achieving their

13 UNDP, Capacity development: A UNDP Primer
14 UNDP Capacity Assessment Practice Note, 2008, p. 4
15 Baser & Morgan, 2008
16 OECD, 2010
development goals”. Hence, the team sought to address the question of what 'drivers' make institutions capable and have increased their capacity, (and therefore indirectly overall state capacity).

According to UNDP “The MDGs, have become a guiding force for action and investment in developing countries. Impressive progress has been made, including in some of the world’s poorest countries. The number of deaths of children under five is declining steadily worldwide; school enrollment figures are increasing as is access to clean water. Yet progress is “uneven, fragile and simply too slow.” With the 2015 MDG deadline approaching, for UNDP to effectively support their partners, diagnostics need to be constructed to determine which policies will yield the best impact, in view of the six bottlenecks discussed.

Accordingly, this report delivers a set of conclusions from desk research and field contacts about policy-choices, institutional arrangements and investment in knowledge and other resources, in view of addressing the six bottlenecks (limitations of implementation capacity) identified by the UNDP/CDG. Additionally, the SIPA team has conducted further research in finding linkages between the bottlenecks, after analyzing their overall relevance to three case-studies.

While the Team has kept in mind the limitations for generalizing conclusions, given the unique circumstances of each country, findings nevertheless point to the overarching relevance of the six bottlenecks (and especially distortion of skills, reaching the last mile and breakdown of the supply-chain of public services) and their centrality to achieving development impact. The Team’s work also advances the understanding of the dynamic interaction among bottlenecks and their evolving character throughout time.

IV. Methodology

This section describes the overall framework adopted for the Team’s research and includes analytical tools used by the Team, and identifies the different stages, through which the Team went through as a part of the research process.

Viewing capacity development in a ‘system’ or ‘institution’ context helps us to understand complex interventions involved in bringing about institutional change. Formal and informal entities interactively perform functions and produce products and services that make development possible. 19

17 UNDP Capacity Development Group, 2009, p. 8
18 UNDP, MDG Breakthrough strategy, 2010, p. 5
19 UNDP, Capacity development: A UNDP Primer
The methodological framework, presented in this section, including inputs, outputs, outcome and impact largely draws upon the UNDP CDG Framework for Measuring Capacity Development,\(^{20}\) and adapts it to the question of overcoming the six bottlenecks and accomplishing progress toward the MDGs.

**Inputs** are the resources, such as human, financial and physical resources, used by institutions in the public sector, civil society, and private to convert inputs to outputs.\(^{21}\)

**Outputs** are the intra-institutional capacities that have been developed in the targeted or identified institution, and include:

- Managerial capacity (with focus on leadership, monitoring and evaluation and human-resource management)
- Financial capacity, (budgetary competency, accountability, transparency, audit trails etc.)
- Stakeholder engagement (inter-sectoral outreach to other governmental units, and to communities in civil society at all levels)
- Institutional arrangements (mandate, objective, structure and a clear definition of roles and responsibilities).

**Outcomes** from the institutions’ activities pertain to progress on the six bottlenecks. These relate to improved service delivery and evidence of progress on the bottlenecks.

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\(^{20}\)UNDP, Capacity development: A UNDP Primer
\(^{21}\)UNDP, Capacity development: A UNDP Primer
**Impact** is defined as the positive movement in indicators related to MDGs.

The intra-institutional capacities under the category “outputs” were chosen to holistically capture various channels, through which the capacity of an institution can be bolstered. Given the methodological framework, the team nonetheless remains cautious of the conceptual challenges associated with drawing causal links between outcome and impact, given that impact usually is the summative product of multiple processes happening simultaneously, rather than of a single institution.

The Team applied the above framework to three selected case-studies in order to analyze selected institutions that have developed capacity to overcome implementation-capacity challenges and thus contributed to progress toward achieving the MDGs of interest to this study. While alternative methodologies might approach institutional development through other prisms, the team has anchored its methodology around CDG’s elaborate conceptual scheme, which has already gained traction among the development community and has pushed forward the global discourse on effective development aid. Building upon it, the team has focused on the outcomes of capacity-building as successes in addressing the defined implementation bottlenecks.

### A. Refining the Scope

In order to refine the scope of the project to manageable proportions, the team worked on a two-step strategy to limit the research topics:

#### A.1. MDG SELECTION

As eight MDGs constitute sixty indicators\(^{22}\), the team after consultation with UNDP/CDG chose to focus on two sectors and three indicators to arrive at a manageable scope.\(^{22}\) The team also wanted to analyze MDGs that exhibited linkages, to explore the prospects of common capacity development strategies, which draw upon the bottleneck framework.\(^{23}\) The team excluded MDGs 1 and 2, after discussion with UNDP/CDG during the first meeting. The next step undertaken by the team was background examination of the various literature archives, where the availability and consistency of data from different sources was a primary consideration. The Team examined rankings on MDG progress, based on data—within the UN system, and used auxiliary data-sets on inequality and poverty. In the interests of adding the most value to UNDP’s extensive work on MDG progress, the Team selected MDGs 4A, 5A and 7C:

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\(^{22}\) UN Stat, Official list of MDG indicators, 2008

\(^{23}\) Oloo, 2005
<table>
<thead>
<tr>
<th>Goal</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4: Reduce child mortality rate</td>
<td>Target 4A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate</td>
</tr>
<tr>
<td>Goal 5: Improve maternal health</td>
<td>Target 5A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio.</td>
</tr>
<tr>
<td>Goal 7: Ensure environmental sustainability</td>
<td>Target 7C: Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation</td>
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Given that UNDP/CDG initially expressed interest in achievements in the health sector, the Team selected MDGs 4A and 5A, which exhibit strong conceptual interrelations e.g.?. While these MDGs are explicitly health-related, Goal 7/Target 7C was chosen, given the concept of linkages and the relationship between access to safe drinking water and basic sanitation to child mortality and maternal health. Hence, the Team's MDG selection has enabled a focused study of various aspects of the health challenges faced by the developing world.

### A.2. COUNTRY SELECTION

In view of the task to identify good-practices that are potentially replicable, rather than work with outliers, the Team - primarily focusing on countries in Sub-Saharan Africa as initially discussed with UNDP/CDG - eliminated countries with abundant natural resources such as oil, natural gas or precious metals. This elimination was informed by the “resource curse” paradox, according to which countries and regions with an abundance of natural resources, particularly non-renewable, tend to have worse development outcomes than countries with fewer natural resources. The team’s methodological decision was also informed by research on single-resource exporting countries. We examined the mixed record of success and failure of 40 single-resource exporting economies, and uncovering a unique set of policy challenges and opportunities faced by countries, which are hardly replicable in other country-contexts. Similarly, the Team excluded countries such as South Africa, which has been an outlier in terms of economic performance and inequality. In addition to GDP data and data from the Human Development Index, the Team considered criteria such as comparable geographic size, relatively stable political regimes and diversity in terms of rural-urban population distribution, and put emphasis on the former when faced with the challenge to also diversify in terms of colonial history.

In addition, the Team collected the most recent data from the UN and performed quantitative analysis, ranking countries according to their MDGs progress. In view of CDG’s focus on the

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24 Oloo, 2005
25 Auty, 1993
26 Hopkins, Lawrence, Stephens & Webster, 2007
28 For example, whether the country was under French, British, Belgian, German or another foreign rule.
29 UN data
importance of replicability of prospective findings, the Team picked both outstanding and satisfactory performers on the MDG progress. As a consequence, Ghana, Namibia and Ethiopia were selected for analysis.

**B. Case-study Approach**

Once the countries were selected, the Team adopted a case study approach, analyzing three institutions across different sectors using the methodological framework shown in figure 1 above. The research used both primary and secondary sources. Literature reviews were conducted for each sector and country analysis to develop an in-depth understanding of issues involved, alongside additional literature review to deepen the Team's understanding of institutional theory—in the context MDG achievement.

A preliminary stakeholder analysis, addressing the three CDG-identified classifications: the enabling environment, the organizational and individual levels was conducted to identify potential interviewees. Eleven formal and six informal interviews were held with interviewees from government institutions, international organizations, NGOs and independent researchers. Interviewees included UNDP Staff, UN Habitat staff, prominent academics from Columbia University's Mailman School of Public Health and the Earth Institute, program directors at NGOs involved in the respective countries such as the Population Council, the Clinton Health Access Initiative, the Rockefeller Foundation, USAID Ghana staff, the Center for National Health Development (Ethiopia), as well as government officials.
V. ANALYSIS AND FINDINGS

This section schematically presents the Team’s analysis and findings from Ethiopia, Ghana and Namibia. Each country analysis is structured as follows:\(^{30}\):

1. Summary
2. Introduction
   i. Sector Summary
   ii. Millennium Development Goals Overview
3. Institutional Arrangements within the Sector
4. Bottlenecks
5. Analysis of the Selected Institution
   i. Background Of The Institution(s) Analyzed
   ii. Inputs into the Institution(s) Analyzed
   iii. Outputs of the Institution(s) Analyzed
      • Better institutional Arrangements
      • Management Capacity
      • Financial Capacity
      • Stakeholder Engagement
   i. Outcome of the Institution(s) Analyzed
   ii. Impact of the Institution(s) Analyzed
6. Bottlenecks Still to be Addressed
7. Concluding Remarks

\(^{30}\) For detailed descriptions of how each subheading is defined, refer to METHODOLOGY.
A. Ethiopia

A.1. SUMMARY

The Ethiopia case-study first presents a brief country back-ground and sketches the governance structures within the health sector. Specification of the historical bottlenecks within the health-sector is followed by analysis of the institution selected for this study – the International Health Partnership Compact (IHP) and Health Extension Programme (HEP), found to be important drivers behind positive MDG progress: Ethiopia's progress for achieving the MDGs have been defined as “promising”\textsuperscript{31}.

The two institutions are examined through the framework outlined in the Methodology Section. The category “inputs” pertains to the availability of resources for the institution: human, financial and physical. Given the institutions activities, the outputs are the services provided. The research will then present how these selected institutions improve institutional arrangements, management capacity, finance capacity and better stakeholder engagement within the health sector. The outcomes from the institutions’ activities pertain to progress on the identified bottlenecks, and the impacts pertain to the effects on the movement of MDG indicators.

A.2. INTRODUCTION

The Federal Democratic Republic of Ethiopia (Ethiopia) is Africa’s oldest independent country. Ethiopia is known for its periodic droughts and famines, its long civil conflict and a border war with Eritrea. Although Ethiopia has had fewer of the coups that have plagued other African countries, drought, famine, war and ill-conceived policies brought millions to the brink of starvation in the 1970s and 1980s. Since 1990s, reducing pervasive poverty and ensuring human development in Ethiopia have been the objectives of the Ethiopian government. This vision is explicitly incorporated in various government development policy documents. For more information about Ethiopia, please refer to the supplementary guide, section 1.1.

A.2.i. Health Sector Summary

Ethiopia suffers from gaps in health-service provision in rural areas, where approximately 84% of the population lives.\textsuperscript{32} Ethiopia is one of the 57 countries identified by the World Health Organization (WHO) with a critical shortage of health workers.\textsuperscript{33} To alleviate the shortage, the government initiated the Health Extension Programme (HEP) in 2003, under the framework of Health Sector Development Plan (HSDPIII) (2005-9), which focuses on both human resource development and the construction and rehabilitation of facilities.\textsuperscript{34} To support this initiative, the government of Ethiopia (GOE) had to mobilize resources from international donors to fund the

\textsuperscript{31} Ethiopia: 2010 Millenium Development Goal Report, 2010
\textsuperscript{32}International Health Partnership: Taking Stock Report, 2008
\textsuperscript{33} WHO, 2010
\textsuperscript{34} WHO, 2010
health program. For more detailed information about HEP, please refer to supplementary guide Section 1.2.

A.2.ii. Millennium Development Goals Overview

With the HEP and other health programs, MDGs 4A\textsuperscript{35} and 5A\textsuperscript{36} have been steadily improving in Ethiopia. MDG indicator 4A is on track, and indicator 5A is expected to be on track by 2015.

Table 1 Progress towards MDGs (Combined data source from UNDP and MoFED)\textsuperscript{37,38}

<table>
<thead>
<tr>
<th>MDGs</th>
<th>Base level (1990)</th>
<th>2001/02</th>
<th>2005/06</th>
<th>2009/10</th>
<th>MDG Target</th>
<th>National Target 2014/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDG4: Under 5 mortality rate (per 1000)</td>
<td>190</td>
<td>167</td>
<td>123</td>
<td>101</td>
<td>63</td>
<td>67</td>
</tr>
<tr>
<td>MDG5: Maternal mortality ratio (100,000)</td>
<td>871</td>
<td>871</td>
<td>673</td>
<td>590</td>
<td>290</td>
<td>267</td>
</tr>
</tbody>
</table>

Improvement of children’s health is an essential component of the Health Sector Development Programme (HSDP III), which focuses on poverty-related health conditions. Improvement in maternal mortality is closely correlated with access to and quality of health facilities and professionals. On that basis, the efforts already taken to date are fundamental building blocks to help Ethiopia achieve the goal of reducing maternal mortality by three-quarters by the end of 2015.\textsuperscript{39}

A.3. INSTITUTIONAL ARRANGEMENTS WITHIN THE HEALTH SECTOR

This section of the paper addresses the governance of Ethiopia’s health sector, identifies the major stakeholders and their roles, and outlines recent policy developments, with relevance to the MDGs.

Government of Ethiopia (GOE): The nodal health ministry of Ethiopia is called the Ethiopian Federal Ministry of Health (FMOH). It has been firmly committed to the steadily increase of resources for the health sector. GOE’s adoption of the HSDP III plan enabled mobilization of greater domestic resources by channeling international aid to the health sector.

\textsuperscript{35} Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate  
\textsuperscript{36} Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio.  
\textsuperscript{37} GOE, 2010  
\textsuperscript{38} MoFED, 2010  
\textsuperscript{39} GOE, 2010
Health Extension Program (HEP): In 2003, FMOH launched the Health Extension Program (HEP), which focuses on community-based interventions, including the promotion of family planning. This approach aligns effectively with Pathfinder International’s community-based approach to the delivery of quality reproductive health and family planning (RH/FP) services. For more detailed information about HEP, please refer to supplementary guide Section 1.2.

Development Assistant Group (DAG): DAG was formed in 2011 to ensure donor harmonization. The DAG is a coordination group among international donors, which currently comprises 26 bilateral and multilateral development partners (Supplementary guide - Section 1.3).

Multiple Donors: In addition to committing to DAG, several donors organized individual programs in the health sector. Even though most of the funding to health sector was towards HIV/AIDS, it was not streamlined.40

A.4. BOTTLENECKS

Given CDG’s framework of six institutional bottlenecks, the main bottlenecks inhibiting MDG progress in Ethiopia’s Health Sector have been identified in this section based on Team research and interviews. The next sections will further address these three bottlenecks, namely, the breakdown in the supply chain for public services, distortions in skills reaching where they are needed and challenges in reaching the last mile.

Breakdown in the supply-chain for public services (1): With the exception of the HIV/AIDS sector, the shortage of available funds in the health sector has slowed the development of other health services such as primary health care, which is critically related to MDGs 4 and 5. The largest donors for the health sector in Ethiopia are the Global Fund and PEPFAR, and they focus on the HIV/AIDS agenda, providing vertical funds. (Figure 2) Below shows the aid distribution between HIV/AIDS vs. other health initiatives in 2008/09). Hence, aid for health services related to child and maternal health appeared.

Distortions in skills reaching where they are needed(2): The health sector in Ethiopia faced shortage of health workers in rural area,41 and also faces an existing institution capacity constraint in funding coordination. The shortage of available skilled health-care professionals, especially in rural areas, has been a challenge. Not having enough primary health workers and mid-wife within the healthcare system has been identified as a primary limitation of the health-system by the government itself, the donor community and NGOs.42

Challenges in reaching the last mile(5): Scaling up on the quantity of Health Extension Workers (HEWs) is an important step for HEP to reach the last mile. However, there is a lack of funding to

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40 Pereira, 2009, p.13
41 WHO, 2010
42 WHO, 2010
support this initiative.\footnote{Ministry of Finance and Economic Development, 2010} For example, to meet the minimum staffing pattern, there is a huge gap between the supply and demand of human resources required, for scaling up basic and emergency obstetrics and newborn care services in health centers and hospitals to achieving health related MDG targets.\footnote{Ministry of Finance and Economic Development, 2010}

Figure 2: Large amount of aids from donors is committed to HIV/AIDS. More resources for health sector except for HIV/AIDS should be mobilized\footnote{Calculation is based on [FMOH, 2009] pp116-117, [The Independent Review Team, 2008] p98, and [PEPFAR]. Funds for HIV/AIDS is the sum of the Global Fund and PEPFAR. PEPFAR' funding is estimated to be 230 million USD [The Independent Review Team, 2008] p98. *Total of Pooled funds for health is the sum of the MDG Fund, PBS and the health pooled fund.}

\begin{figure}[h]
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\includegraphics[width=0.5\textwidth]{figure2.png}
\caption{Large amount of aids from donors is committed to HIV/AIDS. More resources for health sector except for HIV/AIDS should be mobilized.}
\end{figure}

A.5. ANALYSIS OF IHP

A.5.i. Background of the Institution Analyzed

Even after the implementation of HEP, the abovementioned bottlenecks continued to be relevant to Ethiopia’s health sector. In 2008, GOE created a new funding institution, the “International Health Partnership (IHP) Compact”, to channel funding from donors to HEP, as HEP had proven its ability to accelerate progress in MDG indicators. Additionally, GOE created the MDG pooled fund to target 4A and 5A specifically.
Figure 3: Schedule of Progress on IHP Compact. The GOE has made efforts to promote donor harmonization in the health sector since 2005. IHP Compact was signed in 2008.

IHP allows for donors to better track and monitor the flow of their aid. The aim of IHP was to eventually integrate fragmented funds under its umbrella, and to increase contributions to the primary health sector. This new funding scheme is expected to accelerate capacity development of the Health Extension Programme (HEP).\footnote{46} The Fund will not be used for HIV/AIDS, malaria, and TB because these issues already receive substantial support from the Global Fund and PEPFAR. The institutional analysis in the following sections will focus on the IHP as a major institutional component in the Ethiopian health sector, and HEP to the extent that it has been influenced by IHP.

A.5.ii. Inputs into the Institution Analyzed

Inputs include human, financial and physical resource used for the activities of the institutions analyzed – in Ethiopia’s case – IHP and HEP - to develop financial capacity, management capacity, better institutional arrangements and capacity for stakeholder engagements (outputs). For a more detailed description of inputs, refer to Methodology.

The GOE has made efforts to promote donor harmonization in the health sector since 2005. As a result of its efforts, the new funding scheme, the International Health Partnership (IHP) Compact\footnote{47}
was finally introduced in Ethiopia by signing in August 2008 between the GOE and donors (Figure 3). The main purpose of the IHP and its related agreement is the Joint Financing Arrangement [JFA] between the Government of Ethiopia and development partners on support to the MDG fund, to establish “the MDG Pooled Fund.”

**A.5.iii. Outputs of the Institutions Analyzed**

The category “institutional outputs” pertains to the intra-institutional capacities that have been developed within IHP and the MDG Fund, and includes managerial capacity, financial capacity, stakeholder engagement and institutional arrangements, analyzed below.

**Better Institutional arrangements:** Through the MDG Fund, GOE is able to harmonize and alignment health-related activities. The JFA defines the MDG Pooled Fund as a cooperative funding mechanism managed by the Federal Ministry of Health (FMOH) using Government's procedures, which provides specific federal grants for public goods and capacity development activities within the health system strengthening framework.

The inception of the flagship Health Extension Programme (HEP) was completed during 2009. This was the first year that the full complement of community based health workers supporting the Ministry of Health’s (MOH) efforts towards the achievement of MDG 4A and 5A were deployed, working on a combination of promotional, preventative and basic curative high impact interventions.

**Management Capacity**

The MDG Pooled Fund is one of the GOE’s preferred modalities for scaling up Development Partners’ assistance in support of the Health Sector Development Plan III (HSDP III). In the JFA, the development partners’ signatories are required to commit to providing resources to the MDG Pooled Fund aligning with the GOE’s “one plan, one budget, one report” framework by using country-led arrangements for planning, execution and reporting. This framework is a new management scheme aimed to increase transparency, where donors can better track and monitor the flow of their aid. In the long-run, the GOE would like all pooled funds and other funding initiatives for health to be incorporated into the MDG Pooled Fund.

Additionally, with regard to HEP, the main method of intervention is training and deploying Health Extension Workers (HEWs) in rural villages. The HEWs have basic skills in clean delivery, essential newborn care and recognition and referral of maternal and newborn complications. Currently, it has been observed that after the implementation of HEP and investments in health facilities all over the country, the proportion of the population living less than 10 km away from a health post has increased. So far, the total number of HEWs trained and deployed has reached 30,193 accounting for 98.07% of the total national requirement of 30,786 HEWs. Some of their major tasks include delivering basic sanitation, immunization and providing other health services in mainly rural

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48 MoFED, 2008

**Capable Institutions for Achievement of the MDGs**
villages in the country. Crucially, the commitment of the government to introduce community-based pneumonia management brings an opportunity to further accelerate the reduction of child mortality.\(^{49}\)

**Financial Capacity**

Good management allowed for the integration of fragmented funds under the IHP institution to generate more aid funding. (Figure 4) The integration of pooled funds for health sector has made progress between the MDG Pooled Fund and the Protection of Basic Services (PBS). As a transition step towards the complete integration, the MDG Pooled Fund includes two sub-accounts under the IHP scheme. The MDG Fund Principal sub-account managed by the FMOH receives direct financing from some development partners. The PBS provides financing for a second sub-account within the MDG Fund. Since the MDG Fund promotes transparency and accountability, more donors would be interested to participate in this pooled fund.

**Figure 4: IHP compact encourages harmonization, alignment and ownership through the establishment of MDG Pooled Fund\(^{50}\)**

**Stakeholder engagement**

This PBS sub-account encourages development partners who are not yet able to fully harmonize or channel their assistance directly to the MDG Fund Principal sub-account, that is managed by FMOH to support the health sector because the PBS’ sub-account is administered by the World Bank.\(^{51}\) Although some donors still have more confidence in the World Bank management rather than that of the FMOH, however, this transitional integration is a practical way towards further integration of funds brought by the IHP scheme. (Figure 4).

\(^{49}\) MoFED, Ethiopia: 2010 MDGs Report, 2010

\(^{50}\) (FMOH), N.K, & Lemma, 2008, p. 11

\(^{51}\) The World Bank, 2009
A.5.iv. Outcomes Of The Institutions Analyzed

The analysis above substantiates the conclusion that IHP and HEP were instrumental in improving MDGs 4A and 5A. In the following section, the outcomes are deconstructed through the bottleneck framework.

**Breakdown in the supply-chain for public services:** IHP and the MDG Pooled Fund provided the financial resources to accelerate the implementation capacity of the Health Extension Programme (HEP).\(^{52}\) IHP's sole focus on primary health care, and its channeling of resources through the MDG Pooled Fund to support maternal and child health were instrumental in progress on MDG 4A and 5A. To address the funding constrains in the health sector, the MDG Pooled Fund has mobilized more assistance to health programs. The contribution to the MDG Pooled Fund increased from 13.6 Million USD (2008/9) to 34.5 Million USD (2009/10) and its share of total disbursement by development partners increased from 6 % (2008/9) to 9% (2009/10) (Supplementary Guide, Section 1.4). The MDG Pooled Fund is still not the main resource for health sector but surely contributing to the resource mobilization for non-HIV/AIDS health sector.

**Distortions in skills reaching where they are needed:** Initially, HEP struggled with shortage of health workers and inadequate financial capacity. IHP's injection of funding is to build the financial capacity of HEP, such that it can overcome the shortage of health workers through accelerated hiring process. WHO's report on HEP maintains that "if the current momentum of international partnership, political commitment and leadership continue, Ethiopia will have a sufficient number and mix of health professionals who can contribute to achieving universal access to health care and the health-related MDGs by 2015."\(^{53}\) As IHP was only recently formed and skill building is a long-term process, it is too early for the team to conclude that the positive impact of this bottleneck has significantly impacted MDG progress.

**Challenges in reaching the last mile:** HEP followed a community-based approach to delivery of quality reproductive services. It focused on community-based interventions, including the promotion of family planning. The MDG Pooled Fund targeted service delivery, public health commodity procurement, and strengthening health systems through the HEP. IHP's formation cleared the roadblock for HEP’s successful implementation through streamlined funding, which boosting HEP’s financial capacity. After IHP, HEP was more effective in providing maternal and child health care services available in rural areas.\(^{54}\)

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52 The HEP funded by the MDG Pooled Fund has successfully improved child health and maternal health relating to MDG 4 and 5. There are already many studies about the success of the program such as: WHO, 2010
53 WHO, 2010, p.8
54 WHO, 2010, p.8
A.5.v. Impact Of The Institutions Analyzed

With improved managerial capacity, more streamlined donor coordination and an injection of funding to primary healthcare, MDGs targets 4A and 5A have been steadily improving in Ethiopia. The IHP and the MDG Pooled Fund mechanism have accelerated the HEP by funding further flexible resources that the FMOH can manage. By scaling up the primarily health care services, HEP has contributed greatly in overcoming the bottlenecks of “challenges in reaching the last mile” and “the distortions in skills reaching where they are needed”. The IHP institution has contributed to the aspect of the international partnership in the health program. Due partly to the health services (HEP)\textsuperscript{55} and GOE’s funding mechanism (IHP), Ethiopia’s MDG 4A and 5A are evaluated as “Very likely to be achieved, on track” in the MDG monitor created by the UNDP.\textsuperscript{56}

Generally, the current on-going integrated and comprehensive interventions in the health sector, with complementary interventions in other sectors have a significantly positive impact in improving the maternal health and achieving the goal of reducing maternal mortality by three quarters by 2015.

A.6. Bottlenecks Still to be Addressed

Our analysis looked not only at key bottlenecks resolved, but also quite naturally uncovered other new bottlenecks GOE faces today. The section below discusses how the bottleneck “complex problems that need breakthrough-thinking in institutional arrangement” is inhibiting further development of Ethiopia’s health sector.

**Complex problems that need breakthrough thinking in institutional arrangement:** There still are a limited number of donors committing to the IHP scheme. While several donors have strongly committed to the IHP institution, many donors are still reluctant to join the IHP and the MDG Pooled Fund arrangement for reasons stated below. Donors preferred contributing to specific programs instead of depositing in the pooled fund. DAG Ethiopia comprises 26 members, but only 11 agencies signed the Ethiopia IHP Compact, 7 of which signed the JFA. Only 5 of them directly disbursed assistance to the MDG Pooled Fund in 2009/10. (For more information on the participants, please refer to supplementary guide section 1.5). In addition, there is a lack of confidence in the GOE’s capacity and knowledge of donors’ internal regulations. Many donors have concerns about the capacity of the FMOH to manage funds via the national planning process, budgeting, procurement, logistics, audit and reporting systems. In addition to the concern on the lack of capacity, donor countries’ internal regulations have prevented several donors such as USAID and Italy from using Ethiopian systems.\textsuperscript{57} Many donors are still keeping their own system instead of adopting the Ethiopian system (Supplementary Guide, Section 1.6). Lastly, the negative attitude of

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\textsuperscript{55} It must be noted that the health sector is the only sector analyzed in this report. There is positive contribution between the institution identified to the progress in MDG, however we cannot claim that there is direct causation between capacity development of the health sector and MDG progress.

\textsuperscript{56} The MDG Monitor, 2011

\textsuperscript{57} Pereira, 2009
the GOE towards civil society has kept the Netherlands and Sweden from joining the MDG Pooled Fund. The new Charity Law, enacted in Ethiopia in 2009, has worsened the relationship with the donors. The law enables the GOE to strictly regulate Civil Society Organizations (CSOs). A specialist from DAG Ethiopia mentioned that the Government has “designed a sword when they just need a scalpel.” Although the Dutch Government has been always supportive of the establishment of the IHP Compact in Ethiopia, the law prevented the Netherlands from signing the MDG Pooled Fund arrangement.

A.7. CONCLUDING REMARKS

Lack of resources is a challenge in reaching the last mile of Ethiopia’s depleted and overstretched basic country system. UNDP’s mentions, “one of the major development challenges in recent times is the shrinking resource envelope. Domestic resource generation has become a major constraint in many developing countries.” Through our analysis and research findings, we have shown that, aid coordination, harmonization and alignment in donor funds can boost efficiency and utilize the available resources better for capacity development of institutions.

UNDP further asserts that, “coordination will be a key to avoid duplication of effort, cut transaction costs and make sure that resources are used efficiently in accordance with the principles of aid effectiveness;” and our findings support this assertion. The IHP Compact and the MDG Pooled Fund arrangements have effectively mobilized resources for non-HIV/AIDS health sector relating to MDG 4A and 5A. The IHP Compact provided an opportunity to synergize resources, targeting health sector needs in Ethiopia. It is with the support of this institution that MDG 4A and 5A will be achieved in 2015. The implementation of this proven and innovative initiative accelerated MDG achievements. IHP Compact and the MDG Pooled Fund are also able to enhance harmonization and alignment among donors.

Our research findings from the case study analysis of Ethiopia are also consistent with the 2010 MDGs Report. Quoting the report “As evidence on the recent crisis have shown, poor global economic governance threatens progress towards the MDGs. And thus, the global economic governance needs to be strengthened to address and respond to the external shocks. As indicated in the coming Five Year Draft Growth and Transformation Plan (2010/11 – 2014/15), the Government of Ethiopia has shown its commitment to continue to implement an aggressive program to deepen and accelerate growth... These initiatives have been accompanied by a massive re-orientation of public spending to growth and pro-poor investments nationwide sector development programs to improve health services and expanding education and building the capacity of public institutions for improved public service delivery.”

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58 Pereira, 2009
59 Pereira, 2009
60 Pereira, 2009
61 UNDP, MDG Breakthrough Strategy, 2010
62 UNDP, MDG Breakthrough Strategy, 2010, p. 50
B. GHANA

B.1. SUMMARY

The Ghana case-study first presents a brief country back-ground and sketches the governance structures within the health sector. Specification of the historical bottlenecks within the health-sector is followed by analysis of the institution selected for this study - the Ghana Community-based Health Planning and Services Initiative (CHPS), which is examined through the framework outlined in the Methodology Section. Our research demonstrated high association of MDG acceleration with the formation of CHPS.

B.2. INTRODUCTION

Ghana has been an independent since March 1957, with alternating military and civilian governments until 1993, when the military government gave way to the Fourth Republic after presidential and parliamentary elections. The country is ranked 151st in view of GDP per capita by the IMF, with $1,094 for 2010. Under the Human Development Index, Ghana ranks 130th and has a low human-development profile. Half of the population - 24,791,073 with median age around 21 - resides in urban areas (51%), and the other half in rural.

B.2.i. Health Sector Summary

Until 1957, Ghana's health-sector was modeled after British practices, with most healthcare facilities located within the core administrative districts and governed via a centralized form of administration. The health sector’s structure started changing in 1972, when the government attempted to decentralize healthcare service provision to the districts with policy remaining at the center. Several reforms followed (1977, 1997 and 2002), resulting in what is nowadays a fully decentralized system of healthcare delivery, from national to sub-district levels, with two core functions: policy formulation, regulation and coordination of the actions of actors in the sector, as well as implementation of policy via service delivery.

B.2.ii. Millennium Development Goals Overview

This case-study examines progress toward MDG 4A and MDG 5A: reducing the under-five mortality rate by two-thirds between 1990 and 2015; and reducing the maternal mortality ratio by three quarters between 1990 and 2015 as well as creating universal access to reproductive health by 2015. The country has not been a high performer on MDG 7C.

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64 Ghana Web
65 International Monetary Fund
66 International Human Development Indicators
67 Due Diligence Africa: Ghana
68 Abekah-Nkrumah, 2006
69 Abekah-Nkrumah, Dinklo & Abor, 2009
National-level data from the WHO\textsuperscript{70} illustrates that the under-five mortality per 1000 live births has decreased by 35.6\% during 1990-2008 from 118 to 76, and the maternal mortality per 100,000 live births declines from 630 to 350 by 44.4\% in the period. Thus, while remarkable improvements have been achieved over the past 18 years, Ghana is unlikely to achieve its MDG goals if progress continues at the same pace.

**Table 2: MDG 4a & 5a progress in Ghana since 1990**

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<tbody>
<tr>
<td>Under-five Mortality (per 1000)</td>
<td>118</td>
<td>110</td>
<td>111</td>
<td>88</td>
<td>76</td>
<td>35.6%</td>
<td>39</td>
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<tr>
<td>Maternal Mortality (per 100,000)</td>
<td>630</td>
<td>540</td>
<td>500</td>
<td>400</td>
<td>350</td>
<td>44.4%</td>
<td>157.5</td>
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**B.3. INSTITUTIONAL ARRANGEMENTS WITHIN THE HEALTH SECTOR**

This section of the paper addresses the governance of the sector, identifies the major stakeholders in the health sector of Ghana, the linkages between them, and outlines the most recent policy developments, with relevance to MDG progress.

**Ministry of Health (MOH):** MOH plays a leading role in the national efforts to achieve the MDGs. MOH collaborates with other ministries, departments and agencies within the government, as well as partners such as WHO, USAID, UNFPA, UNICEF, JICA and DFID, as well as a number of domestic and international NGOs and academic institutions. The Government of Ghana (GOG) has traditionally been a major source of funds to the health sector, with about 45\% of the total funds available to the sector coming as releases through the national budgeting process.

**Ghana Health Services (GHS):** The main public-sector service provider is GHS an autonomous Executive Agency established in 1996 and responsible for implementation of national policies under the control of the MOH through its governing Council - the Ghana Health Service Council.

Other Public-sector institutions include government hospitals, policy clinics and health-centers, teaching hospitals and quasi-government institution hospitals. A visual representation of the sector’s organizational structure can be found in Supplementary Guide, Section 2.2

In addition to GoG funds, the health sector also receives about 13.8\% of the total health sector budget from Development Partners (DPs) - mainly bilateral and multi-lateral donors whose contributions take the form of programmes and projects.

\textsuperscript{70}WHO Databases, maternal mortality ratio, 2010.
B.4. Bottlenecks

Given CDG’s framework of six institutional bottlenecks, the main bottlenecks inhibiting MDG progress in Ghana’s health sector have been identified in this section based on Team research and interviews. The next sections will further address these three bottlenecks, namely, the breakdown in the supply chain for public services, distortions in skills reaching where they are needed and challenges in reaching the last mile.

**Breakdown in the supply chain for public services:** Supply chain risks within the health-system have been identified as topical, potentially catastrophic and urgent. Under a constrained budget, Ghana’s health-sector faces the challenge to provide quality health-services given growing ethnically heterogeneous populations; insufficient existent fixed infrastructure and transportation vehicles; significant parts of the population (28.5% living below the poverty line; cultural norms and values connected to traditional medicine, and difficulties with personnel-retention in rural areas.

**Distortions in skills reaching where they are needed:** While most disease problems that have been causing the high rates of illness and deaths among Ghanaians are preventable and curable, the number of available skilled health-care professionals, especially in rural areas, has been a challenge. Not having enough primary health-workers and mid-wives within the healthcare system had been identified as a primary limitation of the health-system by the government itself, the donor community and NGOs.

**Challenges in reaching the last mile:** In the 1990s more than 70 percent of all Ghanaians still lived more than eight kilometers from the nearest provider, and rural infant mortality rates were 50 percent higher than corresponding urban rates (MOH 1998). Hence, GHS’s main challenge has been to extend coverage, particularly to rural areas. Moreover, complementing the expansion of basic health services with emergency obstetrics is essential for building the public-sector capacity to address maternal mortality.

B.5. ANALYSIS OF THE SELECTED INSTITUTION

B.5.i. Background of the Institution Analyzed

The Community-based Health Planning and Services Initiative (CHPS) is a programmatic strategy to provide cost-effective and adequate quality basic primary health services to individuals and households at the community level through engagement of the communities in the planning and delivery of services. It began as a research project in the Kassena-Nankana district of Upper East region, at the Navrongo Health Research Centre. The Navrongo initiative was launched to guide

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71 Weber, Brouhard & Berman, 2010
72 Index Mundi, 2009
73 Naicker, 2009
Ghana’s health-reform process. A policy committee including faculty from the Mailman School of Health at Columbia University was convened by MOH in response to mounting evidence that the health program was failing to reach the rural poor, with the mandate to review the relative merits of alternative strategies for providing community health care.\textsuperscript{74}

The Navrongo experiment sought to address inequalities in the health system by mobilizing both community and health services resources. CHPS functions through a combined service model, which involves the deployment of a primary health worked called a Community Health Officer (CHO), posted and living with the community, in combination with local volunteers. Given the experiment’s successful results, Navrongo demonstrated feasible means of accelerating the pace of child survival improvement. With the observed trends extrapolated, the national child mortality MDG goal would be within reach ahead of MDG target timelines. A national scaling-up initiative was launched in 2000. CHPS has been an adopted national strategy since 2002, and its expansion in all districts started in 2004. The milestones to establish a new functional CHPS compound include preliminary planning, community entry, health-compound construction, procurement of essential equipment, posting nurses and volunteer recruitment.\textsuperscript{75} For more information about these milestones, please refer to Supplementary Guide, Section 2.3.

The fact that the CHO in most cases lives together with the community allows for longer-term interactions with the community and the attainment of patient trust and respect. The close and sustained interactions between the CHO and community-members has also contributed to changes in long-engrained attitudes toward healthcare in the communities, i.e. seeking earlier and modern-medicine solutions to problems that have been associated with traditional communal practices. The population covered by CHPS was 15.3\% by 2009, including 869 functional CHPS zones. In the medium term, MOH planned to deploy 1570 CHO\textsc{s} to various communities nation-wide by 2006. While the scale-up is lagging behind the timeline of the official strategy, effectively the number of functional CHPS zones has increased from 409 in 2008 to 869 in 2009, and the population covered by CHPS moved from 7.2\% to 15.3\%, respectively.\textsuperscript{76}

\textbf{B.5.ii. Inputs Into The Institution Analyzed}

\textbf{Inputs} include human, financial and physical resource used for the activities of the institutions analyzed – in Ghana’s case – CHPS - to develop financial capacity, management capacity, better institutional arrangements and capacity for stakeholder engagements (outputs). For a more detailed description of inputs, refer to Methodology.

\textbf{B.5.iii. Outputs of the Institution Analyzed}

The category “institutional outputs” pertains to the intra-institutional capacities that have been developed within CHPS, and includes managerial capacity, financial capacity, stakeholder engagement and institutional arrangements, analyzed below.

\textsuperscript{74} Phillips, Bawah and Binka, 2005
\textsuperscript{75} Awoonor-Williams, 2004
\textsuperscript{76} NDPC, 2010
Better institutional arrangements

Once CHPS's scale-up started in 1999, with coordinated announcement at a big national conference, GHS quickly developed capacity for tracking the roll-out, and started including CHPS as one of the key indicators for performance-review guidelines for the district levels as early as 2003. As a result of the imperative to scale up CHPS and the ensuing demand for CHOs, the government developed institutional capacity to train health professionals. A salary-rise in 2006 also contributed to retention-enhancement. This has resulted in a growth of the actual number of trained professionals. By the end of 2009, CHPS had become entrenched in the CHNTS curriculum, integrating CHPS into the fabric of trainings about primary healthcare.

A major constraint in scaling up CHPS has been the construction of a health-compound - a pre-condition for procuring essential equipment, posting nurses and recruiting volunteers. As a response to this constraint, the acceptable definition of a "health-compound" has been expanded by the authorities. The capacity to exhibit institutional flexibility has allowed communities to mobilize spaces that already were in existence, rather than build new ones, which would have taken up additional resources. There are no penalties for failure to implement CHPS. However, once CHPS was implemented in pioneering communities in a certain district, pressure from the population to implement CHPS in more communities increased. Thus, an informal line of accountability was created between the communities and the district level. Along with the roll-out of CHPS, donors helped develop capacity to better track the logistics for delivery of crucial medical supplies toward the health compounds.

Management capacity

CHPS's implementation as a Strategy to empower district-health teams necessitated interaction among people at different system levels. USAID grants made it possible for communities from different regions to interact with communities that had already built a compound. This practice enhanced demonstration capacity and grassroots learning on the intra-community level. Capacity was developed for organizing peer workshops, which created peer-pressure for further adoption and served as triggers for action within different zones. For more details on managerial capacity, please refer to Supplementary Guide, Section 2.3. For more details specifically on the capacity for grassroots peer-to-peer learning and local demonstration, please refer to Supplementary Guide, Section 2.5. CHPS's capacity for information-management has been enhanced via the creation of a working group on the issue, under the collaboration of GHS and donors providing technical assistance, to address the issue of reliable data-storage and retrieval.

Financial capacity

There is no fixed budget allocation for CHPS at the national level. Hence, all CHPS funding allocation must come from the district-level, and be evaluated locally against other health priorities given the districts’ constrained financial resources. The state is an indirect supporter by virtue of paying the

77 MOH, 2003
78 UN Every Woman Every Child, 2010
79 Stakeholder interviews, Ghana.
80 USAID, 2009
81 Phillips et al, 2005
salaries of the employed CHOs. The figure of $1.92^{82}$ marginal cost per capita per year extra (on top of existing expenses for healthcare at that time) has been quoted throughout several sources, but no solid subsequent estimates of the implementation of CHPS, including the commitment of basic medical supplies to furnish the compound, have been circulated. A non-exhaustive list of cost-estimates for the larger Technical Assistance projects can be found in Supplementary Guide, Section 2.3. The indirect costs, borne by communities by virtue of used resources to erect a new compound, are not formally accounted for. According to most interviewees, tracking of CHPS funding at the national level virtually does not exist, as the total amount of money spent is very difficult to ascertain from both MOH and GHS data.

**Stakeholder Engagement**

MOH has pursued an active strategy to increase the number of CHOs deployed by CHPS. A partnership between GHS and USAID with technical assistance (so-called CHPS-TA) from the Population Council, EngenderHealth, the Centre for the Development of People and the American College of Nurse Midwives has been instrumental in scaling up CHPS. USAID’s efforts concentrated on piloting CHPS in two deprived urban communities, strengthening Community Health Nurse Training Schools (CHNTS) and the technical capabilities of CHOs, and developing national-level capacity in advocacy as well as in monitoring and evaluation. The Japan International Cooperation Agency (JICA) is starting a five-year technical cooperation project with focus on capacity-building and activity-expansion. The MDG Task Team (MDG TT), launched in 2008, has clarified policy on CHOs, and improving local data on maternal mortality and morbidity amongst other initiatives.\(^{83}\) UNICEF and WHO have developed the Integrated Management of Childhood Illnesses\(^{84}\) (IMCI) initiative aimed at reducing childhood mortality, particularly for children under five years, thus addressing MDG 4A. Additionally, the Tanzania-Ghana Health Partnership (TGHP) will test the proposition that both countries can accelerate this success by combining two successful models.\(^{85}\) The Tanzania Essential Health Interventions Project (TEHIP)\(^{86}\) was largely inspired by Ghana’s CHPS. A detailed discussion about the developed capacity for South-South learning, export and customization of successful practices with regard to TGHP can be found in the Supplementary Guide: *Ghana, Section 2.4*.

**B.5.iv. Outcomes of the Institution Analyzed**

The analysis above suggests CHPS was among the key initiatives that have contributed in improving MDG 4A. In the following section, the outcomes are deconstructed through the bottleneck framework. Contributions to MDG5A could not be established via the Team’s research, since CHPS is a primary healthcare initiative, without explicit focus on health issues related to maternal mortality. While it might be speculated that increase in access to primary healthcare indirectly benefits expectant mothers, no datasets have been identified with relation to CHPS.

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82 Phillips et al, 2006  
84 WHO Ghana, 2004  
85 Columbia University Mailman School of Public Health, 2011  
86 Doris Duke Charitable Foundation, 2011
Distortions in skills reaching where they are needed: The supply of trained practitioners in primary healthcare provision – essential for addressing MDG target 4A - has increased with the scale-up of CHPS, as the national capacity for training has been enhanced. CHPS-relevant knowledge is being integrated into national medical curricula, and interest has increased toward acquiring the skill-set, given higher salaries relative to the early 2000s. Technical assistance from JICA has contributed to boosting the monitoring and evaluation of academic programs to ensure cadre quality – a crucial aspect as CHPS is going forward. While the supply of health-workers has been augmented, the supply of mid-wives and obstetricians is still a major constraint on progress toward MDG4.

Challenges in reaching the last mile: CHPS has effectively contributed to improving access to health-care delivery. As of 2009, the population covered by CHPS was 15.3% by 2009, including 869 functional zones. While considered progress in terms of absolute number of access points, CHPS’s roll-out lags behind Ghana’s initially set expansion targets. Not all communities have fulfilled all milestones, required for deeming a compound functional. While faster expansion is a national policy priority, community-mobilization remains an extensive activity, which requires patience, persistence and commitment of time and resources, if it is to ensure long-term support, crucial for the success of CHPS as a community-based initiative.

B.5.v. Impact of the Institution Analyzed

This paper does not maintain that progress toward MDG 4 in Ghana or any other country can be exclusively attributed to the CHPS initiative or any single institution. Still, the SIPA Team has been able to draw upon the academic findings of the research team, which conducted the initial experiments that substantiated the CHPS expansion, through Dr. James Phillips at Columbia University's Mailman School of Public Health.

Evidence from the Navrongo experiment suggests that communities with a CHO and volunteers exhibit lower early childhood mortality indicators than those without such deployed measures (Figure 5). The introduction of CHOs - among other tested health interventions - proved to most substantially affect MDG4, captured via under-five mortality rates (Figure 6).

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87 Phillips, 2011, slides 28-29
The model’s replicability, given Ghana’s diverse ethno-linguistic profile, was confirmed via a second experiment in a different part of the country. Thus, the program was gradually promoted to be a national primary health care reform effort.

Figure 6: Comparison of the result on under-five annual mortality among a control group, communities only with nurse, communities only with volunteers and zurugelu, and communities with both (“zurugelu” as a word means “togetherness” in the local language, and stands for door-to-door services, which are provided by local volunteers and supported by community leaders)89

88 Phillips, 2011, slide 26
89 Phillips, 2011, slide 32
The Kassena-Nankana District, where CHPS was first deployed, experienced substantial decline in the under-five mortality rates (Figure 7). At first, under-five mortality rates were higher than the national average. Within ten years of CHPS’s introduction, the rates had fallen below the respective national average. Hence, CHPS appears capable of leading to reduction of child mortality at least to the level mandated by MDG targets, depending on the national strategy’s scale and pace of implementation. Observations about robust movement of MDG 4 in relation to CHPS have been confirmed by other sources.\(^{90}\)

**Figure 7: Trends in under-5 mortality in Ghana and Kassena-Nankana District relative to the MDG**

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**B.6. BOTTLENECKS STILL TO BE ADDRESSED**

While progress has been made on the “skills” and “last mile” bottlenecks as far as CHPS is concerned as a strategy, these developments should by no means be considered as sufficient to reach a steady-state of adequate health-care provision. Progress should be maintained on both.

**Breakdown in the supply chain for public services (1):** While there has been progress toward improving the supply-chain within the health-sector (CHPS reaching a substantial number of communities, particularly crowding in more donor assistance and serving as a back-bone, around which to build supply-chain improvements), substantial progress is still needed in terms of national outreach of the program. In addition, the procurement of health supplies, the availability of trained midwives and obstetricians, and the availability of transportation for health-workers and patients,

\(^{90}\) Bawah, 2006.
particularly in rural areas, obstruct the expansion of health-care services and provision of quality health-care. The quality of the referral system\textsuperscript{91} depends on effective and efficient interaction among a number of stakeholders\textsuperscript{92}. An insightful angle for future research would therefore be to explore how capacities within the referral system can be enhanced, and how CHPS can be best integrated into the referral system.

### B.7. CONCLUDING REMARKS

The CHPS is a program, which evolved from a grassroots experiment to national policy and is firmly embraced by the government. CHPS has actively contributed to expanding the availability of primary healthcare services, to mobilizing community support and participation in the provision of healthcare services, and – indirectly – to progress toward MDGs 4 and, indirectly, possibly to MDG 5. Themes to address, as the program is going forward, include building a formal national strategy to develop CHPS leadership capacity, particularly at the district level, and making the allocation of financial resource more explicit (i.e. creating a specific budget-line for CHPS in district-level budgets).

Once the bottlenecks of reaching the last mile has been moved, another bottleneck - the supply of skilled CHO - became crucial for the success of the program. In response, the government has increased medical training capacity and provided compensatory incentives to alleviate the shortage. Looking forward, further capacity is desired in terms implementing professional trainings and ensuring sufficient training infrastructure is in place to ensure the quality of CHOs deployed, in addition to their growing numbers.

The higher degree of interaction, which contributes to better bonding between CHOs and communities, is related to lower attrition rates. Nevertheless, this is a trend that any policy-maker should closely monitor, in view of balancing the imperative of rapid scaling up and the need for community sensitization and buy-in, to ensure the program’s sustainability.

CHO training efforts should continue on an ongoing basis, together with efforts to expand the supply of medical cadres with other relevant skill-sets, midwifery and obstetrics in particular. Here CHPS has served as a facilitating platform for addressing the bottlenecks in midwifery skills (there is discussion about having more midwives cover the compounds). Thus, even if CHPS as an institution was not specifically targeted toward expanding the supply of mid-wives, such linkages have helped move forward the broader health agenda.

CHPS has energized the development of the national referral system, an indication of interaction between the last-mile bottleneck and the supply-chain bottleneck. The heavy involvement of donors in view of providing technical assistance has been an example of vibrant stakeholder engagement. On the other hand, this raises questions about CHPS’s sustainability as a governmental

\textsuperscript{91} Referral system is sending a patient who is difficult to be treated at a low level medical facility to higher level which can give appropriate medical treatment

\textsuperscript{92} District hospitals, national hospitals, CHPS and health-insurance providers among others
Within CHPS, community-based management has been instrumental. Districts that started the programme soon expanded it more rapidly than health sector resources could seemingly sustain. To build on the value of demonstration, the use of small pilots should be expanded by sponsoring leading districts to conduct peer-to-peer exchanges similar to the Navrongo and Nkwanta models – an early feature of the program before it became nation-wide.

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93 Phillips et al, 2005
C. NAMIBIA

C.1. SUMMARY

The Namibia case-study first presents a brief country background and sketches the governance structures within the water sector. Analysis of the historical bottlenecks within the water sector is followed by analysis of the selected institution. The institutions, in Namibia’s case – Namwater & Water Point Committees (WPCs) – have been analyzed through the framework outlined in the Methodology Section. Our research demonstrated high association of MDG acceleration with these institutions.

C.2. INTRODUCTION

Namibia is the driest country in Southern Africa, with a projected population of 2.15 million in July 2011 and approximately 60% of its citizens reside in Northern Namibia. It is among the youngest countries in the world and gained its independence from South Africa on 21st March, 1990. Namibia is classified as lower middle-income country. Despite the overall robust macroeconomic performance over the past few years, Namibia faces serious challenges with regard to income and wealth inequality. A substantial segment (28%) of population below the poverty line, and 4% very poor. According to the 2009 UNDP Human Development Report, Namibia is ranked first in income inequality for the period 1992-2007 with a GINI index of 74.3.94

C.2.i. Water Sector Summary

Among countries in Sub-Saharan Africa, Namibia particularly stands out for its poor availability of water resources. Namibia is also highly dependent on neighbouring countries - South Africa & Angola - for securing its water supply, since a large population lives on the banks of the rivers that originate from these countries. The Water policy of Namibia has been continuously evolving over the last two decades. The first policy change was implemented after the country gained its independence, followed by the Namwater Act of 1997. Under this act, the Namibia’s government established Namwater as the bulk water supplier of water in Namibia. The next notable change was the Water Management Act of 2004. The Water Supply and Sanitation Policy Act came into force in 2008. Its principles are in line with Integrated Water Resources Management (IWRM) including a strong focus on Water Demand Management (WDM).95

There was substantial disparity between rural and urban parts of the country for access to water in 1990, only 51% of rural population had access to safe drinking water, while almost 100% of the urban population had access to safe drinking water, compared to the present day, where 88% of rural population has access to safe drinking water.

94 Human development report, 2009
C.2.ii. Millennium Development Goals Overview

While the focus of the current report is Namibia's progress on MDG 7c, quick background is presented on the country's progress on MDGs 4 and 5, as a counter-point to Ethiopia and Ghana. The infant mortality indicator was falling until 2000, but has subsequently been on an upward trend. Currently the under-five mortality is at 69 deaths per 1,000 live births. Its increase is mainly due to the combination of HIV/AIDS and inadequate nutrition. Similarly, maternal mortality has been increasing since the 1990s, currently at 450 per 100,000. Given the trend both maternal and infant mortality targets will not be met by 2015.

With regard to MDG7, Namibia has been performing well on both rural and urban access to water. Proportion of population using improved drinking water sources (% access to water) in rural Namibia has increased from 51% to 88%, which corresponds to an increase from 64 to 92% for the total population. Thus, Namibia is on track and likely to achieve the MDG target in this indicator.

<table>
<thead>
<tr>
<th>Table 3: MDG 7c progress since 1990</th>
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<td>% using improved drinking water sources, total</td>
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<td>% using improved drinking water sources, urban</td>
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<tr>
<td>% using improved drinking water sources, rural</td>
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C.3. INSTITUTIONAL ARRANGEMENTS WITHIN THE WATER SECTOR

This section will address the governance of the sector. We will look into the roles of the different stakeholders, the linkages between them, and new policy development within the water sector of Namibia. Namibia’s water industry involves multiple stakeholders. Internally, the Central government, the Directorate of Rural Water Supply (part of the Ministry of Agriculture, Water and Forestry), Namwater Corporation and local water supply companies are the major stakeholders. Externally, donor agencies such as, the World Bank, UNDP, GTZ and multinational private sector companies initially played an important role in the development of water supply and sourcing. The key parastatal institutions crucial to water supply are:

**Namwater Corporation**: State owned enterprise, responsible for bulk water supply to corporations, bulk agricultural users, local communities, and government offices. Namwater Corporation, though operating on a commercial and full cost-recovery basis, remains under the government’s control.96

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96 A detailed analysis of Namwater in the following section
Directorate of Rural Water Supply (DRWS): The water supply sector has been a priority for Namibia. The Ministry of Agriculture, Water, and Forestry, through its Directorate of Rural Water Supply, represents the national government in the water industry. This department is in-charge of WPCs by force of the Water Management act of 2004. The extension office of DRWS interacts with the WPCs and LPWCs and reports to his regional office. Furthermore, the government is responsible for implementing all laws related to the water industry development.

Local community organizations: Following the policy of decentralization and integrated water resource management, the end users of water were required to form community organizations (for a detailed explanation, Figure 8). The WMA 2004 made it mandatory for all users on a single Namwater supply line to form a local water association, which should then elect a local water point committee.

![Organizational structure of Community based organizations](image)

Figure 8: Organizational structure of Community based organizations
The figure above depicts the various stakeholders in the water distribution system and their interaction with each other. Consumers are required to form a Water Point Association (WPA), which then elects 5-7 members to form a Water Point Committee (WPC). Consumers on one water supply point are required to form a Local Water Point Association (LPWA), which then elect 5-7 members to form a Local Water Point Committees (LPWCs). The WPCs/LWPCs are responsible to DRWS, and a local Extension officer interacts with these WPCs/LWPCs to get their inputs and resolve their grievances. The Extension Officer reports to a Regional Officer.

C.4. BOTTLENECKS

Given CDG’s framework of six institutional bottlenecks, the main bottlenecks inhibiting MDG progress in Namibia’s water sector have been identified in this section based on Team research and

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97 Ministry of Agriculture, Water and Forestry, Water and Sanitation Policy, July 2008
interviews. The next sections will further address these four bottlenecks, namely, the breakdown in the supply chain for public services, distortions in skills reaching where they are needed, challenges in reaching the last mile, and depleted and overstretched basic country system.

The breakdown in the supply chain for public services: Namibia’s long colonial history had created huge disparities in the water supply infrastructure in the country, which contributed to major differences in urban and rural water supply. This was exacerbated by inequality of water resources across the country, which is also a reflection of the demographic divide in urban and rural Namibia. Additionally, dry areas of Central Namibia have always been water-scarce and dependent on water supply from other parts of Namibia. In addition, income inequality and low population density make it financially difficult to provide water to remote areas.98

Distortions in skills reaching where they are needed: The early days of WPC operations were marked by lack of financial management skills such as accounting, book keeping, auditing, and revenue collection at the community level. Major gaps were identified in training and skills. The elected members of WPCs did not have the adequate skill sets to manage these community-based water points and collect payments from the end consumers.99 Local users of WPCs also needed training in technical expertise such as repair and maintenance of facilities. In addition, WPC members need education on sustainably managing water, considering the poor availability of water resources.

Challenges in reaching the last mile: Along with a poor supply infrastructure, Namibia faced structural challenges in last mile water distribution. Water had been traditionally considered a free public good, with little willingness to pay exhibited by consumers. From a governance point of view, the supply network was scattered with various state agencies handling the rural supply and municipalities handling the Urban water supply. There was no accountability at the village level with regard to financial management and efficiency of use of water as a scarce resource.

Depleted and overstretched basic country systems: As discussed above, Namibia has an extremely dry climate, which increases the burden on its limited water resources and makes Namibia reliant on neighboring countries for its water-needs, which further strains its finances. Currently, FAO estimates that one third of Namibia’s water consumption is from shared water supply with neighboring countries.100 However, as the population and economy of neighboring countries such as Angola grows, there will be additional pressure on the shared water resources, which are domestic in origin. For more information, please refer to supplementary guide section 3.1.

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98 Bayliss &Fine, 2008
99 Klintenberg, Mazambani & Nantanga, 2007
100 Aquastat FAO international system, international water issue section
C.5. ANALYSIS OF THE SELECTED INSTITUTIONS

C.5.i. Background of the Institutions Analyzed

Namibia Water Corporation (Namwater), established under Act 12 by the parliament in 1997, commercially provides bulk water services to industries, municipalities, and rural communities through the Ministry of Agriculture, Water and Rural Development. Historically, bulk water supply was a department under the government. Namwater was established to slowly decentralize water-supply and to contribute to the ongoing efforts of the ruling party to achieve participatory democracy at the grassroots level. Apart from rural supply, Namwater also supplies water to 46 local authorities, government ministries and departments, as well as other bulk users such as mining & Namibia Wildlife resorts.

While all the three parastatal institutes- Namwater, WPC, and DRWS - have played an important role in the achievement of the MDG, our primary and secondary research indicates that Namwater was the pivotal institution associated with the accelerated progress on MDG. After the formation of Namwater and WPCs in 1997 and 1998 respectively, the MDG started improving more quickly. The local communities also played an important role in distributing water and supply to rural households. Though there is no evidence to suggest causality, the Team noted a high association with MDG success and Namwater – an observation supported during the interview process.

C.5.ii. Inputs into the Institutions Analyzed

Inputs include human, financial and physical resource used for the activities of the institutions analyzed – in Namibia’s case –Namwater Corporation - to develop financial capacity, management capacity, better institutional arrangements and capacity for stakeholder engagements (outputs). For a more detailed description of inputs, refer to Methodology.

C.5.iii. Outputs of the Institutions Analyzed

The category “institutional outputs” pertains to the intra-institutional capacities that have been developed within Namwater, and includes managerial capacity, financial capacity, stakeholder engagement, and institutional arrangements, analyzed below. The category “institutional outputs” pertains to the intra-institutional capacities that have been developed within Namwater, and includes managerial capacity, financial capacity, stakeholder engagement and institutional arrangements, analyzed below.

Better Institutional Arrangement

From a non-functional Department of Water Affairs, the water infrastructure was consolidated yet decentralized. It achieved this dual task by transferring ownership to local municipalities and

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101 Namibia Water Annual Report, 2005
102 As the urban indicators were already at 99%, this analysis only focuses on rural infrastructure and larger issues of Namwater
community based organizations such as WPCs/LWPCs. Namwater was given the task of bulk water supply, while WPC worked on improving the last mile connectivity of these resources. Additionally following the broader objective of decentralization, the government ensured that WPCs reported directly to DRWS at the center, such that its technical capacity was available to them. Transfer of the existing water sourcing infrastructure was also crucial in improving the supply chain of the public systems. These changes also gave the central government more capacity to focus on broader policy issues, inter-country water treaties, and an improved donor fund management. For more details on Better Institutional Arrangements, please refer to supplementary guide, section 3.3.

Management Capacity

After the formation of Namwater, a number of sound management practices were introduced in the sector, through which management capacity was enhanced. For example, since Namwater was formed as a commercial entity, it adopted the management culture of a business corporation such as hiring a board of directors, tracking financial performance on a quarterly basis, an introducing performance based bonuses, among others. (Detailed managerial structure can be found in Supplementary Guide section 3.3). Such management capacity was instrumental in consolidating the management of the sector's scattered infrastructure, improving the supply chain, and reducing human resource overhead costs. All these processes contributed to Namwater's improved organizational efficiency.103 Though Namwater functions as a professional private company, several key managerial issues were affecting the local management of the water resources. DRWS carried out training programs for WPCs/LWPCs, during the implementation phase. Follow-up training was also conducted with WPCs staff, as ownership was transferred to them. Nevertheless, skills remain a major constraint to the sector’s and the organization’s sustainability. During one of the interviews conducted, a senior UN official commented that, ‘skills might be a limitation’ even today. Through secondary research, the Team independently, identified gaps in financial management skills and technical skills, needed to maintain the smooth functioning of WPCs. Such dynamics have lead to a slow transfer of complete ownership to WPCs.

Financial Capacity

One of Namwater’s major objectives as an institution was to reduce the costs of clean water. It followed a cost recovery model at the community level, which was successful in instilling accountability. However, this practice led to marked price inequality across rural and urban areas. In order to smoothen out the disparity, Namwater set zonal prices, which were derived by averaging out the bulk water prices within a specific zone. The responsibility for cost-recovery was handed over to WPCs, which lack the skill and managerial capacity to carry out such a task effectively. This has led to WPCs owing large sums of money to Namwater.104 Exact amount of loans outstanding could not be accessed, as Namwater has not published its annual statements since 2005. However, interviews and literature review suggests that WPCs still owe large sums to Namwater. Bayliss and Fine say, “By April 2004, local authorities payment arrears reached around

103 Bayliss& Fine, 2008
104 Bayliss & Fine, 2008
N$70 to N$80.” However, they do not give details of the urban and rural break-up. According to the Medium term expenditure report, 10% of WPCs have still not paid all their dues. This figure is higher than the earlier published figure of 70% in 2005-06. This shows the sustainability of WPCs has improved, compared to 2005/2006 figures. Namwater’s scheme included a policy to subsidize remote rural water points through the over recovering of other water points in the zone. The government also continued to grant a subsidy of $N50 million in recent years for further development of rural infrastructure.

**Stakeholder Engagement**

There has been little involvement of international donors in financing the water supply sector. World Bank had funded the water sector from 1978 and the funding continued until 2003. However, when WB left, the government of Namibia has continued to fund the activities of Namwater and WPCs. Since the government has the capacity to continue funding the water supply sector, confirmed in our interview with the UN official, donors have continued to focus on more technical issues, such as water sourcing. However, since water-sourcing issues per se are beyond the project’s scope, further research would be needed to assess in detail the technical capacity within Namibia’s water sector.

**C.5.iv. Outcomes of the Institutions Analyzed**

The analysis above points to a conclusion that Namwater and WPCs were instrumental in improving the access to water MDG in Namibia. In the following sections, this outcome has been analyzed through the bottleneck framework.

**Breakdown in the supply chain of Public Services:** Namwater was created to consolidate the multi-nodal and fragmented supply chain of water supply in Namibia. Namwater successfully consolidated the supply chain under an experienced leadership at the top and positively impacted the supply chain bottleneck. It built the capacity of water supply infrastructure by injecting financial resources and by improving its management structure. It also connected remote parts of Namibia and built up the Eastern National Water Carrier, which ensured a better geographical distribution of water.

**Challenges to reaching the last mile:** WPCs, in collaboration with Namwater, were instrumental in providing water to the last mile by jointly improving the water supply infrastructure and increasing water access particularly for rural users. The government’s decision to hand over the management of water points to WPCs was a successful strategy to create local institutions that are accountable to the Water Ministry. In effect, this practice improved the institutional arrangements of national water distribution. WPCs employed a community-based water management system, which enabled the long-term involvement of rural end-users in the context of expanded water

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106 Namibia’s Medium Term Expenditure Framework 2010/11-2012/13
107 Namibia’s Medium Term Expenditure Framework 2008/09 – 2011/12
108 Namwater annual report, 2005
access. In addition, the community-based water management system gave a sense of water ownership to the local communities and an opportunity for them to participate in the decision making process of the government. Lastly, DRWS, provided management and financial training at the village level to WPCs, to effectively management the water points. These institutional arrangements collectively contributed to overcoming the last mile bottleneck.

C.5.v. Impact of the Institutions Analyzed

Overcoming the bottlenecks resulted in an increased proportion of population using improved drinking water sources (% access to water) in rural Namibia from 51% to 88%. Access to water has increased from 64 to 92% for the total population. These developments put Namibia on track to achieve the MDG target.

![Figure 9: MDG 7c Progress since 1990](image)

**C.6. BOTTLENECKS THAT STILL NEED TO BE ADDRESSED**

**Distortions in skills reaching where they are needed:** There is still a major mismatch in the skills needed for the management of WPCs. Training provided by the government is not adequate because the curriculum does not include financial management education. In addition, due to high attrition, as people are looking for paid jobs, training is not always completed. This lack of permanent structure in WPCs, makes tariff recovery and effective management of these points very difficult. Additionally, it is common for women to be the treasurer of these WPCs, who need to travel sometimes over fifty miles to collect payments and are easy targets for robbery.

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109 Klintenberg et al., 2007  
110 Klintenberg et al., 2007
hampering with the regular functioning of WPCs. As positions on the board of WPC are voluntary (unpaid), there is no incentive for the members to stay with the organization.

Depleted and overstretched basic country systems: As discussed above, Namibia has overstretched water resources. This remains a major challenge in the current scenario. Preliminary research suggests that the government is redirecting its resources in building projects that can tap into other sources of water. Namibia’s dependence on neighboring countries for water resources increases the country’s vulnerability in the future to geopolitical, economic and environmental developments in the region.

C.7. CONCLUDING REMARKS

Namibia’s efforts to commercialize and decentralize the water sector seem to have effectively addressed some of the country’s problems. Although Namwater was formed more than 13 years ago, its recent troubles with revenue collection raise several red flags. With regard to these developments, the Team would like to emphasize that it is too early to comment definitively on the success of commercialization of common goods such as water. However, Namwater’s commercialization provides some key lessons in view of successful efforts to address key bottlenecks. Namwater improved the financial management of water resources in rural and urban Namibia. As a result of Namwater’s formation, costs, and revenues in the sector are now more easily identifiable. Such data points facilitate policy-making by enabling policymakers to focus on specific issues in a targeted manner based on quantitative evidence. If Namwater is analyzed from the lens of inequality, however, there is not enough evidence to conclude that this approach has resulted in policies that have adequately addressed the needs of the poor.111

The Namibian government’s has consciously decided to not privatize Namwater and instead focused on the financial health of the sector. There is a possibility that hasty privatization might have resulted in more disconnection of Water points and even slower handing over of ownership to WPCs. The intra-zonal subsidy has also worked well to cross-subsidize rural and urban supply at a regional level. The impact of more organized targeted subsidy to rural users, as outlined in the Water Act of 2008, remains to be observed. Simultaneously, stakeholders need to keep in mind that Namibia has a huge water shortage problem. This could be further exacerbated, if the issue of inequitable usage of water between urban and rural Namibia is not addressed. Further, any subsidy policy should pay attention to sustainable use of water in both rural and urban Namibia. In light of these complications, future water policies should be created such that a fine balance is maintained between improving access to water, the financial viability of the sector, and the long-term sustainability of water resources.

111 Crook, 2003
VI. Overall Conclusions

The case study analysis of the above countries has some important takeaways for the bottleneck framework. In this section, we will draw up conclusions from the case study analysis for this emerging bottleneck framework. Our research suggests not only some strong linkages between several bottlenecks, but also potentially important policy implications of the effects of these linkages. It also throws light on some key aspects of capacity development around bottlenecks. Additionally, the team believes that the local government can devise local strategies for an accelerated resolution of a few bottlenecks.

With positive impact on one bottleneck, sometimes a second bottleneck becomes crucial. This necessitates immediate efforts toward the second bottleneck, to avoid progress reversal: This is the most important takeaway for the linkages in several bottlenecks. During the planning process, the policymakers should be careful about narrow-mindedly focusing on a single bottleneck to build capacity. It would not be inappropriate to channel bulk resources behind the most crucial bottleneck obstructing capacity development, however, ignoring other bottlenecks could pose severe risks of reversing the gains. As our findings suggest in all three cases, bottlenecks are a shifting phenomenon and as one gets resolved, the second impending bottleneck continues to slow the capacity development process. For instance, in case of Namibia, while the government focused on building a supply chain infrastructure and improving the last mile connectivity, the current skills gaps are posing serious threats to the sustainability of the huge progress made by Namwater and DRWS.

The bottlenecks in supply-chain services (1) and the last mile (5) are closely associated: The three case studies clearly exhibit linkages between these two bottlenecks. Our research suggests that both these bottlenecks seem to move in synchronized manner. There is no doubt that in some countries, the resolution of one bottleneck is more urgent than the other in capacity development: for example, in Ethiopia, without solving the supply-chain bottleneck, the last-mile bottleneck would have been much harder to overcome. However, we conclude that last mile and supply chain bottleneck have a symbiotic relationship. For instance, in Ethiopia, while HEP worked to resolve the last mile bottleneck, IHP was associated with the supply chain bottleneck. Both these initiatives were dependent on each other to successfully achieve capacity development in the health sector. IHP built the financial capacity of the supply chain by diverting funds to primary health care, while HEP used the funds to build the last mile infrastructure, particularly in view of increasing the supply of health-workers and providing them with training.

It is difficult to fathom the success of IHP without community based programs such as HEP and vice versa. Similarly, in Namibia, Namwater and WPCs worked together: Namwater built the water supply chain infrastructure, while WPCs developed water resource management capacities at the last-mile points (water points). Along the same lines, in Ghana the expansion of health-compounds via CHPS was complemented via technical assistance addressing other aspects of the health-sector, such as supplies and transportation, in order to equip health-compounds adequately and provide health-workers with necessary tools to effectively do their work.
The resolution of one bottleneck can negatively impact another bottleneck. In the case of Namibia, Namwater expanded the national water-distribution network in an accelerated manner, which put additional pressure on the already stretched country resources (4). The government initially put few efforts into building capacity to address the problem of water-sourcing such as constructing water treatment plants, expanding desalination activities or artificially recharging aquifer. External shocks could further exacerbate the negative impact of one bottleneck on another. For example, the water-sourcing problem was further exacerbated by Angola's post-civil war economic recovery, which put additional pressure on the shared resources of Cubango/Okavango river basin, and in effect worsened the depleted country system bottleneck (4).

Stakeholder engagement is a common thread in successful solution of bottlenecks: Stakeholder involvement is critical because institutions can't work in isolation to resolve bottlenecks. An integrated, multi-stakeholder approach is a more effective way to resolve bottlenecks. For example, in Namibia, Namwater's engagement with WPCs made it possible to reach the last mile and to solve the supply chain bottleneck for public services. In Ethiopia, the creation of IHP was able to harmonize and align donors to target and increase efforts in Primary Health care. It was for this pooled fund that HEP is able to reach the last mile and the supply chain bottleneck for public services is solved.

Community-based management is instrumental for solving the last mile (5): In all three case studies the last-mile bottleneck seems to have been positively impacted by successful community-based management. For instance, in Ghana, CHPS communities have not only built the majority of health-compounds for health-workers, but also provided continuous support for health-workers as volunteers. This development has enhanced health-workers’ sense of community allegiance and decreased attrition-rates in rural areas. This has in turn improved the supply of qualified personnel and helped to overcome the last-mile bottleneck. Similarly, in Ethiopia's case, HEP's community based efforts were crucial in positively affecting the last-mile bottleneck (5). Likewise, in Namibia’s case, WPCs introduced accountability and instilled a sense of ownership amongst the end-users. It is worth observing that the success of these cases involves all levels of stakeholders: from grass-root communities to the government. Across the three case-studies, a greater sense of ownership has helped enhance the credibility and quality of the respective interventions.

Technical training combined with soft skills training positively impact the skills bottleneck (2). Technical training such as financial management literacy and medical training, complemented by soft skills such as effective communication strategies and negotiation skills, have upgraded human resource capacity. For instance, Ghana’s focus on imparting training in community engagement to CHOs along with technical health training resulted in better acceptance by the local community. In the case of Namibia, lack of managerial and accounting training to WPCs resulted in poor service-fee recovery and often inadequate book keeping of water points.

112 http://www.dartmouth.edu/~gsfi/gsfiweb/htmls/papers/text3.htm#Chapter Three
An aligned and targeted channeling of resources, combined with enhanced managerial capacity, can positively affect the supply-chain bottleneck (1). The supply chain of public services usually includes multiple stakeholders such as multiple donors, multiple ministries, several regional organizations etc. Such a system of complex interaction can pose a set of coordination challenges. In Namibia’s case, a consolidated approach through streamlined deployment of resources and focused management through Namwater was successful in building out the water supply infrastructure in an accelerated way. In case of Ethiopia, IHP’s formation and managerial capacity helped streamline the deployment of resources to the primary healthcare and thus address the supply-chain bottleneck (1). In contrast, the lack of integrated funding and absence of clear budget-allocation at the national and district level in Ghana have posed major challenges to the scaling up of CHPS in accordance with the national strategy timeline.

**Government can create an enabling environment in capacity development to tackle the skills bottleneck:** National public sector can create an enabling environment in capacity development around institutions that has proven to be effective to tackle the skills bottleneck. The Ethiopia government created IHP, which allowed consolidation of financial resources that was needed to increase training capacity. In Ghana’s case, due to the demand created by CHPS at the local level, educational institutes increased the intake for health workers, in turn building long-term capacity in skill building of health workers. Lastly, in Namibia, due to the fact that there is no remuneration for WPCs, there is high attrition at the WPC level. Consequently, training efforts by DRWS are simply wasted. Though there is no evidence to suggest causality, there is clear association between lack of incentive and sustainable skill building.
VII. Recommendations

This section lists key recommendations, based on the analysis and conclusion in previous sections. The presentation is brief and action-oriented, geared toward time-constrained policy-makers. The recommendations should not be conceived of as separate points, but rather – as elements of a broader strategy geared toward overcoming the implementation constraints that hold MDG achievement and – particularly - toward successfully addressing the six key bottlenecks, identified by the UNDP.

**Formulate capacity-development strategies for institutions with a long-term outlook to holistically address key bottlenecks:** In light of linkages highlighted in the conclusions section, capacity-building strategies should not narrow-mindedly focus on a single bottleneck. Right at the planning stage, research should be conducted to uncover linkages between bottlenecks. In case of linkages, any intervention in the long term should address a solution of all key bottlenecks.

**Design management strategies, which take into account the possibility of long-term tensions between bottlenecks:** To the extent possible, devise strategies that minimize the possibility of progress on one bottleneck exacerbating another bottleneck. For example, key stakeholders (i.e. the Namibian government) should have formulated a comprehensive strategy for a possible solution to the overstretched country-system while expanding access to services linked to a constraint resource (water).

**Institutionalize and integrate skill-building into organizational planning.** A holistic approach to skill-building, firmly incorporated in organizational planning, is necessary in order to address the distortion in skills where needed. In particular, institutionalized skill-building can enhance organizational sustainability by securing the human resources required in times of expansion. This strategy should be informed through reliance on updated, frequent and accurate identification of skills needed within agencies.

**Channel resources in an integrated manner to the identified key institution(s).** An aligned channeling of resources can result in streamlined allocation of funds and improved efficiency of service delivery. The integrated channeling of these resources can contribute to accelerated capacity development of institutions to resolve bottlenecks.

**Improve coordination between community-based organizations and institutions especially in the case of last-mile bottlenecks.** The mobilization of community-based organizations can contribute to faster organizational expansion and more sustainable impact, with essential support at the grassroots level.

**The public sector should continue exploring innovative private-sector and civil society solutions for creating an enabling environment.** The success and track-record of any single institution is linked to the overall environment, within which it operates. Hence, CDG’s work should be understood not in isolation but in the context of UNDP’s and the UN’s larger efforts to promote new partnerships and alliances in furtherance of the Millennium Development Goals.
Conduct further research on whether linkages justify an integrated approach to the last-mile and supply-chain bottlenecks. At times, there is a thin conceptual line between reaching the last mile, and expanding access to services, and fixing the breakdown in the supply-chain for public services by expanding it. Furthermore, enhancing the supply-chain synergistically influences the possibility to reach the last mile. Thus, more research should be conducted on whether such observations hold across a greater number of cases, and whether an integrated approach, conceptually and practically, toward these two bottlenecks, is warranted.

Conduct further research to explore causal relationships between bottlenecks. The limited case-study sample, examined in the current report, alludes to a relationship bottlenecks 1 and 5. Further studies should investigate the possible directional causality between the two aforementioned bottlenecks. Research should also be conducted to explore the existence of similar interactions among other bottlenecks across all MDGs.
VIII. SUPPLEMENTARY GUIDE

The purpose of the supplementary guide is to develop in more details important points, which have been addressed in the main body. The Team’s decision to separate two parts has been dictated by consideration of the depth of analysis, which might not always be relevant for a busy policy-maker who has to first process the case in its entirety.

The Supplementary Guide has been divided into three Sections, themed around the three countries:

Section 1 – Ethiopia
Section 2 – Ghana
Section 3 - Namibia

Each section contains sub-sections relevant to the details of the specific country-case.

Section 1. Ethiopia

Section 1.1. Background of Ethiopia

Figure 10: Map of Ethiopia

The capital of Ethiopia is Addis Ababa. 16.6% of the total population lives in the urban areas\(^{113}\), and urbanization is growing at a rate of 3.8%\(^{114}\). With such population growth rate, the labor forces “has continued to grow faster than what the economy can gainfully and productively employ”\(^{115}\). According to the ILO, out of the 33,088,792 economically active population, 1,653,686 are unemployed. The unemployment rate for urban areas is estimated at 20.6%, which is about ten times higher than in rural areas (2.6%). The incidence of unemployment also varies by sex where in urban areas, unemployment among women is estimated to be about 27.2%, compared to 13.7% among men. The same pattern holds true for rural areas, where approximately 4.6% of women and 0.9% of men are reported to be unemployed.\(^{116}\)

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\(^{113}\) UN Data
\(^{114}\) CIA
\(^{115}\) ILO
\(^{116}\) ILO
Table 4: Summary Statistics of Ethiopia\textsuperscript{117}

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface area (km(^2))</td>
<td>2008</td>
<td>1104300</td>
</tr>
<tr>
<td>Population (estimated, 000)</td>
<td>2008</td>
<td>80713</td>
</tr>
<tr>
<td>Population growth rate (avg annual %)</td>
<td>2005-2010</td>
<td>2.6</td>
</tr>
<tr>
<td>Rural population (%)</td>
<td>2007</td>
<td>83.4</td>
</tr>
<tr>
<td>GDP growth rate (%)</td>
<td>2008</td>
<td>11.3</td>
</tr>
<tr>
<td>GDP per capita (current US$)</td>
<td>2008</td>
<td>318.7</td>
</tr>
<tr>
<td>Exports (millions US$)</td>
<td>2008</td>
<td>1462</td>
</tr>
<tr>
<td>Imports (millions US$)</td>
<td>2008</td>
<td>6811</td>
</tr>
<tr>
<td>Agriculture (% of GDP)</td>
<td>2008</td>
<td>44.5</td>
</tr>
<tr>
<td>Manufacturing (% of GDP)</td>
<td>2008</td>
<td>4.8</td>
</tr>
<tr>
<td>Population below $1.25 per day (%)</td>
<td>2010</td>
<td>39.04</td>
</tr>
<tr>
<td>HDI 2010 index</td>
<td>2010</td>
<td>157\textsuperscript{th}</td>
</tr>
</tbody>
</table>

43.5\% of the population is between the ages of 0-14, and only 5\% of the population is over 60 years old. Life expectancy at birth is \(\sim\) 54 years old. With such a young growing population, only 36\% of adults are literate\textsuperscript{118}. The government spends 5.5\% of the GDP on education. 62.8\% women and 73.73\% men are enrolled in primary-secondary education.\textsuperscript{119}

Despite robust economic growth over ten years, Ethiopia is still among the poorest countries in the world. The population living below $1.25 PPP per day is 39\%. The country ranks 157\textsuperscript{th} out of 169 countries on the Human Development Index 2010\textsuperscript{120}. Ethiopia’s economy is based on agriculture (exports coffee, hides, oilseeds, beeswax, and sugarcane), accounting for almost 45\% of GDP, and 85\% of total employment.\textsuperscript{121} However, the trade balance has been in deficit in recent years\textsuperscript{122}.

Apart from a five-year occupation by Mussolini’s Italy, it has never been colonized.\textsuperscript{123} Today, prime minister Meles Zenawi, Ethiopian People’s Revolutionary Democratic Front (EPRDF), won a fourth term in elections in May 2010, bolstering its already large majority. Although corruption is a problem in Ethiopia (according to the Corruption Perceptions Index (CPI) by Transparency International in 2009, Ethiopia is ranked 120 of 180 countries surveyed.\textsuperscript{124}), Mr. Zenawi has won praise from Western donors for curbing Ethiopia’s reliance on foreign aid and commitment to building up the country’s economy. On the other hand, his opponents accuse the West of being blind to what they say is policy of political repression.

\textsuperscript{117} UN Data
\textsuperscript{118} UNICEF
\textsuperscript{119} UN Data
\textsuperscript{120} Human Development Report
\textsuperscript{121} CIA
\textsuperscript{122} World Bank Data and Statistics
\textsuperscript{123} BBC News
\textsuperscript{124} Transparency International, 2009
Section 1.2. Health Extension Program

In 2003, the Ethiopian Federal Ministry of Health (FMOH) launched a new health care plan, the "Accelerated Expansion of Primary Health Care Coverage," through a comprehensive Health Extension Program (HEP). Recognizing the huge gap between need and health care services available, the FMOH has focused on providing quality promotive, preventive, and selected curative health care services in an accessible and equitable manner to reach all segments of the population, with special attention to mothers and children. The policy places particular emphasis on establishing an effective and responsive health delivery system for those who live in rural areas.\footnote{Admassiea, Abebawa & Woldemichael, 2009}

The HEP draws on the same principles as Primary Health Care, but focuses on the improvement of prevention skills and behaviors within the household, and involves fewer facility-based services. Most of the activities listed in the National Health Sector Program (HSDP) Strategies are to be implemented through the HEP.\footnote{Admassiea, Abebawa & Woldemichael, 2009}

The HEP’s focus on community-based interventions, including the promotion of family planning, aligns effectively with Pathfinder International's community-based approach to the delivery of quality reproductive health and family planning (RH/FP) services, which Pathfinder has implemented in the four most populous regions of Ethiopia for more than a decade with generous funding from USAID. Following years of close collaboration with the FMOH, sector offices, and community leaders, Pathfinder began supporting the HEP soon after its launch. FMOH experts in HEP were invited to provide orientation to local Pathfinder staff and implementing partner NGOs to clarify HEP goals and program design and to plan for collaborative implementation.\footnote{Admassiea, Abebawa & Woldemichael, 2009}

Section 1.3. Development Assistant Group (DAG)

Before 2001, funding in Ethiopia was insufficient to fill even the smallest scenario for scaling up services, and more global efforts were required, looking at new donors and new innovative mechanisms for raising finances. In order to support the case more funds, a higher level of transparency was desired from government and donors. Further information was needed to spell out the level of resources being committed to different parts of the national health plan, and its disbursements.\footnote{FMOH: Ethiopia IHP+ Compact, 2008}

DAG Ethiopia comprises 26 donor agencies. The list of members is shown in the table 5.
Table 5: DAG Ethiopia comprises 26 donor agencies\textsuperscript{129}

| African Development Bank (AfDB), Austrian Development Cooperation, Belgium Development Cooperation, CIDA, Denmark Embassy, DFID, European Commission, Finland Embassy, French Embassy, German Embassy, GTZ-Ethiopia, IMF, Indian Embassy, Irish Aid, Italian Cooperation, Japan Embassy, JICA, KfW, Netherlands Embassy, Norwegian Embassy, SIDA, Spanish Agency for International Development Cooperation (AECID), Turkish International Cooperation Agency (TICA), UNDP, USAID and World Bank |

The main objective of DAG is to ensure a more effective delivery and utilization of development assistance to Ethiopia within the Paris Declaration framework of Aid Effectiveness and Harmonization. The framework aims to foster dialogue and to co-ordinate support in the preparation, monitoring and evaluation of the MDGs. The day-to-day coordination of the DAG is managed by a secretariat based within UNDP Ethiopia.\textsuperscript{130} Since 2005, under DAG, aid modalities in Ethiopia have shifted from budget support to pooled funds.

Even after the formation of DAG, the efforts of harmonization in the health sector have not been working well, as aid for health had been fragmented. Even though most of the funding to health sector was towards HIV/AIDS, it was not streamlined.\textsuperscript{131} Three independent pooled funds were managed by five different agencies HIV/AIDS donors were less committed to aid assistance harmonization due to their internal regulations, and most of them used their own procurement, delivery, funds disbursement and reporting system. This diversity of funds made it difficult for the GOE to ensure its ownership in the health sector. For example, most aid funding from the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) is disbursed directly to international NGOs and local NGOs, instead of distribution through the governments. An expert from the European Commission calls PEPFAR “the worst fragmenter” in terms of coordination.\textsuperscript{132}

\textbf{Section 1.4. MDG Pooled Fund is still limited}

\textsuperscript{129} DAG Ethiopia, 2010
\textsuperscript{130} DAG Ethiopia, 2010
\textsuperscript{131} The Independent Review Team, 2008
\textsuperscript{132} Pereira, 2009, p13
Figure 11: Supporters of MDG Pooled Fund are still limited.  
133 Below are the shares of donors in the total MDG Pooled Fund

Section 1.5. Member participation of DAG

DAG Ethiopia comprises 26 members, but only 11 agencies signed the Ethiopia IHP Compact, 7 of which signed the JFA. Only 5 of them directly disbursed assistance to the MDG Pooled Fund in 2009/10. DFID and Spanish Cooperation accounted for most of the share of contribution to the MDG Pooled Fund.134

133 Based on FMOH, 2009, p.116-117 and FMOH, 2010, p.104
134 Based on FMOH, 2009, p.116-117 and FMOH, 2010, p.104
Section 1.6. Lack of confidence in GOE’s capacity

The main reason for the limited number of participants to the MDG Pooled Fund is the lack of confidence in the Ethiopian national system.

Table 6: Many donors are still using their own system; Development Partners Responses to Alignment and Harmonization Questionnaire of the Mid-term Review

<table>
<thead>
<tr>
<th>Alignment Issues</th>
<th>Own DP System</th>
<th>GOE System</th>
<th>Pooled System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning calendar</td>
<td>3</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Planning process</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Budget information</td>
<td>2</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Budgeting process</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>PFM</td>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Procurement</td>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Audit</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Reporting and review</td>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

135 The Independent Review Team, 2008, p123
Section 2. Ghana

Section 2.1. Country Background

Ghana is situated in West Africa, bordering the Gulf of Guinea, between Cote d’Ivoire and Togo, spreading over an area of 238,533 sq km. Agricultural practices contribute to 33.7% of GDP, and employ 56% of the labor-force.

Health Sector of Ghana

This section of the appendix addresses the governance of the sector, identifies the major stakeholders in the health sector of Ghana, the linkages between them, and outlines new policy developments.

Section 2.2. Health Sector organization, stakeholders and policy developments
Figure 14: Organizational chart of Health sector in Ghana

Key:
MDA’s – Ministries Departments and Agencies
GHS – Ghana Health Service
THOSP – Teaching Hospitals
QGIIH – Quasi Government Institution Hospitals
PHMHB – Private Hospitals and Maternity Homes Board
DTAM – Department of Traditional and Alternate Medicine
GHSP – Government Hospitals
PC – Poly Clinics
HC – Health Centres
MBP – Mission Based Providers
PMDP – Private Medical and Dental Practitioners
TMP – Traditional Medical Providers
AM – Alternative Medicine
FH – Faith Healers

Source: Second Five Year Programme of Work (2002-2006, p. 48)

Table 7: Stakeholders related to CHPS

<table>
<thead>
<tr>
<th>Implementers:</th>
<th>Donors:</th>
<th>Technical Assistance Partners:</th>
<th>Academic Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>►The Ministry of Health (MOH)</td>
<td>►UNDP Ghana</td>
<td>►Population Council Engender Health</td>
<td>►University of Ghana School of Public Health</td>
</tr>
<tr>
<td>►The Ghana Health Service (GHS)</td>
<td>►UNICEF Ghana</td>
<td>►American College of Nurse-Midwives (ACNM)</td>
<td>►Columbia University Mailman School of Public Health</td>
</tr>
<tr>
<td>►Community Health Centers (CHC)</td>
<td>►The United States</td>
<td>►The Danish Agency for Development Assistance</td>
<td></td>
</tr>
<tr>
<td>►Traditional Social Institutions</td>
<td>►Agency for International Development (USAID)</td>
<td>►Japan International Cooperation Agency</td>
<td></td>
</tr>
<tr>
<td>►The Navrongo Health Research Centre (NHRC)</td>
<td>►International</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Policy Developments

The health-sector's current developments are guided by the Medium Term Health Strategy (MTHS); First Five-Year Programme of Work (1997-2001); Second Five-Year Programme of Work (2002-2006); Ghana Poverty Reduction Strategy (GPRS) and Current Five-Year Programme of Work (2007-2011).

To provide a sustainable means of funding health services in Ghana, a health insurance bill was passed in 2003 and turned to be operational in 2005 through the establishment of district mutual health insurance, private health insurance and private mutual health insurance schemes. According to the Ghana Macroeconomics and Health Initiative report, approximately US$620 million are required as investment towards reducing under-five mortality by two-third by 2015. Despite the absolute increases (from US$ 378.568 million in 2006, of which 56.9% allocated to primary health care, to US$486.659 million in 2008, of which 49% was allocated to primary health care), GHS's 2009 Annual Report points to existing Financial gaps, leads for the mobilization of additional resources.

In line with the budget report for 2011 fiscal year in Ghana, the budget policy will continue to concentrate on improving health outcomes by directing resources towards the health of women, neonates, infants and children as well the prevention and control of communicable and non-communicable disease.

Saving the lives of women and children is a national priority, as emphasized in the written contribution of President John Evans Atta Mills for the Global Campaign for the Health Millennium Development Goals 2010. The integration of the Expanded Program on Immunization (EPI) into normal district activities has resulted in higher coverage of all antigens, with the support of GAVI and UNICEF. Interventions are planned in child health; improved access to maternal, newborn and child health services; adolescent health; safe blood product transfusion; surveillance, reporting and emergency response systems for the prevention and control of communicable and non-communicable disease; health facility management; and vector control strategy.

Section 2.3. Detailed Analysis of Institutional Outputs

This section covers the analysis of the institutional capacities developed as a result of CHPS's roll-out and operations.

Better institutional arrangements

Mainstreaming CHPS into national curricula. By the end of 2009, CHPS had become entrenched in the CHNTS curriculum, with most schools possessing copies of the Community Health Nurse job-description, which featured in many final exams. Hence, CHPS has been integrated into the fabric of training about health and health-care delivery – a trend supporting sustainable human-resource practices. The existence of two types of educators – community and clinical – have also emphasized

\[136\] UN Every Woman Every Child, 2010
the uniqueness of building capacity for community-supported healthcare. Further capacity is to also be desired in terms of assessing/accrediting practical training site, and introducing formal criteria for practical-training site selection. The development of checklists for monitoring students has been a step forward.

**Capacity for institutional flexibility.** Given that the building of the compound – the physical space for the community health-worker – has been the major constraint in scaling up CHPS, the acceptable definition of compound has been expanded. Such capacity to exhibit institutional flexibility allowed communities to mobilize spaces that are already in existence, rather than build new ones, taking up additional resources. Also, some compounds have been built with the assistance of donors, while others have been built exclusively by the communities, with no conclusive evidence to allude that communities are less supportive of CHPS, when the compound has been built by a donor.

**Monitoring and evaluation capacity and capacity for community-involvement.** CHPS’s implementation is voluntary, without penalties for rolling out the strategy at a slower pace. Hence, there is no formal line of punitive accountability. However, an informal line of accountability is created between the communities and the district level: once a compound is created within a district, other communities learn about it very quickly, creating pressure for the spread of the services. CHPS indirectly helps build capacity for community-involvement by creating a platform for interaction with the district officials, where communities demand that local resources be channeled toward community needs, and demands for justifications by the officials about resource availability and best use.

**Improved Commodity procurement and distribution.** With the roll-out of CHPS, capacity was developed with donor-assistance to better track the logistics for delivery of crucial medical supplies toward the compounds. Additionally, the availability of needed commodities in CHPS zones was increased through the supply of so-called “capacity-triggers”: mobility tools such as motorbikes and radio-equipment, home-visiting kits for volunteers and teaching materials by donors. This description illustrates how CHPS has served to “crowd in” donor assistance, as a back-bone for further positive developments in the health-sector.

**Stakeholder Engagement**

This section further elaborates the direct and indirect involvement of stakeholders with the CHPS initiative.

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137 Interview with USAID
138 USAID, 2009
Table 8: Milestones to accomplish to establish a new functional compound\textsuperscript{139}

<table>
<thead>
<tr>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Preliminary planning:</strong> grouping communities into service zones, specifying nurse assignments, community leader identification and planning community health compound construction.</td>
</tr>
<tr>
<td><strong>B. Community entry:</strong> conducting meetings and diplomacy with village leaders, convening public gatherings for communicating plans and activities to communities, developing community health communities.</td>
</tr>
<tr>
<td><strong>C. Health compound construction:</strong> utilizing volunteer labor and community resources to develop units in villages where nurses live and work.</td>
</tr>
<tr>
<td><strong>D. Procurement of essential equipment:</strong> such as motorbikes, bicycles and clinical equipment.</td>
</tr>
<tr>
<td><strong>E. Posting nurses:</strong> deploying nurses to village locations and providing them with technical refresher training and orientation to communities where they are assigned.</td>
</tr>
<tr>
<td><strong>F. Volunteer recruitment:</strong> engaging community health committees in designating health volunteers to assist with community activities in reproductive and child health services.</td>
</tr>
</tbody>
</table>

Table 9: Sample of cost-estimates for the bigger Technical Assistance projects since the inception of CHPS\textsuperscript{140}

<table>
<thead>
<tr>
<th>Donor</th>
<th>Amount</th>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>USAID/Ghana</td>
<td>$12,000,000 cooperative agreement</td>
<td>2004</td>
<td>CHPS-TA- CHPS Mobilization, Expansion and Support Cooperative Agreement</td>
</tr>
<tr>
<td>USAID\textsuperscript{141}</td>
<td>Ceiling increased to $15,500,000</td>
<td>2007</td>
<td>CHPS-TA- CHPS Mobilization, Expansion and Support Cooperative Agreement</td>
</tr>
<tr>
<td>Japan International Cooperation Agency (JICA)</td>
<td>$4,500,000\textsuperscript{142}</td>
<td>2005</td>
<td>“Scaling up of CHPS Implementation in the Upper West Region”</td>
</tr>
<tr>
<td>UNICEF</td>
<td>$304,335\textsuperscript{143}</td>
<td>2008</td>
<td>Support for the construction of 15 CHPS compounds in the Upper West Region</td>
</tr>
</tbody>
</table>

UNICEF and WHO have developed the Integrated Management of Childhood Illnesses (IMCI) initiative aimed at reducing childhood mortality, particularly for children under five years, thus addressing MDG 4. While IMCI has not been explicitly mentioned as a program in the upgraded CHPS policy, the latter outlines “Basic Package of Services by the CHO,” which further empower

\textsuperscript{139} Awoonor-Williams, 2005

\textsuperscript{140} The sample should be interpreted with much caution, given that these projects pertained to different regions and had different scope of mandate and objectives.

\textsuperscript{141} Phillips, Bawah & Binka, 2006

\textsuperscript{142} Converted, 2005 USD analogue of 450 million yen. JICA, 2007

\textsuperscript{143} Christian Health Association of Ghana, p.2
health-workers to collaborate with communities as “case finders, care givers and counselors, care supporters, case referral and disease control workers”\textsuperscript{144}

Section 2.4 - Capacity for South-South Learning

Replication to Tanzania and the Tanzania-Ghana Health Partnership (TGHP)

Tanzania is on target to achieve the Millennium Development Goal (MDG) of reducing childhood mortality by two thirds by 2015. One contributing factor in this health system development has been the Tanzania Essential Health Interventions Project (TEHIP)\textsuperscript{145}, which gave local districts the tools to make evidence-based decisions about the allocation of healthcare resources based on burden of disease patterns. After introducing this intervention dramatic declines in child mortality were demonstrated in two rural districts (Rufiji and Morogoro) and later scaled up to 120 districts.

Tanzania's plans were inspired by Ghana’s CHPS and Ghana’s strategy for training health extension workers, providing community-based health services, and extending the coverage of essential health interventions. Thus, the Navrongo experiment has been a forming policy influence not only domestically, but internationally.

The Tanzania-Ghana Health Partnership (TGHP)\textsuperscript{146} is a progressive model that will test the proposition that both countries can accelerate this success by combining two successful models into a common strategy for improving health and survival, given that both are achieving success according to MDG targets.

In Tanzania, TGHP will utilize Ghana's community health service model and adapt the country's strategy for training health extension workers and providing community-based health services. In Ghana, the TGHP will strengthen district-level capacity to plan and set priorities using locally obtained burden of disease and cost-effectiveness data in order to ensure delivery of the country’s integrated primary healthcare package. Given that Tanzania has played a key role in the TGHP, Ghana will be utilizing Tanzania’s district health planning and management model.

This meta-development of CHPS, which – as an open system has been adapted to Tanzania’s institutional and health reality – is now feeding back into the institutional development of CHPS, by offering strategies how to strengthen district health-planning and management. Such “customization” of CHPS-like models, which also interact with each other and synergistically contribute to the institutional improvements of each country, can serve as a forceful demonstration of the potential to improve homegrown institutions by means of South-South interaction and cooperation.

\textsuperscript{144} WHO Ghana Office, 2004
\textsuperscript{145} Doris Duke Charitable Foundation
\textsuperscript{146} Columbia University Mailman School of Public Health
Section 2.5. Capacity for grassroots peer-to-peer learning and local demonstration

District experience with CHPS catalyzes progress with CHPS implementation, since demand for community-based care arises once services are demonstrated and worker concerns are dissipated by positive experience with the programme. While managers lacking direct experience with CHPS might have perceived it as an administrative task, those exposed to the program tended to discover that community resources are more available than anticipated, as community health care is in high demand.

The most enthusiastic promoters of CHPS became communities that had benefited from CHPS services and workers who developed a sense of pride in their capacity to serve the rural poor. CHPS, once implemented, appears to be sustained by social and political support. The fact that a significant proportion of health workers participating in CHPS tend to be strong proponents of the programme alludes to a situation where professional gratification is present and where community enthusiasm offsets concerns about worker morale, thus contributing to overcoming bottleneck #3, challenges in reaching the last mile, particularly in view of sustainable rural postings of health-workers.

At the same time, the benefits of CHPS are hard to understand in the abstract, which leads to little enthusiasm or resistance. Moreover, the pace of spread of information about CHPS has shown to be particularly rapid if external resources were found to provide seed funding for CHC construction and CHO posting in a few pilot communities.

During the desk review and while conducting interviews, the research team did not discover evidence that communities receiving initial external donor assistance exhibit less commitment to the CHP. Hence, such funding can be considered an additional trigger, which does not undermine the very essence of CHPS or endanger the spirit of community-ownership, as long as community-sensitizing and mobilization precede the stage of building a compound.

Once a certain number of communities in a district start a program, qualitative evidence suggests that CHPS expands more rapidly than health-sector resources can seemingly sustain. Increasing the number of sites throughout the country where participants in the program can demonstrate success to peers and where peer-to-peer exchanges are organized on the basis of the starting Navrongo and Nkwanta models can be a strategy to balance CHPS’s communitarian essence and large-scale intended coverage, given its status of an adopted national strategy.

147 Columbia University Mailman School of Public Health
148 Columbia University Mailman School of Public Health
149 Bawah, Phillips & Binka, 2006
Section 3. Namibia

Section 3.1. Background Of Namibia

Figure 15: Map of Namibia

Demographics

By July 2011, the population of Namibia is expected to be approximately 2,150,000.\textsuperscript{150} Its population growth as of 2011 is 0.87\%, which is lower than 0.95\% in 2008 and 2009 and 0.91\% in 2010. Approximately 60\% of Namibia’s population resides in six Northern regions, where the population density is higher than the average.\textsuperscript{151} 66\% of Namibia’s people live in rural areas. Apart from the Northern regions, the rest of the country has an arid climate that allows cattle ranching, with little rain-fed agricultural development.

History

The first Europeans settlements in Namibia were observed in the early 1800’s.\textsuperscript{152} German South West Africa was the very descriptive name given to Namibia when these northern Europeans staggered ashore in the territory in the early 1880’s. The Germans eventually acquired control over the central and southern parts of the territory. Their control, however, never expanded. The period of 1890-1908 witnessed numerous protests against German rule. Large numbers of rebels were sent to concentration camps in Germany, many of whom died, despite massive protest movements among German society.

In 1948, as the Afrikaner led National Party gained power in South Africa, Namibia exchanged one colonial experience for another. Under Apartheid, during the 1950s and 1960s, the living quarters of the local urban population were demolished. Furthermore, Windhoek was primarily designated for the white population as the black and colored Namibians moved elsewhere. It finally achieved independence from South Africa in 1990.

Geography

Namibia has a land area of 824,268 sq. km, and is bordered by Angola, Zambia, Zimbabwe, Botswana, South Africa, and the Atlantic Ocean to the west. The country can broadly be divided into three regions:

1) The coastal desert region: This region includes the Namib Desert and is largely composed of dunes, gravel and sandy plains.

\textsuperscript{150} About Namibia Population.
\textsuperscript{151} Namibia’s National Planning Commission, 2008
\textsuperscript{152} Erichsen, 2011
2) **The inland plateau region:** A continuation of the South African Plateau, this covers almost half the country.

3) **Kalahari Desert:** Covered by sand, this is located to the south and east of the plateau.

<table>
<thead>
<tr>
<th>Table 10: Key geographical facts about Namibia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Vegetation</strong></td>
</tr>
<tr>
<td>Savannah</td>
</tr>
<tr>
<td>Desert Vegetation</td>
</tr>
<tr>
<td>Dry Woodlands</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Agriculture Patterns</strong></th>
<th><strong>% of Land Mass</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultivable Area</td>
<td>30% (25mn ha)</td>
</tr>
<tr>
<td>Cultivated area</td>
<td>&lt;1% (820,000 ha)</td>
</tr>
</tbody>
</table>

Namibia is highly dependent on its neighboring countries specially South Africa and Angola. FAO estimates that ‘shared rivers currently provide around one third of the water consumed in Namibia’. In order to manage smooth inter country it has various internal committees and bodies to negotiate and evaluate treaties with other nations.

**Section 3.2. Relevant Government Policies and legislations**

The government of Namibia introduced a “Decentralization Policy” in March 1998 in an effort to improve participatory democracy, strengthen sustainable development, and boost the government’s capacity to plan and control the development. The policy of decentralization is based upon democracy and development.\(^{153}\) This policy serves the purpose of making the Regional Council the major coordinating body with regard to regional development, which besides coordinating actions with respective ministries also should manage the input from local communities, both urban and rural. Thus local people would be empowered to participate through community committees regarding the most important issues. While the study of the decentralization policy process is important, it is crucial to understand that Namibian society has unique values and norms, including the clan phenomenon, patronage politics, and the economy of affection, among others.\(^{154}\)

As far as legislature is concerned, the government of Namibia adopted the Regional Councils Act in 1992 (known as Act 22 of 1992) and Local Authorities Act 1992 (Act 23 of 1992), which promoted the notion of local governance including the management of water resources in communities.\(^{155}\) Besides, the government also initiated a community-driven water management system in 1997, which included the formation of water points in rural areas and Water Point Committees (WPC) to run water points.

The Namibia Water Corporation Act, introduced in 1997, marked the creation of NAMWATER with the responsibility to provide bulk water services to the Local Authorities and cooperate with the

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\(^{153}\) Larsen, 2003

\(^{154}\) Larsen, 2003

\(^{155}\) Hossain & Helao, 2008
Department of Rural Water Supply of the Ministry of Agriculture, Water and Rural Development. Section 34 of Namwater Act 1997 emphasizes "The transfer of assets and liabilities... from the Department of Water Affairs to the Corporation.

In 2005, the government transferred the responsibility of water payment to communal people. Initiated by Namwater, Community Water Committees were elected to better coordinate access to water points. Community people who used water points were obliged to pay to the Committee at the end of each month. The amount depended on the amount of livestock owned, which led to negative repercussions as most communities were unable to make payments in time.

In 2008 the government announced a new Water and Sanitation Policy. It puts domestic water use the first priority of Namibia’s water supply sector over water use in other economic activities. It gives further autonomy to community based organizations such as operations and maintenance of water points. This act also proposes a Water regulator that should “harmonize the expectations of consumers and policymakers, without compromising the financial sustainability of the service provider.” The policy also proposes the formation of a standardized procedure of cross-subsidy in a transparent manner, which was not the case till now.

Figure 16: Major Policy Changes in the Water Sector

- Water Act
- Regional Councils Act
- Namibia Water Corporation Act
- Water Resources Management Act
- Water Supply and Sanitation Policy

Section 3.3. Detailed Analysis of Institutional Output

Better Institutional Arrangement

Though Namwater was established as a commercial entity, it has never been privatized and remains a state owned entity. Under the Namwater Act of 1997, the bulk water supply, Eastern

\[156\] Hossain & Helao, 2008

\[157\] Ministry of Agriculture, 2008
National Water Carrier and various state water schemes were all transferred to the company. Establishment of water points, which were managed by WPCs and supplied by Namwater, immediately followed this step. Though there is no effective regulatory agency in the water sector, various departments of Namibia have a role in water supply. Namwater is under the control of Central Governance Agency, which also oversees the corporate governance of country’s other parastatals, eventually the Minister in-charge of Water is responsible for the supply issues.

In line with its decentralization objectives, the country was divided into 13 regions, which have regional authorities. This arrangement meant that certain government functions would be executed at the regional level including water supply. It was decided that rural water supply should come under the center, so that it can take advantage of the technical capacity. Further a regulatory body was created in 2004, the team didn’t find any evidence of it being fully functional.

The following chart shows the current structure of the water sector, which was formulated in 2005. It shows that Ministry of Agriculture, Water and Rural Development has a policy and strategy unit and a water advisory council. These specialized functions were formed only after Namwater was formed and operational aspects of water supply was handed over to WPCs.

![Organizational chart of the Ministry](image)

**Figure 17: Organizational chart of the Ministry**

This decentralization process allocated the responsibilities in the water sector to entities that were best suited for it. The hierarchy in the government has been divided into three parts – 1) Government who is in charge of policy formulation and regulation; 2) Commercial water suppliers

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158 Heyns, 2005
such as Namwater; and 3) Local management at the community level. This structure could be slightly different at the urban level, where private companies could handle the management of the distribution infrastructure.

Community-based organizations were formed such that they can take responsibility for the operation and management of the facilities and eventually manage the full cost of it. Though the success of recovery has not worked out as planned, a senior government official in 2005 remarked that, "progress in development of community-based management of rural water supply has been very successful and coverage in safe rural water supply facilities has increased."\(^{159}\) The poor recovery and increasing debt to Namwater has raised serious doubts about the success of this model.

**Management Capacity**

Management of water sector is divided into various bodies and government departments of the government (see Figure 17). In 1997 Namwater took charge of assets of the Department for Water Affairs that related to bulk supply, including pumping stations, dams, pipelines and boreholes, and was established to supply on a commercial basis. The realization of the commercial water supply project led to the formation of WPCs and LWPCs. WPC constitutions provide WPCs the necessary mandate to manage water points. Parties who use a water point should be involved in developing a constitution. The constitution is a guide outlining water use and measures to ensure that the parties comply with the guidelines.

At the time of its inception, the first CEO of the company was a German national and was ‘instrumental in restructuring the company along business principals’.\(^{160}\) He was helpful in consolidating the scattered water supply infrastructure and introducing efficiency in it. Initially, the number of employees fell from 1150 in 1998 to 982 in 2001, to restructure the bulk water supply infrastructure of Namibia.\(^{161}\)

Namwater Corporation, headed by its Board of Directors, is managed by the CEO assisted by four General Managers – who manage daily operations of the following departments\(^ {162}:\)

1. Water Supply: The Water Supply Department’s major objective is to provide water in sufficient and sustainable volumes in the cost-efficient manner.\(^ {163}\)
2. Finance and Asset Management: The Finance Division of the Finance and Asset Management Department records and checks all financial transactions and operations.\(^ {164}\)
3. Corporate Services: It is responsible for the development and implementation of HR policies and a divisional strategy including training and development of staff.\(^ {165}\)
4. Engineering and Scientific Services: This is responsible for the design and construction of the bulk water supply infrastructure. It also supplies technical support within the corporation and to the water supply infrastructure in general (including WPCs).

\(^{159}\) Heynes, 2005, p. 103
\(^{160}\) Bayliss & Fine, 2008, p. 221
\(^{161}\) Bayliss & Fine, 2008
\(^{162}\) Namwater, 2006
\(^{163}\) Namwater, 2006
\(^{164}\) Namwater, 2006
\(^{165}\) Namibia Water Corporation Ltd
The Centre also offers technical training and vocational qualification upgrading, and courses on IT and general management skills. Vocation training encompasses a wide range of skills including water care, treatment plumbing, pipe fitting, mechanical and electrician skills, general carpentry and driver training, as well as a number of short courses.

Capacity development of institutional structures, carried out by the Directorate of Rural Water Supply, DRWS (part of the Ministry of Agriculture, Water and Rural Development), was extremely important to structural sustainability. WPCs completed adequate training during the project implementation phase, while follow-up training was carried out under the control of DRWS. Training incorporated skills training, problem solving, conflict resolution, and health aspects of water use. Follow-up training was conducted by Rural Water Extension Officers (RWEOs) and consultants, however, more training related to the project implementation was still required. After the completion of training, the complete ownership of water points is transferred to WPCs, even for operations and maintenance. However, due to the attrition and technical skills gap this has not been as successful as envisioned. In 2008/09, less than 10% had complete operation and maintenance control.

In addition to the local water management, Namwater worked to improve the geographical distribution of water from wet areas to more water scarce areas. The Eastern National Water Carrier, handed over to Namwater in 1997, was established to carry water from the wet north, via pipes and canals, to the drier areas of central Namibia. All phases of the Eastern National Water Carrier except one have been completed and were instrumental in improving water allocation across Namibia.

**Financial Capacity**

In 1997, Namwater was formed with objective to provide clean water to citizens with the lowest possible rates. It operates on a cost-recovery basis, charging local industries and communities for the consumption of water and the end users had to pay for development of supply infrastructure. Donors like World Bank played an important role in the early stage of Namwater formation. World Bank provided loans worth $1.5 bn from 1978 till 2003. The prices were calculated for each scheme depending on the cost. The tariffs are adjusted such that it enables full recovery of the cost, including overhead costs. However, this would have led to huge discrepancies in water pricing, which were smoothened out by setting zonal prices, which averages out the bulk water prices at a zonal level. As the costs of each individual scheme varied drastically depending on age of investment, distance from a common water source etc, those that were over-recovering subsidized the small rural schemes, which were not financially viable. Though the full cost recovery model smoothened the decentralization process, it also exacerbated the inequalities with poorest regions having least access and highest prices.

This method of cost-recovery also resulted in huge price rises in water prices. From 1998 till 2004

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166 Mouton, 2004
167 Mouton, 2004
168 Kate & Fine, 2008
alone the average price increase of water was around 114%. Northern areas of Namibia were the worst affected because of their heavy dependence on surface water, which needs more treatment than ground water. Local authorities and rural water communities owe millions N$ to Namwater.

The collections are going to be carried out by the local communities, who would then pay Namwater. This has not got the desired results for the government, as people did not have the money to make their water payments, this lead to the closure of some water points. There were several reasons for such poor recovery, but mainly customers of Namwater (local authorities) were not able to recover the cost of the water and didn’t have proper accounting systems in place. A report in 2008 suggests that this could have forced people in remote areas to ‘go back to boreholes, earth dams and wells.’

The authors of the National Water Resources Management Review (NWRMR) noted that, “The extent to which the water point committees will be able to levy charges will depend on their authority, capacity and legal backing. In particular, their ability to resist the opposition from ‘outsiders’ to the concept of cost recovery in general and the introduction of progressive fees in particular. Part of the decentralization process involves empowering regional councils to raise revenue locally.”

The financial data of the organization were not available beyond 2006. However, Namwater saw a sudden turn around in 2005, where it started making profits. There is a possibility that this could have been achieved due to its stricter recovery policies and austerity measures. However, the company has not released an annual report after that and government has not included the financials in the budget after 2006.

**Table 11: Financials of Namwater (2003-2006)**

<table>
<thead>
<tr>
<th>('000 N$)</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Income</strong></td>
<td>236,885</td>
<td>263,466</td>
<td>321,478</td>
<td>362,991</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td>(254,371)</td>
<td>(320,504)</td>
<td>(284,009)</td>
<td>313,381</td>
</tr>
<tr>
<td><strong>P/L from Operations</strong></td>
<td>(7409)</td>
<td>(48,234)</td>
<td>37,469</td>
<td>49,610</td>
</tr>
<tr>
<td><strong>Net Profit</strong></td>
<td>(22,734)</td>
<td>(69,144)</td>
<td>27,889</td>
<td>42,198</td>
</tr>
</tbody>
</table>

A press reports have indicated that the company has continued to make profits. According to AllAfrica, a news organizations, the State-owned entity recorded net profits of N$12.9 million in 2007 and N$59.7 in the 2008 financial year. Apart from an increase revenue base of charging all consumers for water, it also put in substantial austerity measures to reduce operational expenses.

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169 Bayliss & Fine, 2004  
170 McClune, 2004  
171 AllAfrica, Namibia: Namwater Waiting for Cabinet Okay to Increase Water Tariffs  
172 Namibia Water Corporation, 2005
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