Scoping Study for Improvement of Water & Sanitation in Somalia

Prepared by:
Centre for Humanitarian Change
PO Box 8, Sarit Centre
Nairobi
Kenya

For:
Embassy of Sweden, Somalia Section
PO Box 30600
Nairobi,
Kenya
Acknowledgements

The Scoping Study for Improvement of Water & Sanitation was prepared by the Centre for Humanitarian Change (CHC), P.O Box 8, Sarit Center Nairobi Kenya for the submission to Embassy of Sweden, Somalia Section, UN Crescent Gigiri, and P.O. Box 30600-00100, Nairobi, Kenya.

The team that carry out the study consisted of of CHC directors; Nancy Balfour and Peter Hailey and two consultants, Mr Mohamed Bashir and Mr Christophe Galarza.

Many stakeholders working in concerned sectors in Somalia, from the Government and private sector to the International Aid Organizations and Local NGOs, all of whom provided valuable information which significantly enriched the study.

The team would like to particularly thank the Hon. Hussein Ahmed Abdile Minister of Water Resources in Somaliland and his team of Directors; Mr Abib Adan Nur, the Director of Public Health Department (MoH Somaliland), Mr NuhArrAmin, quality specialist seconded from IOM to MoWR Somaliland; Mr Mohamed Salat and the Eng. Mohamed Abdi from PSAWEN and his deputy and project officers, Mr Abdirizak Hassan, Director of Planning from Ministry of Health; Eng. Omar Shurie, DG, and his team from the Ministry of Energy and Water Resource; Eng. Mayo Executive Director Beniadam; Iman Nur Icar, Deputy Mayor Banadir Regional Administration and his team; the UNICEF team in Nairobi, Mr Dara Johnston, Chief of section and Sarh Kemor, Patrick Laurent (Cluster Coordinator) and UNICEF team in the field, Mr Mohamed Farah, Mr Clement Adam, Head of ACSD (Accelerated Child Survival & Development) in Garowe and Mr Dinesh Bajracharya WASH specialist in Garowe; as well as Miss Chantal Richey, Water and Sanitation Specialist from WSP the World Bank; Richard Evans, UNHABITAT (Hargeisa), IOM Head of WASH section Khayre Omar, Mr Abdullahi Yusuf, Country director of CARE Somalia and his team in Somaliland and Puntland; Miss Hinda Abdi Musa, acting Area Manger and her technical team from DRC; the Oxfam team in Nairobi and Hargeisa, Mr Maurizio Gatti from Terra Solidali; the ACF Country director Sebastian Weber; Mr Osman Guureye and Mr Abdirizak Mohamed from Garowe water co.; Mr David Mitchell, Team leader from Somaliland business Fund; Mr Mohameud Hamid and his team of project manager from KAALO in Garowe; Garowe; Mercy Gitau and Peter Mutevo from COOPI; Ali Ahmed Ottheve and his team from IFAD; the SWALIM team for their presentation, Sukri from Islamic Relief; Abdi Jama Gedi the Chairman, SoCWP, SWA, and all other agencies that were interviewed. CHC appreciates these contributions, and availability of all actors demonstrating a real commitment to the sector.

The contribution of the WASH key stakeholders during the brainstorming workshop was much appreciated especially their observations and suggestions on the priority programmes for the WASH sector.
### List of abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRICS</td>
<td>Building Resilience in Central Somalia</td>
</tr>
<tr>
<td>BWR</td>
<td>Basic Water Requirement</td>
</tr>
<tr>
<td>CBHW</td>
<td>Community Based Health Worker</td>
</tr>
<tr>
<td>CBO</td>
<td>Community-based Organization</td>
</tr>
<tr>
<td>CHF</td>
<td>Common Humanitarian Fund</td>
</tr>
<tr>
<td>COOPI</td>
<td>Cooperazione Internazionale</td>
</tr>
<tr>
<td>CLTS</td>
<td>Community-Led Total Sanitation</td>
</tr>
<tr>
<td>CSZ</td>
<td>Central South Zone</td>
</tr>
<tr>
<td>EPHS</td>
<td>Extended Programme of Health Services</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>FCHW</td>
<td>Female Community Health Worker</td>
</tr>
<tr>
<td>FGS</td>
<td>Federal Government of Somalia</td>
</tr>
<tr>
<td>HSSP</td>
<td>Health Sector Strategic Plan</td>
</tr>
<tr>
<td>HWTS</td>
<td>Household Water Treatment and Storage</td>
</tr>
<tr>
<td>ICCM</td>
<td>Integrated Community Case Management</td>
</tr>
<tr>
<td>ICRC</td>
<td>International Committee of the Red Cross</td>
</tr>
<tr>
<td>IDP</td>
<td>Internally Displaced Person</td>
</tr>
<tr>
<td>IFAD</td>
<td>International Fund for Agriculture and Development</td>
</tr>
<tr>
<td>INGO</td>
<td>International Non-Governmental Organization</td>
</tr>
<tr>
<td>JHNP</td>
<td>Joint Health and Nutrition Programme</td>
</tr>
<tr>
<td>LNGO</td>
<td>Local Non-Governmental Organization</td>
</tr>
<tr>
<td>MCH</td>
<td>Mother and Child Health Centres</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MoWR</td>
<td>Ministry of Water Resources (FGS)</td>
</tr>
<tr>
<td>MWMR</td>
<td>Ministry of Water and Mineral Resources</td>
</tr>
<tr>
<td>NCA</td>
<td>Norwegian Church Aid</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>NWC</td>
<td>National Water Centre</td>
</tr>
<tr>
<td>ODF</td>
<td>Open Defecation Free</td>
</tr>
<tr>
<td>PHAST</td>
<td>Participatory Hygiene and Sanitation Transformation</td>
</tr>
<tr>
<td>PL</td>
<td>Puntland</td>
</tr>
<tr>
<td>PPP</td>
<td>Public Private Partnership</td>
</tr>
<tr>
<td>PSAWEN</td>
<td>Puntland State Agency for Water, Energy and Natural Resources</td>
</tr>
<tr>
<td>REDR</td>
<td>Register of Engineers for Disaster Relief</td>
</tr>
<tr>
<td>RWS</td>
<td>Rural Water Supply</td>
</tr>
<tr>
<td>SL</td>
<td>Somaliland</td>
</tr>
<tr>
<td>SOMREP</td>
<td>Somalia Resilience Partnership</td>
</tr>
<tr>
<td>SRCs</td>
<td>Somali Red Crescent Society</td>
</tr>
<tr>
<td>SWALIM</td>
<td>Somalia Water and Land Information Management</td>
</tr>
<tr>
<td>SWIMS</td>
<td>Somalia Water Sources Information Management System</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNDISOS</td>
<td>United Nations Development Office for Somalia</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UN-HABITAT</td>
<td>United Nations Human Settlement Programme</td>
</tr>
<tr>
<td>UNHCR</td>
<td>United Nations High Commissioner for Refugees</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>UN-OCHA</td>
<td>United Nation Office for the Coordination of Humanitarian Affairs</td>
</tr>
<tr>
<td>WASH</td>
<td>Water, Sanitation and Hygiene</td>
</tr>
<tr>
<td>WATSAN</td>
<td>Water and Sanitation</td>
</tr>
<tr>
<td>WSS</td>
<td>Water Supply Services</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
# 1. Table of Contents

1. Table of Contents ........................................................................................................ iii
1. Introduction .................................................................................................................. 1
   1.1. History of WASH sector in Somalia ................................................................. 1
   1.2. Overview of access to water and sanitation ..................................................... 1
   1.3. Background to this study ................................................................................. 2
2. Methodology for the Study ......................................................................................... 3
   2.1. Objectives ........................................................................................................ 3
   2.2. Methodology ..................................................................................................... 3
       2.2.1. Desk review and case studies ................................................................. 3
       2.2.2. Interviews ............................................................................................... 3
       2.2.3. Sampling ................................................................................................ 4
   2.3. Limitations of the study .................................................................................... 4
3. Socio-political Factors Affecting WASH Sector ....................................................... 5
   3.1. Historic Links between Water Resources and Conflict .................................. 5
   3.2. Livelihoods dictated by severe hydrological context ....................................... 6
   3.3. Relationship between WASH behaviour, health and nutrition ....................... 6
4. Current Scope of the WASH Sector ........................................................................ 7
   4.1. WASH governance ......................................................................................... 7
       4.1.1. Legal and institutional framework of the Somalia water sector ............... 7
       4.1.2. Regional Variations on Institutional Arrangements for Water Governance ............................................................................................... 7
       4.1.3. Institutional support for sanitation and hygiene and water quality monitoring ............................................................... 8
       4.1.4. Sector Coordination .................................................................................. 9
   4.2. Water Resource Management ....................................................................... 9
       4.2.1. Roles & Responsibilities .......................................................................... 9
       4.2.2. Monitoring ............................................................................................... 10
       4.2.3. Surface Water Resources ....................................................................... 10
       4.2.4. Ground Water Resources ....................................................................... 10
   4.3. Rural Water Supply ......................................................................................... 11
       4.3.1. Water supply infrastructure development .............................................. 11
       4.3.2. Unsustainable emergency drought response ........................................... 11
       4.3.3. Household water treatment and storage (HWTS) ................................... 12
       4.3.4. Water supply operation and maintenance .............................................. 13
Scenarios for Development of a Swedish Aid Portfolio Relating to WASH in Somalia

5.1. Rural Water Supply ................................................................. 19
  5.1.1. Sustainability strategy for Somalia ...................................... 19
  5.1.2. Support to multiple use water systems: .................................. 20
  5.1.3. Alternative to water trucking: ............................................. 20

5.2. Urban Water Supply ............................................................... 20
  5.2.1. Rehabilitation, management and extension of urban water supply infrastructure: ............... 20
  5.2.2. Peri-urban water programme: ............................................. 20

5.3. Water Resource Management .................................................... 20
  5.3.1. Strengthening monitoring and information management systems ........................................ 20
  5.3.2. Support to FGS to start negotiations on cross-boundary water agreements. ..................... 21

5.4. Sector Capacity Development (Dual interventions for water and environmental health) ............. 21
  5.4.1. Phase 1 - Design and Planning: .......................................... 21
  5.4.2. Phase 2 - Curriculum development and module testing ..................................................... 21

5.5. Hygiene and Sanitation Promotion .............................................. 21
  5.5.1. Strengthening Nutrition & Health Sensitive WASH: ................................. 21
  5.5.2. Scaling up mass Hygiene and Sanitation Promotion Initiatives: ................................. 22

5.6. Urban Sanitation ....................................................................... 22
  5.6.1. Improving low cost sanitation for small towns and peri-urban areas: ......................... 22

5.7. Water Governance ................................................................... 22
  5.7.1. Support to sector coordination and establishment of effective strategies and standards for water development and service provision (including for PPPs): .......................... 22
5.7.2. Establishment of decentralised governance systems to provide over-sight to water service provision: 22

5.8. Connecting Emergency, Humanitarian, Resilience and Development Aid for greater impact ........... 23

5.8.1. Contingency funds to support emergency preparedness & early response .......................... 23

5.8.2. Supporting alternative service delivery models for non-government areas ...................... 23

6. Monitoring and Risk Management ......................................................................................... 24

7. Gender Flag .......................................................................................................................... 24
List of Figures

Figure 1.1: Infographic representation of SIDA WASH support Priorities .......................................................... xi
Figure 1.1: Rural water and sanitation Access ........................................................................................................ 1
Figure 1.2: Somalia population with Access to Improved Sanitation ........................................................................ 2
Figure 1.3: Somalia population with access to protected water sources ............................................................... 2
Figure 2.1: Number of Interviewees per Stakeholder per group .............................................................................. 4
Figure 3.1: WASH vulnerability analysis ................................................................................................................ 5
Figure 3.2: Somalia malnutrition analysis, severity and acuteness, 2013 .............................................................. 5
Figure 3.3: Correlation between Diarrheal and Acute Malnutrition in Somalia ................................................. 6
Figure 4.1: Water Voucher system ......................................................................................................................... 11
Figure 4.2: IFAD distribution of clay pot filter for household ............................................................................... 13

List of Tables

Table 1.1: Table of scenarios for development of a Swedish Aid portfolio for WASH ........................................... x
Table 5.1: Summary of prioritisation of programmes for SIDA portfolio .......... Error! Bookmark not defined.
Table 6.1: Summary of prioritisation for SIDA portfolio ............................................................................... Error! Bookmark not defined.
Table 7.1: WASH Programme risks .................................................................................................................. 25

List of Appendices

Appendix 1 - Maps of water and sanitation access.
Appendix 2 - Key Informants List.
Appendix 3 - Participants in brainstorming meeting.
Appendix 4 - Stakeholder mapping and consultation matrix
Appendix 5 - WASH and Nutrition Vulnerability Mapping
Appendix 6 - WASH Pathways to Tropical Enteropathy, Undernutrition & Child Development
Appendix 7 - Institutions and Agencies in charge of water supplies in Somalia.
Appendix 8 - Cluster coordination structure
Appendix 9 - Map of CLTS activities

Appendix 10 - Summary of recommendations from Cluster Capacity Building study

Appendix 11 - Summary of Somaliland Development Fund Activities (SDF)

Appendix 12 - Table showing ranking of proposed programmes against criteria for prioritisation

Appendix 13 - Map showing relative Cholera risk in Somalia
Executive Summary

A complex environment in which to provide WASH services

Somalia WASH sector is operating in an extremely complex environment where socio-economic, environmental and political factors place WASH actors under tremendous pressure. Somalia is a water scarce country but it is also a country at war with collapsed infrastructure, limited sector governance and low availability of skilled. The WASH sector has been dominated by short duration interventions intended to save lives and relieve the suffering of people affected by the combined shocks of conflict, drought, disease outbreaks and displacement. While water is frequently the stated as the highest priority need by communities donors and government often overlook the WASH sector with the result that there have been drastic reductions in budget allocated to the sector and water supply, sanitation and hygiene have ‘fallen between the pillars’ in the Somalia New Deal Compact.

Despite talk of improving stability and access Somalia there is no evidence of improvements in key development of even basic survival indicators. Women and children are particularly at risk in Somalia with maternal mortality rates the highest in the world and malnutrition rates above emergency levels continuously for the last 20 years. Somalia has also some of the worst indicators for access to water and sanitation in the world with Joint Monitoring Project (JMP) estimates showing that access is decreasing in rural areas (where 63% of the population still live) with more than 90% of the population accessing water from surface and unimproved sources while more than 80% still practice open defecation. Predictably the households most at risk from drought, disease and malnutrition related to poor WASH access are those in the regions where the conflict is most acute and periods of stability are rare.

Study Methodology

A combination of methods was used to carry out the study. In addition to a comprehensive literature review, CHC team conducted face to face key informant interviews with over 80 persons from the civil society, donors, international and local non-governmental organization but also government and institutions, the private sector (mostly engaged in Private Sector Partnerships, PPPs) and the United Nations representatives. In addition, CHC held a workshop presenting key findings where recommended scenarios for development of a Swedish aid portfolio were discussed and prioritised by sector experts.

Kaleidoscope of the WASH sector

There are some similarities in the WASH sector profile across the country but the complex socio-political environment leads to very distinct regional variation between the projects operating in the relative stability of Somaliland (SL) and those operating amidst the ongoing conflict in Lower Juba. Somali zones have various structures that provide institutional water and sanitation management and responsibility with sector regulatory framework at various levels of development and implementation. The WASH sector in south central Somalia reflects the security situation and programmes are orientated to humanitarian practises. Similarly, the sector coordination follows geographical specificities, it is for example well embraced by the Somaliland Ministry of Water Resources, while mainly under the umbrella of the cluster UN sector coordination network in the south central zone. The sanitation and hygiene promotion sectors are however equally disregarded all over Somalia and loosely anchored institutionally beside a recent UN initiative around the Community Led Total Sanitation (CLTS) and eradication of open defecation. The distinct regional characteristics guiding the sector together with the strong role played by the clan system in managing water resources (and mitigating related conflict) indicates that a decentralised governance system for the WASH sector is essential.
The water resources management role and responsibility is confused and missing real leadership and government backup. Government data collection network is often obsolete or non-existent and the sector relies on information management programmes run by Somalia Land and Information Management (SWALIM). Somalia is drastically lacking academic and research initiatives on the management of its most precious resources, the two main rivers (Shebelle and Juba River). The sector is also lacking real understanding of its groundwater potential and missing opportunities of collecting runoff water.

Rural water supply programming is also influenced by the complex conflict and livelihood situation and has to address the needs of a highly mobile population. Water supplies rely on both surface water and ground water sources but deep boreholes are critical for livestock and domestic use in the dry season. Studies have shown that only 50% of these boreholes are functional at any one time. Water supply development requires a careful understanding of the pastoralists and agro-pastoralists priorities as well as deep social knowledge of traditional water management practice as water sources are often clan owned and prone to conflict. Regardless of highly polluted surface water, water quality aspect or household water treatment and safe storage have had limited attention (mostly within emergency humanitarian response). The sustainability of water supplies is rarely considered beyond the duration of humanitarian interventions with corresponding failures in reliable water access. However a vibrant private sector has ensured operation of many rural water supplies (including highly inefficient water trucking) and there is however growing consideration of operation and maintenance aspects in aid programmes. Recent initiatives by major WASH actors (Oxfam, UNICEF and CARE), including experiments with public private partnership (PPP) provide a basis to move forward.

Urban water supply offers a different profile as it is higher in the agenda of both donors and political actors. There are remarkable successes in water service delivery to important urban centres throughout the height of the conflict, mostly due to a PPP system firmly grounded within clan responsibilities. Most major urban centres have plans (partially funded) to improve their water system, the most developed one being Hargeisa Water Supply under the HUWSUP program. However, marginalised population in peri-urban areas (including Internally Displaced Person, IDPs) often struggle to have access to water and pay a high price to various small scale providers. The private sector has developed to cover the gap of poor public leadership and with some initial external support to capital improvement has been running water supplies in at least 12 major towns. The PPP model offers tangible advantages especially considering that it appears to be able to provide services under AS authority but it is drastically lacking regulation and guidance. Mogadishu is an exception with the major water supply infrastructure destroyed resulting in private individuals and associations providing Mogadishu water supply from over 300 private wells and boreholes which are highly contaminated. Banadir Regional Authority (BRA) and the new FGS Ministry of Water Resources have no control over these supplies.

Incidence of disease and fluctuation in malnutrition in Somalia show strong correlation with poor water access and sanitation and hygiene practice. Despite the strong global evidence on the potential for improved sanitation and hygiene to impact health and nutrition, this area of programming has been overlooked at several levels. There is some emerging good practice in sanitation and hygiene promotion (e.g. CLTS and mobile phone based hygiene education) but there are missed opportunities for integration with health and nutrition. Facility based approaches, like WASH in schools may have had some results but there is still need to look for new opportunities and new methods to improve the performance of the sub-sector. Similar initiatives towards the integration of WASH, Health and Nutrition programing within the Joint Health and Nutrition Programme (JHNP) and the DFID NGO Health Consortium and other partners have not been prioritised nor funded.

Resilience programmes are developing promising approaches for more sustainable, community
based programming in high risk areas but are tending to focus on livelihoods and promotion of food security in high potential areas for livestock and agricultural production. Few of these programmes include WASH components which could make critical contributions to productive and human capital. Only the UN Resilience strategy has a significant element of basic services for households including CLTS, strategic boreholes and sanitation and hygiene promotion through Community Based Health Workers (CBHW).

Overall the WASH sector is characterised by a critical gaps in capacity at all levels. Emerging government departments for water and environmental health are chronically short of skills, tools, equipment and basic knowledge on the management and technical developments necessary in their sector. The recent survey lead by the WASH cluster Strategic Advisory Group carried out by REDR, shows limited capacity from humanitarian actors despite years of donor support. Weak capacity is one of the biggest constraints to achieving sustainable results in the WASH sector.

Scenarios for development of a Swedish aid portfolio relating to WASH in Somalia

The analysis of the WASH sector led to the identification of exhaustive lists of program options. This list is synthetized in the table below

Recommendations on Priority Programmes

Using a carefully selected set of principles and criteria, the list of programmes was given a priority ranking. The most important criteria being the potential impact (scalability, feasibility, sustainability), the contribution to Health & Nutrition outcomes, New Deal (PSG 4&5), conflict resolution, resilience/ livelihood, etc.

### TABLE 1.1: TABLE OF SCENARIOS FOR DEVELOPMENT OF A SWEDISH AID PORTFOLIO FOR WASH

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainability strategy for Somalia, including</td>
<td>Support to multiple use water systems</td>
<td>Alternative to water trucking</td>
<td>Rehabilitation, management and extension of urban water supply infrastructure</td>
<td>Peri-urban water programme</td>
<td>Strengthening monitoring and information management systems</td>
<td>Support to FGS to start negotiations on cross-boundary water agreements</td>
<td>Phase 1 - Design and Planning</td>
<td>Phase 2 - Curriculum development and module testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strengthening Nutrition &amp; Health Sensitive WASH</td>
<td>Scaling up mass Hygiene and Sanitation Promotion Initiatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Improving low cost sanitation for small towns &amp; peri-urban areas</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Support to sector coordination &amp; establishment of effective strategies and standards for water development and service provision (inc PPPs)</td>
<td>Establishement of decentralised governance systems to provide over-sight to water service provision</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Connecting Emergency, Humanitarian, Resilience and Development Aid for greater impact</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Supporting alternative service delivery models for non-government areas</td>
</tr>
</tbody>
</table>
economic development and environmental sustainability. This process was endorsed during the experts brainstorming meeting in September. Six priority programmes emerged for SIDA support as shown in the graphic below. CHC has recommended distinct principles and modalities to guide implementation of each of these programmes.

**Figure 1.1: Infographic representation of SIDA WASH support priorities**

Copyright notice: infogr.am
1. Introduction

1.1. History of WASH sector in Somalia

For more than 20 years the WASH sector has been dominated by interventions intended to save lives and relief the suffering of people affected by the combined shocks of conflict, drought, disease outbreaks and displacement. Considerable successes have been achieved in these areas despite the constrained working environment. Sustainability and system development have not been prioritised. Minimal education opportunities and the absence of vocational training have resulted in WASH interventions being managed by well-intentioned individuals with few relevant skills or expertise. Government capacity to provide an enabling environment for the WASH sector is similarly constrained, especially in Puntland (PL) and South Central Somalia. In Southern Somalia as humanitarian access has become more constrained over the years WASH interventions have increasingly been implemented by local NGOs.

In recent years more attention has been focused on providing support to more sustainable WASH service delivery (especially in the north) but overall the sector is failing to achieve any real progress in improving sustainable access to water or sanitation. Unfortunately the welcome development of an Economic Recovery Plan (ERF) and related Multi-partner Fund (MPF) as part of the Somali New Deal undervalues the contribution of water and sanitation improvements and consequently the WASH sector has ‘fallen between the pillars’ of the Somali New Deal Compact.

1.2. Overview of access to water and sanitation

Somalia has some of the worst indicators for access to water and sanitation in the world. Reliable data has been difficult to obtain over the last few years but the officially recognised figures are presented in Figure 1 below. Data mapped from the FSNAU household surveys in 2009-2010 (Figure 1.2,1.3 & Appendix 1) provide more up to date information for CSZ and show considerable variation in access with, predictably lower rates in areas heavily affected by conflict in the South.

---

1 Notably the large scale efforts to prevent the spread of cholera in the famine effected population of SC Somalia in 2010-11.
Most striking is the trends in water access which, according to JMP are deteriorating. This suggests that WASH interventions have failed to translate into concrete and sustainable improvements in water & sanitation access.

Somalia is both a water scarce country and a country at war with collapsed infrastructure, limited sector governance and low availability of skilled individuals. The sanitation and hygiene situation is one of the main causes of high levels of diarrhoea disease especially in the rapidly growing urban areas where open defecation is still common practice and open shallow wells provide much of the water supply. Women face the major burden of fetching water, often walking up to 10 km to get water in the dry season. Water is considered both an economic and social good due to the heavy reliance on water for livestock and agricultural production in Somalia.

SIDA has decided to allocate 300 million SEK to the WASH sector in its new 5 year strategy for Somalia. In order to focus the funding on the areas of greatest need in the sector, SIDA has commissioned a scoping study. SIDA intends to contribute to health and nutrition outcomes through its WASH support and hence nutrition and health sensitive approaches have been given particular attention.

SIDA selected the Centre for Humanitarian Change for this study based on the Centre’s capacity to stimulate discussion amongst WASH stakeholders and analyse the best practice in the sector to come up with bold ideas on how to support the delivery of WASH services to achieve health and nutrition outcomes.

The study was carried out between August and September 2014.
2. Methodology for the Study

2.1. Objectives

The objective of the study is to suggest to SIDA options for support to WASH in Somalia for the 2013-2017 period. The suggested options shall be based on an analysis of the WASH situation in Somalia and the exploring of various scenarios for development of a Swedish aid portfolio relating to WASH in Somalia.

The study should also suggest general direction for support (geographical; target groups; modalities; etc) as well as a selection of concrete projects or initiatives that Sida can consider for immediate appraisal (ToR Somalia Water and Sanitation scoping study, 2014).

The research questions refer to stakeholders WASH initiatives in Somalia, identifying their strengths, weaknesses and looking more specifically at lessons learned and best practices to present possible options to improve sector performances.

Question 1: what are the main strengths, weaknesses of the WASH response in Somalia?

Question 2: what are the gaps, lessons learned best practices?

Question 3: what are the recommendations to be made in terms of investment in the WASH sector to improve service delivery?

2.2. Methodology

The team used a combination of methods for the study principally qualitative data were collected. In addition to a comprehensive literature review, the team conducted face to face interviews with more than 80 key informants (see Appendix 2 for a full list of stakeholders interviewed).

Field observation was not conducted during the course of the study but team members have extensive knowledge of the region and more particularly Somalia. The team took time to meet with a number of local NGOs and other Somalis who are working in different regions to get their views on the challenges and successes in the field. The team organised a 1 day meeting to discuss and debate the main findings of the study (22 key stakeholders from the sector - list in Appendix 3). This meeting was a good opportunity, through presentation and discussions, to triangulate and validate the findings of the reports and to discuss some of the outstanding questions relating to strategic direction in the challenging context of Somalia.

Research to address the objectives summarized above began with a comprehensive desk review, followed by data collection using a combination of qualitative methods.

2.2.1. Desk review and case studies

The consultants used Google Scholar and academic databases to collect relevant peer-reviewed articles. In addition, other types of literature were gathered from relevant portals and organizations, including the UNICEF Somalia, OCHA Somalia, SWALIM/FAO Portal http://www.faoswalim.org/, Joint Health and Nutrition Programme http://jhnp.org/etc, Somalia Resilience Programme http://www.somrep.org/ etc. (see Reference list)

2.2.2. Interviews

Semi-structured interviews were then conducted in Nairobi, Hargeisa, Garowe and Mogadishu during the end of August and the beginning of September 2014. Mainly conducted face-to-face rather than on the phone, planned with enough time for preparation and discussion, conversations were recorded for future reference and validation. For this study consultants did not use participatory methods at the community.

---

2 It was agreed with SIDA that the scope of the study should include the water resources sub-sector but exclude solid waste management.
level mainly due to poor access to the field and security reasons. However, the team did make use of recent community consultations (undertaken as part of the planning for resilience programming) to inform the study on community priorities around water, nutrition and health.

A limited number of Somalia WASH cases studies were available to the consultants. Available information has been utilized extensively throughout this report. It should be noted however, that the WASH sector in Somalia is characterized by a dearth of evidence of What Works in Somalia. Therefore, a cross cutting priority for the sector is Knowledge Management and the construction of a more complete evidence base, including for WASH in Somalia.

2.2.3. Sampling

Sampling was not meant to be “representative” of the WASH stakeholders but rather “exploratory” and interviewees were “hand-picked” based on their relevance, knowledge or experience in the WASH sector in Somalia. The 4Ws updated matrix form the WASH cluster was also used to identify main partners.

For this research findings from interviews were triangulated with discussions and presentations from the workshop and the analyses of secondary data from stakeholders report. The resulting stakeholder mapping is presented in Appendix 4.

2.3. Limitations of the study

Discussions with communities or service users would have been very valuable but the field access in Somalia is severely restricted due to logistic and security constraints. Most of the South Central zone is still experiencing a chronic emergency, with limited access in many places. For security reasons, visits outside the main towns in Somaliland (SL) and PL are also not recommended. These same constraints prevented the authors from administering a quantitative questionnaire in the field. These limitations have been minimized to the extent possible through the use of secondary project data as described previously. The study team also attempted to overcome this limitation by taking time to discuss the WASH context in specific areas with a number of local NGOs and other local stakeholders with detailed understanding of the communities they work with.

Reports and secondary data like the UNICEF MICS, JMC data have to be considered in the perspective of an extremely complicated environment for operations and data collection. For example the latest SWALIM report and live map refers to recent data for PL and SL (February 2014) but much older data for the South Central Zone (2008 to 2009).

Issues of corruption, compromise of humanitarian principles and poor governance are significant in the Somalia context, and may have significant impact on both private sector performance in water scheme investment and management and access of marginalised groups to water and sanitation. These are explored in brief in the following section but a more detailed analysis of how the socio-political context and a political economy analysis for the WASH sector would be a useful contribution to strengthening the sectors performance.

![Figure 2.1: Number of Interviewees per Stakeholder per Group](image-url)
3. Socio-political Factors Affecting WASH Sector

3.1. Historic Links between Water Resources and Conflict

After the overthrow of President Siad Barre in 1991, Somalia was without a formal parliament for more than twenty years. In the following years opposing groups failed to reach an agreement and the country entered a prolonged period of lawlessness and warfare. It was not until 2012 that a new internationally backed government was installed. The north-west part of Somalia unilaterally declared itself the independent Republic of Somaliland. Whilst still not recognized internationally the territory has experienced relative stability since then.

The years of fighting have been characterised by shifting power dynamics between rival clans with alliances being formed and broken for convenience. The relative power of the difference clans and sub-clans effects access to resources, including water and particularly water for livestock and agriculture. Similarly the control over key productive assets such as water has been a source of conflict throughout Somalia’s history. With such a high value placed on water in Somali society it is viewed as both an economic and social good and households expect to pay to collect water. Unfortunately for such a poor country prices for water are some of the highest in the region.

The decades of fighting have also meant that the population were increasingly vulnerable and their weakened resilience to natural disasters such as drought led to the starvation of more than half a million people in 2011. Analysis of nutrition and WASH vulnerability clearly indicate the overlap of vulnerabilities in the mostly densely populated areas of Somalia such as the South along the rivers and between the riverine valleys (see maps below).

![Map of Somaliland](image1.png)

**Figure 3.1:** WASH vulnerability analysis, severity and acuteness, 2013

![Map of Malnutrition](image2.png)

**Figure 3.2:** Somaliland malnutrition analysis, severity and acuteness, 2013
above and in Appendix 5). Much of the analysis of the causes of the famine point to the relative in-balance in access to resources of some groups in these areas.

The sensitivity around control over water resources by different clans and between regional authorities means that water supply development by external actors as a risk of increasing conflict as well as providing an opportunity for peace building through negotiated operation and management.

3.2. Livelihoods dictated by severe hydrological context

The climate of Somalia is mainly arid or semi-arid, with a few pockets of semi-humid areas. Rainfall happens during two seasons with less than 100 mm annually along the northern coastline to over 600 mm in some more mountainous regions. The growing period is restricted to 1 to 4 months per year limiting agricultural production. Frequent droughts and floods present important challenges to the population. Forests are limited to the north and to the southern floodplains of River Juba. While the soils have potential for agricultural production along and between the two main rivers (cf irrigation and barrages/dams on the Shabelle and Juba Rivers) and few other small areas, most of the land is used by nomadic pastoralist communities for herding livestock. The Ethiopian highlands generate most of the surface water resources that flow into Somalia through the Juba and Shabelle Rivers with no Somali involvement in the management of this supply either for flood control or irrigation. A significant part of the surface runoff in other areas is not captured. Groundwater provides 80% of the domestic water supply, but the groundwater table is deep (100 to 300 m below the surface) which makes extraction expensive. Due to dissolved minerals the salinity is also very high. Despite the significance of the groundwater and the high costs of drilling, relatively little is known about the hydro-geology of the country (Balint Z. et al, 2011).

3.3. Relationship between WASH behaviour, health and nutrition

There is significant global evidence on the relationship between WASH, diarrheal disease and malnutrition (see Appendix 6). There has been very little credible research in Somalia but the 2009 FSNAU Meta-analysis of nutrition trends in Somalia showed that acute malnutrition has significant associations with any illness and with individual common child illnesses. Children who were reportedly ill had 1.55 times greater risk of being acutely malnourished than those who were not. Diarrhoea posed a highest risk of malnutrition in children reported ill. There was also a corresponding seasonal trend in both GAM and diarrhoea prevalence over the eight years under study.

Figure 3.3 - Correlation between Diarrheal and Acute Malnutrition in Somalia

Global evidence shows that handwashing and sanitation practices have the greatest effect on diarrhea disease and in Somalia outbreaks of cholera and acute watery diarrhea (AWD) are common in the areas with the worst access to water and sanitation (Lower Juba, Mogadishu, Lower Shebelle, Baidoa). Hygiene and sanitation behaviour in Somalia is very poor with high levels of open defecation putting households at high risk of disease and malnutrition.
4. Current Scope of the WASH Sector

4.1. WASH governance

4.1.1. Legal and institutional framework of the Somalia water sector

Somali regions have an extremely varied approach to structures for institutional Water and Sanitation management and responsibility. Water Codes, Laws and institutional structures have mainly been implemented in SL and PL. The Federal Government of Somalia (FGS) is in the process of developing a Water Policy with the help of IGAD. There is however a general consensus that Water Resources and Management should be prioritized. (Appendix 6 - Government Ministries responsible for the water supply sector and regulatory frameworks.)

4.1.2. Regional Variations on Institutional Arrangements for Water Governance

Hargeisa Water Agency

The “Hargeisa Water Agency” is a National Water Agency responsible for the distribution of drinking water across Hargeisa. It is an independent public company reporting to the President. The Agency is responsible for the operation of the water supply and related facilities, catchment in the city and periphery population centres. The agency is also in charge of the design and implementation of water related works and related facilities, new distribution networks and the extensions of existing distributions (Hargeisa Water Supply Master Plan).

The EU (grant of €15 million), UN-Habitat (€1.5 million) and SDF (€1 million) have joined to upgrade the system over a 42-month period. The Hargeisa Urban Water Supply Upgrading Project (HUWSUP) is a partnership with the Hargeisa Water Agency and UN- Habitat. The main objectives of the project are to increase the amount of water available to Hargeisa while ensuring that the supply system is secure and sustainable, principally through the replacement of the main transmission pipes and the development of more water sources (drilling of new boreholes). There is an $8M shortfall in funding to complete the upgrade but World Bank are contributing to the project through provision of Corporate Advisory Support to Hargeisa Water Agency.

A small scale water distribution network from an infiltration bed funded by UNICEF, UNDP, Hargeisa Local Government and Hargeisa Water Agency has had limited success partially due to a low yield from the newly constructed dam at Haraf.

Finally another water project, from Humboweine, sponsored by the United Arab Emirates Government and contracted out by Al-Khalifa Foundation is in progress. It should provide enough clean water to the eastern and southern parts of Hargeisa that have an acute water shortage.

PSAWEN in Puntland

The Puntland State Authority for Water, Energy and Natural Resources (PSAWEN) is an institution created by law on the 20th December 2000. It became fully operational in 2001 as the sole institution responsible for the delivery of water and electricity in the Puntland State of Somalia. It has the full mandate to oversee and manage the Puntland Water and Energy Affairs and National Water Policy (Puntland Water Policy, 2007). The Water Department within PSAWEN is responsible for both urban and rural water systems, as well as survey and design of water supply, provision of clean hygienic water at reasonable cost, management of the operations and maintenance. However
PSAWEN has some limitations as a state agency rather than as a full Ministry especially in terms of representation in Government. The Ministry of Environment, Wildlife and Tourism is also a key player in water resource management in Puntland.

PSAWEN ensures coordination with various stakeholders and has the ability to sign contracts with the private sector. Main programme concerns are linked with monitoring and evaluation of the water sector, to fulfil their regulator role. PSAWEN has also developed a 5 years plan (over US$ 3 million a year) and common approach guidelines for a three year project developing the existing Public Private Partnership Companies (PPP). The 5 main towns have benefited from this strategy with over 20,000 HH connections. At rural level, PSAWEN and UNICEF have established two repair and maintenance centres in Qardho and Garowe. They have rehabilitated and constructed water sources (boreholes, springs, wells and small water supply). PSAWEN stress the need for capacity building for their employees, and also raise several operational challenges such as limited water sources, high operational costs (mainly due to high petrol price) and limited private sector investment.

In non-government controlled areas of CSZ the coordination of the WASH sector has been taken up by committees established at regional level by the WASH Cluster. These are made up of the local (and international) NGOs active in the sector. The system works well for coordination and mobilisation of a response to emergencies but the committees have no authority to provide oversight of the sector or enforce standards (even Sphere standards) on the other WASH actors. In some areas (including key towns such as Merka and Johar) water has been effectively governed through traditional systems involving clan elders. Where the trust of the water users is an important factor in maintaining peace around resource management there are some benefits to retaining these traditional governance mechanisms. As appointed governors and regional authorities begin to be formed in some of the regions it will be important to harness this civil society capacity to form a ‘hybrid’ institutional structure for governance of the sector.

4.1.3. Institutional support for sanitation and hygiene and water quality monitoring

Hygiene promotion and sanitation issues are not well represented at institutional level. The Ministry of Health (MoH) and the Public Health departments are often the designated Government counterpart but have little means to lead the sector. The Departments in PL, SL and, newly established, in FGS have limited capacity but in many cases this is compensated by genuine commitment. The PL MoH Public Health department has taken a strong role in developing sanitation policy and adopting CLTS protocols. A Sanitation policy was recently developed for SL but it is not enforced due to the weaknesses in the Public Health department. Several organisations have committed to support capacity building of the Public Health department of the FGS MoH in order to strengthen the regulation and control over the critical environmental health situation in the city. Urban sanitation is seen to be the mandate of local municipal
authorities but in practice these authorities believe that this responsibility is limited to mains sewerage (which doesn’t exist) and sold waste management. Leaving a gap in responsibility for on-site sanitation which is the norm for around 99% of urban residents.

There are also some weaknesses in the water sector related to water quality. In SL, for example the water quality department embedded in the MoWR and supported by IOM (started in November 2013) lacks political will and support. Recent initiatives like staff training and supplies for the laboratory have had a limited impact. However water quality is one of the Ministries priorities and there is a need to reinforce the overall sub-sectoral strategy and its operation. Weaknesses in regulating water quality are compounded by the relatively poor understanding of how the water supplies become contaminated and the risks associated with the use of this water. Improvements in water quality will therefore require combined efforts from several institutions.

4.1.4. Sector Coordination

Sector coordination is often ensured through the “cluster”, with support of UNICEF and implementing partners and to some extent endorsed by the appointed Ministry at regional level (in PL and SL). Up until recently there was no Government committee appointed to ensure inter-ministerial coordination and this role was often ensured by the inter-cluster coordination mechanism. An inter-sectoral committee has now been established in Mogadishu, chaired by the DG Planning, which has potential to strengthen the oversight and coordination of the fragmented planning and implementation of WASH sector activities.

In the South Central zone, coordination at regional and district level is still managed by WASH cluster implementing partners (See Appendix 7 for Map of Cluster Coordination System). The selection of sub-cluster leads ensures some buy in from WASH actors but in practice the membership is dominated by NGOs closely linked to the Cluster through their funding from Common Humanitarian Fund (CHF). Practically speaking other WASH actors remain un-coordinated and private sector, diaspora and Arab government instigated water projects are often implemented without adherence to standards or even good practice.

UNICEF and IOM supported technical assistance have been appointed and embedded within the relevant ministries. Sector coordination is happening on a regular basis even though a limited number of partners attending the meetings. The main challenges in the coordination sector were reported to be linked to the complexities of operating within a conflict context, the regional and district focal point capacities as well as decreasing funding.

Steps are being taken to encourage government to take on more responsibility for coordination. This may in future involve a new role for the cluster more related to rapid onset emergency preparedness and response.

4.2. Water Resource Management

4.2.1. Roles & Responsibilities

The responsibility for water resource management is not clearly defined in the Somalia context. In PL and SL PSAWEN and MoWR have a mandate for water resource monitoring and development and SWALIM has invested considerable resources in building the capacity of appointed officers and establishing information management systems to assist them to fulfil their mandate. However there are some overlaps in responsibilities with the Ministry of Environment and in practice many development partners (including World Bank) have been asked to work through the Ministry of Environment for implementation of projects involving water resource development.
4.2.2. Monitoring

There is a hydro-meteorological monitoring network that combines manual rainfall, river monitoring stations and automatic weather stations with satellite based data transmission. There have also been some attempts to introduce drought mitigation and management approaches using a Combined Drought Index (CDI). The Somalia Water Sources Information Management System (SWIMS) has over 2,250 detailed records of strategic point water sources, this system has recently been upgraded.

In the new system, the “live map” does not require any software application and should facilitate user’s interaction and analysis and enhance data collection. The “live map” has a web interface accessible to all stakeholders (that have access to enough bandwidth). The main result of the new system will be improved data visualization and reporting in near real time using a variety of tools including maps, tables, charts and reports. The SWIMS Live Map shows parameters for each water source such as water quality, functionality, location, photos etc. The system also allows data export to MS Excel for detailed statistical analysis. An off-line version of the system is also being developed for use by those who have no internet connection. 436 strategic boreholes were identified in the January 2014 survey in SL and PL and details of another 3,355 water sources in Somalia e.g. boreholes, berkads, wells are currently accessible online.

The constraint with the tool as a “live” map is that it requires regular updates. It has been updated in SL and PL by the recent survey (Jan-Feb 2014), but still relies on data from the water inventory carried out in 2008 and 2009 for data on water supplies in CSZ.

Update options such as SMS platforms to simply provide information on emergency boreholes (functional or not) are being studied and could make the tool much more useful. Access to previous and older data (history of borehole functionality for example) are not available in the current version.

Despite the efforts of SWALIM their considerable capacity for sector monitoring has not yet been successfully embedded in government institutions. This is both a result of the capacity of the staff available to manage the system and the lack of vision of the water departments to use the tool for sector planning and coordination.

4.2.3. Surface Water Resources

Surface water resources are dominated by the Shebelle and Juba River which are the source of the South’s significant agricultural potential. Consequently control of the riverine areas has been at the heart of much of the conflict over the last 20 years. As the bulk of the water in the rivers originates in the Ethiopian highlands, trans-border agreements are required to effectively manage the water resources as well as develop a coordinated approach to flood warning. The starting point for the development of trans-border agreements would be establishing formal relations between the Ethiopian water resource authorities and the Ministry of Water Energy and Water Resources, preferably with technical support from SWALIM in the initial stages.

4.2.4. Ground Water Resources

The aquifers in Somalia are a combination of shallow aquifers in the riverine areas that are recharged from surface water, and aquifers of often considerable depth elsewhere. Apart from the riverine areas, recharge of aquifers is relatively small, and a large proportion of groundwater draws from connected aquifer formations in neighbouring Kenya and Ethiopia. Groundwater quality in Somalia is

---

1 A ‘strategic borehole’ is defined as one which operates all year round and serves a large number of communities in the dry season when other, temporary water supplies, run out.
relatively poor, due to high levels of salinity. One of the major causes of this elevated mineral content is that the water is or has been in contact with easily dissolvable minerals. In addition, groundwater recharge is inadequate and confined to limited source areas; many aquifers receive no recharge at all and consist of old, highly mineralized fossil water.

Assessment and mapping of groundwater resources has been limited since the comprehensive surveys undertaken by Italian Hydro-geologists in the 1970s. Individual hydro-geological surveys have been carried out to guide borehole drilling but this has not been coordinated and very little of the data is consolidated. SWALIM recently undertook an assessment of groundwater potential in SL and PL and produced comprehensive maps and information to guide water development. However there is limited capacity within the WASH sector actors to absorb and utilise this data.

4.3. Rural Water Supply

4.3.1. Water supply infrastructure development

The majority of Somalis live in rural areas (63%, JMP 2012); they are pastoralists and semi-sedentary agro-pastoralists with some permanent village dwellers. Water needs are met by rivers (seasonal and permanent), springs, rainwater harvesting facilities (surface reservoirs or “balleys” and cement lined tanks or “berkeds”) shallow wells and deep boreholes. The network of functioning pastoral water supply structures is highly inadequate and leads to environmental degradation through overgrazing around existing water points.

All water apart from in the big cities is communally or privately owned and supplied. Water is either (privately) transported to users from a city’s supply, is collected in cement catchments (berkeds) by private entrepreneurs, or is sourced from communal or private wells and boreholes. An active private sector system for water delivery to communal or individual berkeds by water tanker is well established.

In recent years rural water projects have focused on infrastructure rehabilitation. There is some evidence that the same water supplies will be routinely “rehabilitated” every 2-3 years by different organisations. This is both a failure of the approach to water interventions which are often short term, relief orientated and do not consider sustainability and of the responsible water authorities which do not maintain records of water projects.

There has been some construction of new water supplies, mostly drilling and equipping of new boreholes in water scarce areas. There are varying degrees of community engagement in these projects depending on the source of funding. Projects developed with funding raised by the community through the diaspora tend to have more local ownership whereas projects delivered by an outside organisation are seen as a gift but not one for which the community should take responsibility. In the last 2 years a large number of boreholes (possibly over 50) have been drilled by contractors on the instructions of various Islamic governments under the umbrella of the Organisation of Islamic Council (OIC). It appears that this drilling has been un-coordinated, un-mapped and had minimal community participation. There are reports that some of these boreholes are not equipped to pump water. The tendency to see drilling new boreholes as a solution to water access problems has resulted in a large number of boreholes throughout the country but up to 50% of them are non-functional. Further new drilling without proper coordination and community consultation risks environmental damage to critical pasture areas and over-depletion of fragile aquifers.

4.3.2. Unsustainable emergency drought response

Water shortages are usually experienced during the long dry season (Jilaal) when the
population can only rely on the two permanent rivers (the Juba and Shabelle) and ground water supplies (permanent springs, boreholes, permanent wells). Drought and internal displacement severely constrains access to water, with supply needs often met through costly water trucking to water storage facilities in permanent settlements or directly to grazing areas.

The typical response from aid agencies to drought is to fund water trucking to areas with temporary water supplies. It is estimated that millions of dollars have been spent on these temporary responses over the last 20 years. If funding had been pooled and spent on more permanent water supply solutions the need for water trucking would be greatly reduced. During the 2010-11 famine water actors introduced Water Vouchers as a way of increasing access to water for the worst affected households who would otherwise be forced to move or reduce food purchase to pay for water (see box).

The experiment worked well in terms of being able to directly target the worst affected households and avoiding price inflation. It is also expected to be a much more efficient way of ensuring water access in areas with no permanence water supply and where monitoring is difficult.

Other responses focus on rehabilitation of water supplies, including donation of pumping equipment.

There have been some recent attempts to establish more sustainable water supply management and then use emergency funds as ‘surge’ support/subsidies to community based water service providers (committees and private operators) through fuel subsidies, spare parts donation and mobilisation of rapid repair teams (from sub-regional repair centres in PL). These approaches and others reinforce sustainable management rather than undermining it and ensures availability of water at times of stress.

4.3.3. Household water treatment and storage (HWTS)

The promotion of HWTS has mostly been through distribution of jerrycans and chlorine tablets as an emergency intervention with minimal education on how to use the items at the time of distribution. More comprehensive projects to promote use of chlorine and/or ceramic water filters have been introduced in SL, including social marketing of Biosafe (alongside ORS and Zinc) by PSI in Hargeisa. This has had significant impact on use of HWT and reduction in the severity and impact of diarrhoea episodes but is so far restricted to urban areas.

Ceramic water filters are manufactured in
Hargeisa and are a popular option for HWTS with households (according to surveys carried out by Somali Red Crescent). However pricing and transportation are a constraint to wide spread marketing in Somalia.

4.3.4. Water supply operation and maintenance

The sustainable operation and maintenance of rural water supplies is starting to get attention from stakeholders. Since the majority of water supplies are communally or privately owned and government has been weak or absent from the sector the prevailing model is one in which private sector plays a major role. Water is seen as an economic good and in most cases households buy water, even from communal (or clan) owned supplies. Funds collected are used for minor maintenance and operator remuneration and profits (sometimes substantial in the case high production boreholes) are absorbed by the owners with little or no accountability to users. In recent years the PPP model has been adapted by UNICEF in collaboration with Terre Solidari, COOPI and others and applies to selected rural water supplies. Lessons learnt (documented in a series produced by UNICEF) indicate that the approach has potential for financially viable water supplies but needs longer term capacity building support to newly established water service providers and stronger regulation.

Oxfam GB has also been working through NGOs in Lower Juba and SL to improve sustainable management of boreholes and has developed models for subsidised community management which can be replicated to other areas.

4.3.5. Technical Innovation

There appear to be few examples of technical innovation in rural water sector but notable successes include:

- Solar pumping equipment installed on shallow wells and boreholes - The use of high quality components has resulted in systems which are low on maintenance costs and reliably provide water, even in remote areas of Hiran and Madug
- Small-scale water treatment systems - IOM has introduced these as a way of improving access to safe drinking water in riverine areas of SCZ.

![Figure 4.2: Women in Hiran water point and solar system.](image)

- Ceramic water filters - Locally manufactured (in SL for northern Somalia and Kenya for Southern Somalia) have been distributed in a number of communities in Gedo, Bay, Galgadud and SL with good acceptance.

![Figure 4.3: IFAD distribution of clay pot filter for household](image)

- Lined and covered ‘Baleys’ - a pilot project was constructed by Terre Solidari in PL to improve the reliability of rainwater harvesting and to provide fresh water which could be combined with saline borehole water to provide drinking water.

Private sector companies, based in Kenya, are developing mobile phone based technology
for data capture, transmission and education. So far this is being used for monitoring relief distribution in IDP camps and other sector project outputs in CSZ. There is a good opportunity to also use this technology to overcome problems of remote monitoring of water supply operation (especially strategic boreholes) linked to rapid repair services for more sustainable operation and maintenance.

Despite the high salinity of much of the groundwater in Somalia there are few examples of use of desalination to produce fresh groundwater. These technologies are used extensively (at different scales) in Middle East countries and could be appropriate for Somalia.

4.4. Urban Water Supply

4.4.1. Water Supply infrastructure

Somalia is experiencing rapid urban growth, accelerated by internal displacement due to conflict and drought. Surprisingly urban water supply is relatively good (with the exception of Mogadishu and Kismayo) and piped water is available to a high proportion of residents (see figures in Chapter 1). However many of the urban & peri-urban poor (including IDPs) rely on small-scale water vendors who provide low quality water at a high price so that poor people pay up to five times more for water. Typically people in cities and towns in conflict areas in the south are supplied by small neighbourhood networks or through private vendors with water carts.

4.4.2. Private sector involvement

Publicly managed up to 1991, Urban Water Supply Systems (WSS) were already financially stressed and inadequate. Damaged and poorly maintained they rapidly became non-functional during the following 2 decades. WSS infrastructure did not received public funding with exception, of limited allocations, in SL and PL by the UN Children's Fund (UNICEF). The local private sector has developed, during that period, to fill the void created by the lack of public leadership in providing WSS services. Entrepreneurs throughout the country have built berkads, drilled private boreholes, provided services throughout the main cities and to some extent improved WSS operation.

PPPs were developed in 12 towns between 2000 and 2009 with the biggest being in Bossaso, Galkayo, Baidoa and Borama. Many of the urban water companies are now owned by a local investor who operates with local business people as shareholders. In general these have had good results particularly in large cities like Boroma, Bosasso and Garowe. The notable success is the continued provision of water to users in Jowhar, Merka and Baidoa after the takeover of these towns by ICU and then AS. Despite the absence of any external support these companies (established between 2000 and 2005) managed to negotiate to bring in necessary inputs to keep the WSS operational.

In the Somalia context government authority struggles to provide planning, policy, and regulation. SL and PL have reorganized their urban water sectors and largely established local WSS agencies and domestic public-private partnerships (PPP) under an EC funded programme but there are obvious limitations in the south-central region. Decentralized water service delivery is clearly the right path for Somalia but questions around equity and water quality need to be addressed.

4.4.3. Mogadishu water supply

Mogadishu water supply provided piped water to 42,000 people in 1988 but today provides no water. The old water supply piping system from boreholes was destroyed and the boreholes now supply water to the communities and IDP camps in Afgoye corridor only. All the former Mogadishu water agency assets were looted and destroyed and a lot of resources are needed to put the system back in to operation. Private individuals and associations provide Mogadishu water supply from 300 plus wells in the city. Banadir authority and the ministry have no control over these providers but they
do provide a valuable and mostly sustainable service to the Mogadishu residents. The individual water points have been mapped by UNHABITAT as part of their recent urban development project and there have been a number of water quality surveys indicating high levels of contamination in water supplies at source, point of collection and point of use.

The re-development of Mogadishu Water Supply requires a phased approach with the first step being to work with the associations of service providers in both Mogadishu city and Afgoye to improve their services and encourage compliance with quality and equity principles. Large scale investment in infrastructure is required as a second phase but this will need to be negotiated carefully with the existing service providers.

4.5. Community sanitation & hygiene

Evidence for the strong link between sanitation and hygiene and health and nutrition is overwhelming. Not only does good sanitation and hygiene significantly reduce the risk morbidity and mortality from major killers like diarrhoea, malaria and pneumonia it has also been shown to reduce stunting and the risk of wasting. Good sanitation and hygiene practices are therefore also connected to lifelong and intergenerational impacts on cognitive abilities, earnings, and poverty reduction.

4.5.1. Rural communities

Holistic and participatory community hygiene approaches including hand washing, safe disposal of faeces and other solid waste, household treatment of drinking water and improved food hygiene have proved to be the essential elements of successful hygiene approaches. There are multiple prevention and promotion activities used to achieve these aims ranging from mass media campaigns to participatory community based processes.

For many years Hygiene and Sanitation promotion and prevention education and communication programmes in Somalia have tended to be ad hoc, uncoordinated, isolated and often fail to learn lessons from previous initiatives. In particular the approaches used have been characterized by the use of cascade training and an emphasis on education of Somali populations as opposed to participatory approaches building on local knowledge promoting existing positive traditional practices. Sector siloes between WASH and Health and Nutrition also limit the impact of approaches to community sanitation and hygiene used by each sector. Integration of approaches at the community level represents a tremendous opportunity for a synergistic acceleration of progress in reducing mortality, morbidity, malnutrition and improving human and social capital.

Within the Health and Nutrition sectors hygiene and sanitation promotion has been conducted through a variety of community based workers using a variety of packages most of them including the essential elements of sanitation and hygiene. Female Community Health Workers (FCHW, WHO), Community Health Workers (Somaliland Government), Integrated Community Case Management (iCCM, UNICEF Health GAVI and Save the Children), Community Based Health Workers (UNICEF Resilience programme) and the Nutrition, Health and Hygiene programme (UNICEF) are some examples of packages presently being rolled out in Somalia. The JHNP has also commissioned a Strategy for Community Based Health (in progress). This initiative has the potential to harmonise packages used and to focus attention on this extremely important component of the Health Systems Strengthening process. The WASH sector has predominantly used the PHAST approach as a framework for their interventions in this area. The behaviours promoted through this system are very similar to those found in the Health and Nutrition sector topics and Participatory Hygiene and Sanitation Transformation (PHAST) puts a clearer emphasis on participatory approaches.
to achieving sustainable behaviour change. There is clearly a need for the sectors to review and harmonise their approaches to maximise coverage, quality and impact in this area.

The predominant form of sanitation investment of all types of aid in Somalia has been through programmes subsidising the construction of latrines. Despite this investment there is very little evidence of impact on the increased use of latrines or improved sanitation and hygiene. The current situation is also characterized by a high degree of unsustainability and little sustained behaviour change. New community based approaches for sanitation such as Community Led Total Sanitation, CLTS, have shown great promise globally and in Somalia. Communities are encouraged to review their own defecation patterns and the impact it has on their community. Through this analysis they then develop their own action plan towards their community becoming open defecation free (ODF). ODF status represents a first and major step for a community as they then go on to develop more sophisticated and holistic approaches to sanitation and hygiene in their own community.

In Somalia, CLTS has been largely supported by UNICEF, partners and LUNGO with positive results. Since piloting CLTS in 2012, a total of 144 villages have achieved self-acclaimed ODF status. An additional 232 have been triggered and are on course to achieving ODF status (see Appendix 8 for map of CLTS activities). However, weak central government means that scaling up of CLTS is a challenge. The CLTS protocol is at different levels of development. In PL the CLTS protocol is already in place with official recognition by the PL authorities which has passed a decree barring all subsidy based approaches. In SL and SCZ CLTS protocol development has been initiated. Going forward UNICEF and partners as a sector/Cluster lead should continue to advocate for government, donors, partners and other stakeholders involvement in implementing the CLTS. In a CLTS regional workshop held in Feb 2014, government committed to triggering more than 50% of the 11,000 villages in Somalia by end of 2015 (MDG target) and UNICEF is targeting 685 villages by end of 2015.

4.5.2. Urban communities

The sanitation sector and operational sewerage system never recovered from the challenges of the last 23 years and have received far less attention and funding from various stakeholders and investors. In the absence of a public sector provider, or enabling environment, individual waste collectors have assumed the role and recovered costs by charging households directly. Waste from the few functioning sanitation facilities and the waste gathered by the collectors are commonly deposited in dry river beds and landfills without consideration of public health or environmental degradation (cf. Hargeisa landfills).

Community latrines, since sewer systems servicing individual households are limited, are used by the majority of people who have access to sanitation. Migrations and displacement have considerably stressed the few existing systems found in peri-urban and temporary facilities have become permanent. To maintain facilities, local organizations and the humanitarian actors de-sludge facilities using vacuum tankers. Few latrines are equipped with septic tanks and most of these are not managed. In IDPs areas households have limited facilities mainly due to restrictions on land availability forcing people...
to defecate in the open on the periphery of peri-urban areas and camps.

Overall peri-urban sanitation & hygiene is at crisis levels. Cholera outbreaks are common and efforts to engage government to manage sanitation services have been unsuccessful. Despite the focus of humanitarian aid on IDP camps, a recent IOM survey showed very poor access to sanitation and hygiene practices (See box) Few WASH actors with relevant capacity to address urban H&S.

4.6. Facility based sanitation & hygiene

WASH in Schools has been a component of many WASH programmes over the years. However there are few examples of these resulting in sustainable services at schools or in sustained behaviour change. The most recent model for a more holistic approach to facilities based WASH (supported by USAID) has potential for better results. Furthermore the inclusion of WASH facilities within the child-friendly schools component of the ‘Back to School’ campaign may generate more interested and support to school WASH.

4.7. WASH improvements within other sector programming.

4.7.1. Integrating WASH, Health and Nutrition programming.

In recent years much of the focus of the Health sector has been on re-establishing the health system at National down to Health facility and Primary Health Unit level. Community level programming is a newer priority promoted by initiatives such as FCHWs, iCCM and resilience. Consequently community programming has received less resources and is operating at much smaller scale. The JHNP, the DFID NGO Health Consortium and other partners have been rolling out a minimum package of health facility based services based on the first three core programmes defined in the Essential Package of Health Services (EPHS). This has involved ensuring basic capacity and services are available in Health Facilities and to a limited extent in Primary Health Units. The process has concentrated on the Northern zones and accessible areas of CSZ. WASH is well represented in the 2nd and 3rd core programmes of the EPHS. Unfortunately, given the huge challenges and limited resources in practice a great many of the WASH activities detailed in the core programmes have not been prioritised or funded. Needless to say that this omission will result in a significant negative impact on the potential of these initiatives to make significant progress in reducing morbidity, mortality and malnutrition.
Whilst difficult decisions have to be made because of limited capacity and resources, on careful review of the governance publications for the Health sector, such as the HSSPs and the JHNP programme documents, it can be seen that there is still room for improvements in the actual implementation of inter-sectoral WASH activities, whilst at the same time staying within the resource constraints. These documents and plans clearly state the importance of WASH activities but the statements are not translated into the plans for coordination, monitoring and evaluation frameworks and annual and multi-year targets. Equally, opportunities to leverage WASH activities, in particular hygiene and sanitation promotion, within existing funding and resources in the JHNP have, for the most part, not been taken. These weaknesses reflect the difficulty of managing intersectoral programmes and the absence of WASH decision makers within Health and Nutrition sector coordination and planning mechanisms and vice versa. In particular the Public Health Departments of Ministries of Health, for a variety of the usual reasons, have not been influencing and leading the process of ensuring that WASH is fully integrated in Health and Nutrition sector and ensuring that Health and Nutrition is represented in the WASH sector under the management of the Ministries of Water and PSAWEN. This is important at the national level but especially important at the local level given the essential role of community level programming for sanitation and hygiene within Health and Nutrition community programming.

4.7.2. WASH and Resilience

Resilience initiatives in Somalia have tended to focus on livelihoods and promotion of resilience in the areas of production. Only the Joint UN Resilience strategy has a significant element of basic services for humans included as a pillar of the strategy. For WASH this translates into the inclusion of CLTS, strategic boreholes and sanitation and hygiene promotion within the Health and Nutrition sector contribution to the pillar through Community Based Health Workers. The two main NGO Resilience Consortia have limited elements of WASH for humans integrated within them. Nevertheless there is some potential for greater emphasis on this area through:

- Provision of joint water services (discussed elsewhere),
- Integration of WASH promotion issues in outreach and behaviour change initiatives for livelihoods such as extension workers and vaccination campaigns for animals.
- The inclusion of seasonal water vouchers in the social protection elements of these consortia also represents an opportunity.

4.7.3. The role of water resource management in peace building

Water resources are often cited as one of the triggers for conflict in Somalia. There have been few studies on this but there is historic evidence to suggest that the source of inter-clan conflict (and hence wider political divisions) is typically access to natural resources (Lewis, 1961). The critical economic and social importance of water in Somali society means that there are opportunities to use negotiation over common access as an entry point to wider peace building. The effectiveness of this has been demonstrated through borehole drilling projects in Galgadud where the siting of the borehole meant that sub-clans who were traditionally opposed to one another had to come together to agree on a joint management framework for the new boreholes.

The potential of water as a catalyst for conflict resolution and peace building is unfortunately not recognised within the New Deal but there is an opportunity to build on successful case studies through conflict sensitive water programming.
4.8. WASH Sector Capacity Development Initiatives

Very few WASH interventions have included any substantial capacity development components. An initiative by the WASH cluster Strategic Advisory Group led to WASH Somalia agency capacity assessment carried out by REDR, in November 2013 (A similar process was conducted for Nutrition in 2011). The report explores factors affecting professional development of WASH staff through different angles including their direct environment, organizational and individual attitudes and practices. It is evident that there are a number of factors in the Somalia context which appear to penalize sector professionals such as poor basic education systems, lack of vocational training and restricted movement due to the logistic and security situation. Other limiting organizational factors were identified as the lack of standardized recruitment processes and appraisal mechanisms. The report, however, noted that the Sphere Standards handbook, CLTS, CHAST and PHAST manuals were often recognized as the most widely available technical literature. It was nevertheless mentioned that there is generally a poor access to technical literature and academic books (that are often in English). Capacity building was also mentioned to be mostly limited to training of senior staff and restricted to specific subjects. (ref RED R).

Based on the report’s recommendations, presented in Appendix 9, the cluster has targeted “immediate” activities and planned the translation of documents and books before the end of the year. The cluster is also planning to develop a training curriculum for logistics, a short video and 5 days training package on WASH project implementation.

However, government and relevant ministry’s employees as well as private sector staff (in charge of water supply for example were not included in the assessment process. Whilst it is relevant to extend some of the conclusions and recommendations to this group there is a need to present a more comprehensive framework and strategy to address the whole sector needs and present a stronger strategy for capacity development for the sector.

5. Scenarios for Development of a Swedish Aid Portfolio Relating to WASH in Somalia

5.1. Rural Water Supply

The priorities for rural water supply are driven by limited water resources within a fragile environment and risk of conflict over water supply.

5.1.1. Sustainability strategy for Somalia

Models for sustainable operation and management are emerging but there needs to be a harmonised approach to taking successful models to scale. There is potential to partner with the Somaliland Business Fund (see Appendix 10) on the business development part of some of these interventions. Specific recommended interventions include:

1) Package of capacity development to existing and new private operator models for rural water supplies
2) Installation of solar pumping on selected groundwater systems
3) Programme for sustainability of strategic boreholes, including
   a. Mobile phone based monitoring boreholes
   b. District and/or clustered repair centres supporting community managed boreholes
   c. Support to district coordination & planning
5.1.2. Support to multiple use water systems:

Access to wet season grazing and maximising use of scarce surface water resources are critical for pastoralist livelihoods. Similarly the use of water for agricultural purposes must be addressed specifically in rural areas. The riverine communities, while confined to a small part of the country, are crucial to domestic food production. In addition, they host the largest proportions of assimilated IDPs. River water is available so quality rather than quantity is the concern for water supply in these areas. Specific interventions recommended are:

1) Development of sand dams for better surface water conservation (replicate World Bank/Water Sanitation Project proposed WALP project)
2) Development of Pans in areas of low groundwater potential to extend access to wet season grazing
3) Water treatment and distribution systems for riverine communities

5.1.3. Alternative to water trucking:

1) Study to examine dependence on temporary water supplies (Berkads) and identify alternative water supplies and/or relocation of settled households
2) Capacity building on use of water vouchers as a seasonal safety net for poor households together with relevant coordination and monitoring mechanisms

5.2. Urban Water Supply

5.2.1. Rehabilitation, management and extension of urban water supply infrastructure:

The management of urban water services requires strengthening and a better regulatory framework. Investment should capitalise on the successes of Public-Partnerships in a number of Somali cities, both on the service delivery and the regulation side (building on EU/UNICEF project). While the diversity of management models is to an extent driven by context, a regulatory framework also needs to define what management models (e.g. municipal water agencies, PPPs) are appropriate in urban areas to ensure pro-poor service delivery to all residents

1) Contribution to completion of Hargeisa water supply.
2) Improving performance of water utility companies under PPPs for small-medium towns (SL, PL & CSZ), including;
   a. establishment of ‘boards/councils’ to represent public interests in absence of government
   b. Policy and regulatory frameworks at State level (some being developed under EC prog for SL and PL)

5.2.2. Peri-urban water programme:

Water quality is critical in urban areas, where population density intensifies problems of hygiene and sanitation, and cross-contamination from sanitation systems into water distribution systems is more likely. In the short term, the abundant use of shallow wells and informal water vendors will have to continue, but must receive more attention in terms of water quality and risks to public health.

1) Support to introduction of municipal rules on well / water cart chlorination
2) Study on pricing, water quality and service provision by private vendors
3) Pilots on self-regulating water quality for private water providers
4) Public education (and social marketing) on water safety and HWTS

5.3. Water Resource Management

5.3.1. Strengthening monitoring and information management systems

Support to a comprehensive Integrated Water Resource Management (IWRM) system in Somalia must start with establishing all existing information, followed by completing the mapping of all ground and surface water
sources, including hydrogeological surveys where necessary. This must also include mapping of agricultural uses, pastoral uses (including range management issues of grazing areas and dry / wet season water sources), water quality issues, and means of water extraction. With water catchment areas mostly outside of Somalia, trans-boundary issues must be analysed and mapped as well.

The following specific interventions are recommended:

1) Extension of ground water assessment for CS Somalia
2) Update water point inventory for CSZ & upgrade ‘live’ map to include live updates using GRS technology & real time monitoring of water point functionality
3) Establishment of fully functional WRM departments in government with mechanisms for generating revenue from water abstraction permits etc

5.3.2. Support to FGS to start negotiations on cross-boundary water agreements.

There is a need to establish a base for negotiations on shared water use now that there is a recognised government in Somalia

5.4. Sector Capacity Development (Dual interventions for water and environmental health)

Following the capacity development assessment and scoping study, carried out by REDR among WASH Cluster members, significant capacity gaps and poor performance in capacity development were identified. Weak capacity is constraining sector development at all levels and a major investment is recommended in this area. Capacity and intuitional development emerge as common themes throughout Pillars 4 and 5 of the Somali New Deal Compact.

5.4.1. Phase 1 - Design and Planning:
1) Feasibility study for Technical Training Institute in SL
2) Capacity development planning (with consortium of key WASH actors) - 1 plan for all federal states and SL (including on integrated programming)

5.4.2. Phase 2 - Curriculum development and module testing
1) Development of courses, curriculum etc for SL Water Training Institute
2) Design of modular training packages, together with related coaching, resources etc. Tailored to different skills & competencies required for different grades of staff in the sector (both public, private and CSO). Preferably available on an internet or mobile phone based platform

5.5. Hygiene and Sanitation Promotion

There is global recognition that this area of WASH programming has one of the greatest impact on disease reduction and improving nutritional status. There are several important opportunities to scale up good practice models and significantly change sanitation and hygiene behaviour in Somalia.

5.5.1. Strengthening Nutrition & Health Sensitive WASH:

Integration of health, nutrition and WASH approaches at the community level represents a tremendous opportunity for a synergistic acceleration of progress in reducing mortality, morbidity, malnutrition and improving human and social capital. Specific recommended interventions include:

1) Study to Review of Health Governance documentation e.g. policies, strategies, plans of action to integrate minimum actions for WASH at facility and community level, including M+E systems, coordination structures and financing
2) Study to review and develop Public Health structure in MoH.
3) Programme support to expand community based health, nutrition and WASH, specifically CBHW and CLTS initiatives. Targeted to areas most in need e.g. CSZ.

5.5.2. Scaling up mass Hygiene and Sanitation Promotion Initiatives:
Lessons learnt from creative campaigns, in partnership with private sector in neighbouring countries can be applied and scaled up in Somalia. Specifically:

1) Innovative mass campaigns using audio-visual media and/or extension of Oxfam’s m-WASH project
2) Further studies into feasibility of social marketing of hygiene, sanitation and water treatment items (e.g soap, SODIS, PUR, Polyglu)
3) Engagement of private sector (manufacturers and retailers) in PPP for social marketing (example SOPO campaign in Kenya)
4) Cholera and Polio preparedness and control (including support to regional supply hubs)

5.6. Urban Sanitation
Increasing pressure on inadequate systems and facilities put urban areas at high risk of large scale disease outbreak. Sustainable interventions in this area have been limited to date and capacity for innovative improvements is low. However potential gains in dignity, health, nutrition and protection of the urban poor are significant.

5.6.1. Improving low cost sanitation for small towns and peri-urban areas:
1) Study to identify appropriate technical options (best practice from other countries), including pilot on Peepoo
2) Strengthening institutional systems and capacity for safe sanitation service provision, including regulation, development of capacity and facilities for safe extraction, transportation and disposal of excreta.

5.7. Water Governance
Priority investment in water governance should clearly map and then address the gaps between water policies, water acts, and water standards that exist in the different jurisdiction in Somalia. In the process a careful and inclusive definition of the role of government, and the role of service providers in relation to users and other stakeholders is essential

5.7.1. Support to sector coordination and establishment of effective strategies and standards for water development and service provision (including for PPPs):
Government-led coordination is crucial for a more harmonized support by the international community therefore government must be empowered and supported to lead sector coordination that works alongside and in harmony with, but separate from the cluster system. At the same time standards and regulatory frameworks need to be developed, disseminated and introduced at all levels.

5.7.2. Establishment of decentralised governance systems to provide over-sight to water service provision:
The continued role of communities and private sector in water service provision is essential to build on existing strong local governance systems. Interventions to improve governance, particularly for more equitable and safe service delivery are recommended as follows:

1) Study to explore options for harnessing CSO capacity to complement, reconstruct or supplement government institutions at Regional levels (transiting cluster to sector and linked to 5.1.1)
2) Support to transitional regional water authorities (HR, capacity development and equipment)
3) Strengthening local government capacity to take responsibility for urban water supply

5.8. Connecting Emergency, Humanitarian, Resilience and Development Aid for greater impact

The continued disconnect between humanitarian and emergency funding and programming and the developmental support being provided through framework of the New Deal risks marginalisation of the most vulnerable and weakening of sustainable results. Alternative models for harmonising funding and linking programmes are essential.

5.8.1. Contingency funds to support emergency preparedness & early response

1) Support to development of WASH cluster/sector surge models
2) M&E systems for remote management (‘buy into’ DFID system)
3) Cholera & Polio preparedness and control (including support to regional supply hubs)

5.8.2. Supporting alternative service delivery models for non-government areas

1) Advocacy for continued funding to humanitarian needs in non-government areas
2) Complementary funding to add WASH components to livelihood based resilience programmes
3) Study and roll out of support to humanitarian agencies to strengthen capacity and accountability in delivery of services and development of WASH “Do No Harm” Emergency and Humanitarian principals for WASH Sustainability.
6. Monitoring and Risk Management

Somalia is a risk operating environment and many humanitarian actors have developed extremely risk adverse operating procedures. The proposed programmes under the SIDA WASH portfolio require SIDA and its implementing partners to accept a certain degree of risk in order to deliver sustainable services where they are most needed within Somalia. A clear monitoring and risk management framework is recommended and this should be based on frameworks already in use for SIDA programming in other sectors.

Specifically for WASH programming the main risks are identified in the table below with appropriate monitoring and risk management measures. These apply mostly in central south Somalia but should also be applied in other parts of SL and PL where there is continued conflict and areas are not fully under government control.

7. Gender Flag

The SIDA WASH portfolio should aim to narrow gender disparities, through specific actions to address the water, hygiene and sanitation needs of women/girls in two main ways. Firstly, by adding an explicit gender dimension to the policies and strategies of the relevant government departments and secondly by encouraging regional and district stakeholders to add an explicit gender dimension to their specific WASH action plans.

The implementing partners should include mechanisms to monitor gender impact by reviewing and updating specific indicators on gender. SIDA could provide specific gender technical support to assist implementing partners with indicators to monitor gender equity of WASH provision.
<table>
<thead>
<tr>
<th>Risk</th>
<th>Rating</th>
<th>Proposed Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudden shrinking of access and/or uncertainty on access causes imbalance in the scope of the programme and impedes delivery</td>
<td>Medium/High</td>
<td>• WASH Implementers have field presence in several locations in the South and liaise closely with local authorities and communities to ensure access. WASH implementers should carefully test access in newly opened areas to determine feasibility of operations, and engage in roll-out of activities once sufficient assurances are available that programme delivery can be effectively ensured.</td>
</tr>
</tbody>
</table>
| Operations unintentionally contribute to conflict dynamics. | Medium | • WASH implementers use conflict-sensitive approaches to programming and ensure programmes are driven by a commitment to equity to reach the most vulnerable across different communities.  
• Close liaison with different local authorities and parties will ensure programme is well appropriated and priorities are well understood by counterparts on the ground. |
| Diversion of aid/Taxation. | Low/Medium | • Given the unique context in Somalia, many WASH implementers have contracted different third party monitoring partners to assess delivery of programme and prevent diversion. Based on field reports from third party monitors, partners should be assessed, and if diversion is observed, an investigation can be carried out.  
• The DFID supported, mobile phoned based M&E system builds on this 3d part monitoring system but also has the potential to do end user monitoring which will greatly increase accountability  
• The activities under programme 6 include introduction of ‘Do No Harm’ principles which will include capacity building and development of systems for better accountability in NGO activities. |
| Beneficiary, staff and assets security risks | Low/Medium | • Conflict-sensitive approaches and the use of ‘DO No Harm’ guidelines to programming will help WASH implementers to ensure programme delivery does not undermine beneficiary and implementing partner security.  
• Field Security apparatus (Field Security Coordinator, Local Security Assistants) in coordination with UNDSS monitor the security situation on a daily basis and advise on security risks related to programme implementation and movement for programme supervision and monitoring. |
| Lack of local capacity slows/impedes delivery of programme | Low/Medium | • WASH implementers and their local staff (as well as NGOs) will benefit from the capacity development programme proposed. In the meantime the implementers should rely on the strong network of partners working within the WASH Cluster to identify the best local staff. |
| Break or shortage of supply pipeline undermines continuity of programme deliver | Low | • WASH implementers should develop relationships with local traders and use their programmes to stimulate the local market for standard WASH items. Implementers should use WASH cluster regional supply hubs only as a last resort. |
References:4


JMP (no date) WASH targets and indicators post-2015: outcomes of an expert consultation. UNICEF, WHO.


4 The CHC team made use of an extensive library of documents including those sourced through google scholar. It is not possible to list all documents so the reference list only includes the main resource material for the study

P. Cross, Y. Coombes 2014. Sanitation and Hygiene in Africa. Where do We Stand? Analysis from the AfricaSan Conference, Kigali, Rwanda. Edited by Published by IWA Publishing


SWECO 2013. Somaliland Water Project Concept.

USAID 2010, Somalia Water and sanitation profile.


L. Wild, N. Mason Examining the role of WASH services within peace- and state-building processes, ODI 2012

Websites:

OCHA Somalia
http://www.unocha.org/somalia/coordination/clusters/water-sanitation

Relief web - Country up date and maps
http://reliefweb.int/country/som

SWALIM. Somalia Water and Land Information Management
http://www.faoswalim.org/

WASH cluster Somalia
https://sites.google.com/site/washclustersomalia/washglobalressources

Community level water disinfection for slums
http://www.lotuswater.org/