

# **UNICEF Republic of South Sudan and Sudan**

## **Improvement of the Health and Livelihood of Rural Communities in Southern Sudan and the Three Transitional Areas of Abyei, Blue Nile State and South Kordofan**

### **Through**

### **Increased Access to Safe and Sustainable Water, Sanitation and Hygiene Facilities Project**

## **FINAL EVALUATION REPORT**

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November 2011**

## Table of Contents

Acknowledgments.....	4
Abbreviations.....	5
BACKGROUND .....	6
Project Goal and Objectives.....	7
Purpose of the Mid-Term Evaluation.....	8
Profile of Project Area .....	9
METHODOLOGY .....	9
Desk Analysis .....	111
Field Visits and Discussions .....	111
RELEVANCE OF THE ACTION.....	<b>Error! Bookmark not defined.</b> 3
THE ACTION: EFFICIENCY AND EFFECTIVENESS .....	15
THE ACTION: IMMEDIATE OUTCOMES & IMPACTS .....	19
Outcomes .....	19
Impacts.....	19
Adjusting Context .....	20
SUSTAINABILITY OF THE ACTION.....	21
Main operational Risks and Assumptions.....	21
Financial, planning and management factors.....	21
Goods and Services in the local market.....	23
Institutional factors .....	24
Other Challenges to Sustainability.....	25
COMPLEMENTARITY & VISIBILITY OF THE ACTION.....	25
GENDER AND HUMAN RIGHTS .....	26
CHALLENGES .....	26
Environment & Infrastructure.....	26
Technical.....	27
Hygiene Promotion .....	27
Security .....	28
Governance .....	28
Funding .....	29
RECOMMENDATIONS.....	29
Environment.....	29
Technical.....	30
Hygiene Promotion .....	30
Security .....	31
Governance .....	31
Funding .....	31

LESSONS LEARNED..... 32

    Follow-up..... 32

    Sanitation Methodology..... 34

CONCLUSIONS..... 34

LIST OF ANNEXES .....

    Annex 1: TOR EC Final Evaluation

    Annex 2: Revised Project Narrative

    Annex 3: UNICEF Sudan Final Report

    Annex 4: Supply Chain Guidance Note

    Annex 5: Transitional Areas Note

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## **Abbreviations**

ACP	African Caribbean & Pacific
CHAST	Children's Hygiene and Sanitation Training
CLTS	Community-Led Total Sanitation
CPA	Comprehensive Peace Agreement
EC	European Commission
ECHO	European Community Humanitarian Office
EU	European Union
EUR	Euro, the European currency
GONU	Government of National Unity
GOSS	Government of Southern Sudan
IEC	Information, Education and Communication
KAP	Knowledge, Attitude and Practice
M&E	Monitoring & Evaluation
MDTF	Multi Donor Trust Fund
NGOs	Non-Governmental Organizations
PHAST	Participatory Hygiene and Sanitation Transformation
PTA	Parent Teacher Association
ROSS	Republic of Southern Sudan
RUWASSA	Rural Water and Sanitation Support Agency
SPLM	Sudan People's Liberation Movement
UNICEF	United Nations Children's Fund
VWSC	Village Water and Sanitation Committee
WASH	Water, Sanitation & Hygiene
WATSAN	Water and Sanitation
WES	Water and Environmental Sanitation Project

## **BACKGROUND**

This is a report on the external final evaluation of the project on “Improvement of the Health and Livelihood of Rural Communities in Southern Sudan and the Three Transitional Areas of Abyei, Blue Nile State and South Kordofan<sup>1</sup> through Increased Access to Safe and Sustainable Water, Sanitation and Hygiene Facilities Project”. The evaluation was conducted during September, 2011.

The project was started in March 2007, and was planned to run for three years, ending in February 2010. However, following recommendations from the Mid-Term Review conducted in 2009, a request for a one-year extension was submitted by UNICEF to the European Commission and approved. The project activities ended in February 2011.

The project commenced only two years after the historic Comprehensive Peace Agreement (CPA) signed on January 9, 2005 which ended years of civil war in Sudan. The CPA provided for a Government of National Unity (GONU) which was represented by the National Congress Party (NCP) in the north of the original country of Sudan and from the Sudan People’s Liberation Movement (SPLM) in what is now the new country of South Sudan. The GONU established an interim autonomous Government of Southern Sudan (GOSS), based in Juba, with provision for the referendum on self-determination set for 2011. The referendum took place as scheduled in Southern Sudan from 9 to 15 January 2011, on whether the region should remain a part of Sudan or become independent. A simultaneous referendum was supposed to be held in Abyei on whether to become part of Southern Sudan but was postponed ostensibly due to conflict over demarcation and residency rights.

The referendum commission published the final results on 7 February 2011, with 98.83% voting in favour of independence. The predetermined date for the creation of an independent state was 9 July 2011, and it was on this date that the Republic of South Sudan was born. After decades of civil war with the north, which saw two million lives lost, South Sudan became Africa’s 54th state and the 193rd country to be recognized by the United Nations.

Since the signing of the CPA, the delivery of basic social services to Southern Sudan is improving although there have been interruptions in this process with emergencies such as the cholera outbreak in 2006 which diverted resources of the GOSS, UNICEF and implementing

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<sup>1</sup> The Three Transitional Areas are Abyei, Blue Nile State and South Kordofan

partners. As a contribution to this development, UNICEF and The Delegation of the European Commission (EC) signed an agreement on this Project which is the water and sanitation component of the GONU-GOSS/UNICEF Country Program of Cooperation.

## **Project Goal and Objectives**

The overall objective of the project is to improve health and quality of life for 853,000 people in 1,380 rural communities in Southern Sudan and in the Three Transitional Areas of Abyei, Blue Nile State and South Kordofan. The Project is financed under the First Call for Proposals by the ACP-EU Water Facility. The overall budget for the Project is EUR16 million, financed approximately equally between the EC and UNICEF. Southern Sudan's share of the total project budget is 72%, and the share of the Three Transitional Areas is 28%.

The specific objectives fall under three main categories: (1) planning and sustainability, (2) access to water supply, and (3) access to sanitation and hygiene promotion. They may be summarized as follows:

Planning and Sustainability: To actively and effectively involve target communities in project planning, construction, operation, maintenance, and in the long-term management of their water and sanitation facilities as well as in hygiene promotion.

Water Supply: To increase access to equitable and safe water supply by 3% in project states.

Sanitation and Hygiene Promotion: To increase access to safe sanitation facilities and hygiene promotion by 1% in the project states.

Targets for each of these three categories were initially defined in the Project document and in its logical framework. However, following the mid-term evaluation the targets were adjusted (see Annex 2 Revised Project Narrative, adjusted indicators highlighted in track changes).

## **Purpose of the Final Evaluation**

The terms of reference for the final evaluation are copied in Annex 1. Essentially the purpose is to examine issues of relevance, effectiveness, efficiency, impact and sustainability. This evaluation exercise is considered as a final evaluation of the joint EC-UNICEF component of the WASH programme implemented in Southern Sudan and the Three Transitional Areas. The period of evaluation of the programme focuses on the last two years following the mid-2009 interim project evaluation. It is not considered to be an overall evaluation of the project design (as this was accomplished by the interim evaluation conducted in 2009) but more a process of reflection to define what a future course of action for WASH system sustainability might be, one which is more relevant to the population dynamics and the political realities faced today in the new Republic of South Sudan, such as the evolving capacity in local government.

The final evaluation of the joint EC-UNICEF component of the WASH Programme also examined issues of sector coordination and management, sustainability and monitoring, and how best to achieve results in these areas in the context of the socio-economic and political realities of Sudan. Aspects of a human rights based approach to programming (planning, documenting, information sharing, management and service delivery), especially gender aspects were examined. The evaluation includes lessons learned and proposes recommendations for improving the quality of the programme in the future. The findings and recommendations of this evaluation will provide future direction for the WASH programme beyond the current programme cycle (2012-2013).

The evaluation addresses the 3 sub-programme components: Policy & Strategic Planning and Development; Safe Water Supply Services and Sanitation and Hygiene Promotion.

The evaluation generated findings, lessons learnt, recommendations and conclusions which address the following dimensions of the WASH project:

1. Relevance of the Action
2. Description of the action and its efficiency and effectiveness
3. Immediate Outcomes / Impact of the Action:
4. Sustainability of the Action
5. Complementarity & Visibility of the Action
6. Gender and Human Rights

## **Profile of Project Area**

Sudan was the largest country in Africa before the division of 2011. It has an area of about 2.5 million square kilometers and a population of 39.2 million (2008 census). More than half the population lives on 15% of the land, mostly along the River Nile. There are 25 states in the country, of which 10 are run by GOSS. The 15 states in the north cover an area of 1.9 million square kilometers, or 76% of the total area; and they have a total population of 30.9 million representing 79% of the people of Sudan. The 10 states in the South have a total population of 8.3 million (or 21% of the total) living in an area of 0.9 million square kilometers (or 24% of the total land area of the Republic of South Sudan, independent 9 July, 2011).

The populations to be covered by the Project are 200,500 in the Three Transitional Areas and 652,500 in the ten states in Southern Sudan<sup>2</sup>, the latter representing only 8% of the population in the South. Hence the value of the Project cannot be so much in making significant gains in coverage, as it is in laying the foundation for accelerated and sustainable coverage. Hence the Project document stresses development, quality and sustainability as the hallmarks for the Project.

## **Methodology**

The structure for the final evaluation springs from the three specific objectives. The logical framework and the project document provided the basis for comparing performance against targets. These are underpinned by a requirement for assessments of relevance, effectiveness, and efficiency. The evaluation has entailed:

- A desk analysis and review of project documents and reports.
- Visits to authorities and communities in 4 states in South Sudan: Central Equatoria (Juba County), Eastern Equatoria (Torit County), Lakes State (Rumbek Centre and Rumbek East Counties), Upper Nile (Malakal and Fashoda Counties).
- Discussions with project partners and stakeholders, community leaders and community members, trained individuals, school officials and officials at different levels of government - ministry, state, and county.

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<sup>2</sup> Annex 3 gives the names of the ten states in Southern Sudan and of the Three Transitional Areas.

Selection of states and communities to be visited was made by UNICEF, taking into account security concerns and logistical imperatives. The importance of these elements became quickly evident first when trying to establish the timing of the evaluation and ultimately with planned movements within the proposed evaluation programme.

Originally planned to take place earlier in 2011, security issues soon caused a readjustment of the planning, delaying the evaluation start to September 01, 2011. The military activities in Abyei (May 20) and security incidents in the Nuba and South Kordofan (June 5) provoked delays in launching the evaluation, as these two areas are part of the evaluation's mandate. Current movement of Sudanese military into the third Transitional Area of Blue Nile (as of September 01) finally resulted in the cancellation of evaluation activities in all Transitional Areas. The final evaluation took place exclusively in the Republic of South Sudan. The Khartoum office of UNICEF Sudan provided documents of project activities for a brief review which is included in Annex 5 – Transitional Areas Note.

The aspect of logistics soon became a deciding factor almost from the beginning of the evaluation. In fact the rainy season played a key factor in modifying the agenda of field visits, with most of the 21 days in South Sudan accompanied regularly by a combination of either steady or extremely heavy rain events. The first field visits were originally planned to Western Bahr el Ghazal (Wau), Northern Bahr el Ghazal, Warrap, and Lakes States with Wau as focal point. They were finally cancelled due to heavy rains because no flights could land at Wau airport. Despite repeated attempts to fly later to Wau from Juba, visits to Western Bahr el Ghazal, Warrap and Northern Bahr el Ghazal were finally cancelled. The field visit to Upper Nile State and Malakal was also limited to meetings with authorities, partners and stakeholders in the capital Malakal and a field trip by boat to neighbouring Fashoda County to visit a typical UNICEF supported water management project in the small riverside town of Kodok. Projects from the EC-funded WASH program were not accessible and movement even in the towns of Kodok and Malakal were difficult due to rains and mud.

While these aspects were disappointing in the limitations they imposed upon the evaluation program, they were also important elements to observe first-hand from the point of view of challenges to sustainability of operations on the ground and ultimately how they would (and should) impact on the development of the future strategy. While it was observed in the mid-term review that the rainy season was not enough taken into account during the project design and discussions which took place originally in UNICEF's and the EC's Khartoum offices, the field

visits which coincided with the end of the rainy season reinforced the importance of this element.

### Desk Analysis

The purpose of the desk analysis was to become familiar with the project and more importantly its progress to date. The primary documents used for this purpose were:

- The original and the revised (for the extension) project narrative document,
- The logical framework,
- The terms of reference for the final evaluation,
- Progress and end-of-project report submitted by UNICEF to the EC, and
- Miscellaneous reports and maps collected during the process.

### Field Visits and Discussions

The purpose of the field visits was to observe, listen, and try to evaluate the situation as it existed at the time of the evaluation in terms of WASH challenges and how the UNICEF action had addressed and was impacting on these challenges. Where possible some technical observations were able to be made, but because of logistic and security challenges it was not realistic to plan large numbers of project site visits to perform a technical or community management assessment. However, since this project had already officially closed in February, 6 months earlier, the field visits and discussions were seen as an opportunity to evaluate sustainability elements of the project design and strategy and, from this perspective, contribute more effectively to a list of lessons learned and recommendations that are more relevant to the recently independent South Sudan administration and to new national strategies being developed.

Field visits involved observation but contained a large component of interviews with: beneficiaries, operational project staff, contractors, local government authorities and NGOs. The interviews were semi-structured in order to be able to compare or combine results with other interviews. Interviews normally began with the interviewed person introducing their role in the WASH sector (implementer, beneficiary, official or authority) without any specific questions. This allowed an observation on how individuals perceived, prioritized and understood needs and responses to needs in their corner of the WASH sector. Subsequent questions would be posed to add-in where necessary any information on issues such as ownership and cost-recovery, capacity

at different levels, quality of services being provided through the UNICEF WASH project AND the Government Authorities. Often persons interviewed were encouraged to comment on sanitation and hygiene issues as there was a tendency for the majority to focus on water and service delivery. The common question posed to all persons interviewed was what they perceived of as being the major challenges both during the present and for the future in the WASH sector. Their comments are the main contribution to the list of technical, financial, logistical, political and social challenges that they were being confronted with. These challenges often reflected the capacity of the authorities and implementing partners and they ultimately addressed the sustainability of the strategy of this project and for the WASH sector.

Table 1 below lists the program of field visits. It shows states visited, places visited in the states, dates of the visits, offices and individuals visited. These visits were illuminating. They helped to give a sense of the conditions under which the project was being implemented and managed. They helped to verify claims that had been made in progress reports on such issues as ownership, visibility and quality of installed physical facilities like boreholes, spare parts stores, and sanitation centers; and they gave a sense of complementarities with project partners and with other donors, including the MDTF. They also provided opportunities to find out how beneficiaries feel about such issues as tariffs, reliability of supplies, and confidence in UNICEF.

**Table 1 - Itinerary for the EC Consultant  
European Commission / UNICEF  
Final Evaluation of WASH Project - 2007/2011**

State	Date	Place	Meeting / Visit
Central Equatoria	1 Sep	Juba	<ul style="list-style-type: none"> <li>• Arrival UNICEF Offices.</li> </ul>
Central Equatoria	2-Sep	Juba	<ul style="list-style-type: none"> <li>• Briefing meeting with MWRI</li> <li>• Meeting with UNICEF Team</li> <li>• Inception Meeting</li> </ul>
Central Equatoria	3-4 Sep	Juba	<ul style="list-style-type: none"> <li>• Desk Review and Travel Prep Admin</li> </ul>
Central Equatoria	5 Sep	Juba	<ul style="list-style-type: none"> <li>• Depart Juba for Wau for field mission – Flight landing blocked at Wau (rain), return to Juba</li> </ul>
Central Equatoria	6 Sep	Juba	<ul style="list-style-type: none"> <li>• Flight to Wau cancelled (rain)</li> <li>• Discussions UNICEF WASH Team</li> </ul>
Central Equatoria	7 Sep	Juba	<ul style="list-style-type: none"> <li>• Meeting Dir RWSS Central Equatoria</li> <li>• WASH Cluster Meeting</li> </ul>
Central Equatoria	8 Sep	Juba	<ul style="list-style-type: none"> <li>• Meeting Dir MWRI</li> <li>• Meeting D Dir WASH-Info Mgmt System (WIMS)</li> </ul>
Lakes	9 Sep	Rumbek	<ul style="list-style-type: none"> <li>• Travel Flight Juba to Rumbek</li> <li>• Orientation with UNICEF WASH</li> </ul>

Lakes	10-Sep	Rumbek	<ul style="list-style-type: none"> <li>• Meeting Dep Dir RWSS</li> <li>• Meeting NGO RUWASSA and WASH database</li> <li>• Visit School Deng Nhei latrine blocks &amp; water point</li> <li>• Visit Mayom Returnees transition camp</li> </ul>
Lakes	12 Sep	Rumbek East County	<ul style="list-style-type: none"> <li>• Meeting Min of Physical Infrastructure (MoPI)</li> <li>• Field visit Rural Water Warehouse / Store &amp; discussions with Assistant Commissioner, Pump Mechanics Team and Hygiene Promoter</li> <li>• Meeting Dep. Dir Dept of Urban Water Supply</li> </ul>
Upper Nile	13 Sep	Malakal	<ul style="list-style-type: none"> <li>• Travel air to Malakal</li> <li>• Meeting Commissioner Malakal</li> <li>• Meeting Director MoPI, RWSS &amp; County Rural Water Supply Team in Malakal for training</li> <li>• Visit warehouse and supply chain facility</li> </ul>
Upper Nile	14 Sep	Malakal & Fashoda	<ul style="list-style-type: none"> <li>• Meeting with OXFAM partner</li> <li>• Field visit surface water supply &amp; treatment system Fashoda County</li> <li>• Field Visit and discussions with Solidarités Int'l combined</li> </ul>
Upper Nile & Central Equatoria	15 Sep	Malakal & Juba	<ul style="list-style-type: none"> <li>• Meeting with World Vision</li> <li>• Travel air to Juba</li> </ul>
Central & East Equatoria	16 Sep	Juba & Torit	<ul style="list-style-type: none"> <li>• Travel (car) to Torit</li> <li>• Meeting DRWSS and visit to stores and warehouse facilities</li> <li>• Meeting at offices of PLAN Int'l.</li> </ul>
East Equatoria	17 Sep	Torit	<ul style="list-style-type: none"> <li>• Visit Haikoroton informal community in Torit Town for CLTS with PLAN Int'l</li> <li>• Meeting at offices of CARITAS</li> </ul>
East & Central Equatoria	18 Sep	Torit and Ogorun. Juba	<ul style="list-style-type: none"> <li>• Field visit Rock Catchment water supply project with CARITAS</li> <li>• Return Juba</li> </ul>
Central Equatoria	19 Sep	Juba	<ul style="list-style-type: none"> <li>• Meeting with WASH partner SNV</li> <li>• Visit 2 school WASH projects in Juba town</li> <li>• Meeting Dir Urban Water Supply C Equatoria</li> </ul>
Central Equatoria	20 Sep	Juba	<ul style="list-style-type: none"> <li>• OCHA map supplies request</li> <li>• Meeting Hydrotech Services drilling contractor</li> <li>• Begin draft presentation</li> </ul>
Central Equatoria	21 Sep	Juba	<ul style="list-style-type: none"> <li>• Presentation of preliminary results of evaluation to UNICEF, WASH partners and Government</li> </ul>
Central Equatoria	22 Sep	Juba	<ul style="list-style-type: none"> <li>• OCHA maps</li> <li>• Depart Brussels</li> </ul>

## Relevance of the Action

In the original project narrative written in 2006, the relevance of the action focused strongly on WASH infrastructure needs among the population which had just emerged from a long civil war and included a large number of IDPs and refugees.

However in the run-up to the referendum earlier in 2011 and the subsequent independence of South Sudan, the strategic environment has evolved. With the formation of the GoSS following the Comprehensive Peace Agreement we have had the presentation of the MWRI Water Policy of 2007 and the June 2011 draft of the WASH Strategic Framework document, an official document which was endorsed by the Cabinet on 19 August 2011.

The WASH Strategic Framework was officially endorsed by the GoSS Cabinet of Ministers on the 17th August 2011. Whereas the project's implementation strategy had an initial focus on NGO's as UNICEF's key implementing partners in Southern Sudan region<sup>3</sup>, the increasing role of the Ministry of Water Resources and Irrigation in the Republic of South Sudan (RoSS) is now identifying them as the key player and official partner in the WASH sector in South Sudan. Consequently there is a stronger imperative for building the capacity of the MWRI and especially its State counterparts to take up the responsibility of service provision in the WASH sector.

The new WASH Strategic Framework is broken down into the following subsectors-:

- Water Resources Management (WRM)
- Sanitation and Hygiene (S&H)
- Rural Water Supply (RWS)
- Urban Water Supply (UWS)

The UNICEF WASH project focused on RWS, S&H within its sub-programme components of Policy and Strategic Planning & Development, Safe Water Supply Services and Sanitation and Hygiene Promotion. It should be mentioned that UWS in the form of piped water schemes only exists in a few regional capitals only. The majority of urban water populations are served by what are typically rural water supply installations. Consequently, a number of 'rural water supply' interventions have found their way into the urban and peri-urban context with boreholes and hand pumps, or tanks and stand posts with limited or no distribution network. While this is seen as a technical limitation, it is still a viable option on a small scale where groundwater (or treated local surface water) can address population needs. With the recent influx of returnees from the north following the referendum and an expected increase of IDPs due to security situation in the transition areas, both who tend to collect around towns and peri-urban sites, the ability to provide these low-level services becomes even more important and relevant.

While there is an evident need in the GoSS for skilled and qualified persons for implementation, one of the biggest stumbling blocks is the lack of information on existing services in South Sudan, especially in the water sector. The need for this type of information for planning and developing future strategy cannot be underestimated. For example, the location of boreholes comes from 3 main sources: old colonial records, information from interventions during the support actions for Operation Lifeline Sudan phase, and recently installed facilities. The first 2

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<sup>33</sup> See Findings, Mid-Term Review, A.M. Wright (2009)

sources are of variable quality but all sources are being centralized and their data either field-checked or confirmed where possible. Even new data on recent water supply installations (borehole depth, location, installation) are being cross-checked to confirm that information on borehole logs submitted by contractors or implementing partners is accurate. The activity of establishing a water information data base formed part of the Needs Assessment in the original project design. This has been extended and supported by UNICEF to develop into a comprehensive data base known as the WASH Information Management System within the MWRI<sup>4</sup>.

### **The Action: Efficiency and Effectiveness**

As was the case during the mid-term review, it was not logistically possible in the time allocated for the final evaluation to verify the quality and completion of actions and installation of hardware and software. Therefore comments on this aspect must rely heavily on information presented in the final or end-of-project report submitted by UNICEF to the EC (see Annex 3 UNICEF Sudan Final Report). The final report covers actions implemented in both the South Sudan and the three Transitional Areas and addresses the results of actions for the 3 project objectives of Planning and Sustainability, Water Supply and Sanitation and Hygiene Promotion. The report, in following with the project narrative format, addresses quantitative indicators or targets which signify the success (or the lack of) in achieving the stated objectives by stating the % of indicators or targets covered.

For a general analysis of more than 60 indicators presented in the report, the % of indicators are categorized as achieved, under-achieved and over-achieved. The latter refers to certain indicators where the some participative actions such as training activities attracted more than the proposed target, resulting in greater than 100% success. Below in Table 2 is a summary of the results with % achieved for South Sudan and for the Three Transitional Areas, with a label for A – Achieved, UA – Under-Achieved, and OA - Over-Achieved.

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<sup>4</sup> Originally known as South Sudan Water Information Clearing House (SSWICH)

**Table 2 – Achievement Indicators and Success Rates**

<b>Achievement Indicator</b>	<b>South Sudan %</b>	<b>Three Areas %</b>	<b>Achievement Rating</b>
<b>Planning and Sustainability</b>			
Detailed needs Assessment	done	done	A
Community Selection	done	done	A
1380 VWSCs / VHCs equipped with skills	76%	93%	UA
800 Community leaders trained in sustainable management	152%	110%	OA
1000 Caretakers trained	82%	N/A	UA
810 Pump Mechanics trained	261%	113%	OA
Assistance to Central & State authorities in setting & applying water tariffs	mixed / poor results	mixed / poor results	UA
4480 members of VWSCs /VHCs trained in applying & collecting tariffs	150%	101%	OA
500 artisans trained - latrine construction	26%	103%	UA (SS)
82% of new / Rehabbed facilities functioning at any given time	60- 70%	72%	UA
Annual project action and procurement plans prepared	done	done	A
Project implementation adequately monitored and supervised	done	done	A
<b>Water Supply</b>			
621 existing sites selected for rehab	116%	100%	A
Evaluation rehab, O & M needs	done	done	A
595 hand pumps rehabilitated	122%	100%	A
3 water yards rehabilitated	100%	N/A	A
3 treatment plants rehabilitated	67%	N/A	UA
2 hand dug wells rehabilitated	40%	N/A	UA
857 new facility sites selected	135%	101%	OA
832 BHs with hand pumps installed	142%	100%	OA
5 new water yards installed	40%	N/A	UA

20 hand dug wells with hand pumps	35%	N/A	UA
348 facilities in Guinea Worm affected communities	91%	N/A	UA
150 new BHs equipped - hand pumps	163%	N/A	OA
3 new water yards installed	100%	N/A	A
10 new hand dug wells equipped		N/A	Dropped
10 new hand dug wells equipped		N/A	Dropped
175 hand pump facilities rehabilitated	38%		UA
Effective supply chain for hand pump spare parts established	launched	launched	UA
<b>Sanitation and Hygiene Promotion</b>			
Range of latrine designs prepared for dissemination and choice	done	done	A
Seed funds to promote groups and individuals to provide sanitation facilities	done	N/A	A
Subsidies for 6000 HHs (households)	75%	N/A	UA
1580 demo latrines installed	83%	142%	UA (SS)
10 San Promotion Centres established	N/A	100%	A
9000 HH latrine slabs constructed	N/A	100%	A
System and supplies in place to respond to demand for sanitation facilities	done	done	A
500 techs trained for latrine construction	33%	103%	UA(SS)
Incentives for latrine technicians	done	done	A
145 schools selected for facilities	140%	117%	OA
145 school latrines constructed to acceptable standard	140%	117%	OA
School Hygiene and Sanitation clubs established	135%	117%	OA
School H & S Clubs manage latrines	Good level	Support needed	UA (TA)
KAP studies – 1380 communities and 145 schools	done	Results not confirmed	UA(TA)
All project students participate in handwashing discussions	32%	80%	UA

50% adults in target communities participate in handwashing discussions	45%	90%	UA
Handwashing facilities in 145 schools	106%	117%	OA
Soap provided in 145 schools	31%	70%	UA
Improve hygiene promotion in school curriculum			dropped

Some conclusions on the above results are as follows:

- Majority of Results Achieved (>60 indicators)
- 10 Over-Achieved (highest 261%)
- 18 Under-Achieved (lowest 26%)

The highest results achieved were linked to:

- Training in water and hygiene
- Working with schools
- Boreholes and hand pumps

The poorest results (under-achievement) were linked to:

- Sanitation and latrines (including training in this sector)
- Hand dug wells

Being available in South Sudan 6 months after the project closure and final report provided an opportunity to discuss the project results with various members of the South Sudan WASH team and to identify reasons for achievement indicators not being matched. This was not possible with the Khartoum WASH team, but the majority of indicators rated as under-achieved are allocated to South Sudan area of activities. For the Three Areas there was only one indicator not clearly achieved; Hygiene and Sanitation Clubs in Schools managing latrine facilities. Results of a KAP study in schools and communities may be able to explain this, but the results had not yet been provided for the final report. Other indicators for Three Areas were often close to the expected result (e.g. 72% as opposed to 75% of facilities functioning at any given time). Explanations from the South Sudan WASH team for some of the shortfalls are presented below for each objective:

### Planning and Sustainability

1. Goal: 1380 VWSC's – SS 76% realized and TA 93%. Probably too high a target for South Sudan where the number of committees exceeded eventual water points installed.
2. Goal: 1000 Caretakers trained – SS 82% and TA 0. Correspondingly, a lesser number of Caretakers in the VWSCs were trained.

3. Goal: 500 artisans for latrine construction – SS 26% and TA 103%. Part of this shortfall in South Sudan is due to a lack of capacity and difficulties to find or identify implementing partners / NGOs for training. An additional factor is that following the mid-term review a strategic shift from latrine construction towards Community Led Total Sanitation (CLTS).

### Water Supply

1. Goals: 3 treatment plants rehabilitated - SS 67% (2) and TA 0, 20 hand dug wells rehabilitated – SS 40% and TA 0, 5 new water yards – SS 40% (2) and TA 0, 20 new hand dug wells – SS 35% (7) . These activities were not part of the Three Areas programme. Globally these were demand driven actions, and there was very little demand for hand dug wells and water yards, but much more a demand for boreholes. Thus more boreholes were provided, resulting in 147% over-achievement of the original indicator for South Sudan.

### Sanitation

1. 6000 houses subsidized for latrines – SS 75% and TA 0, 1580 demo latrines – SS 83% and TA 142%. After the mid-term review and in response to recommendations, UNICEF in South Sudan shifted their strategy to CLTS in an attempt to improve results and uptake of latrines and sanitation behavior. The high success in Three Areas was explained by the population, with much exposure to the north of Sudan, had a much higher development of a latrine culture than in South Sudan.

### Hygiene

1. Students participate Global Hand washing Day – SS 32% and TA 80%. This low result was attributed to lack of capacity due to difficulty in finding implementing partners to carry out this exercise.
2. Soap for 145 schools – SS 31% and TA 70%. The focus for school hygiene shifted to delivery at HH level. Although the project proposes a controlled soap delivery it appears that most children take soap home. Also due to the emergency context it was felt that there was more impact on providing soap directly to HHs. UNICEF also tried to include HP into the official curricula (for example as part of a Life Skills education component) but with no success with Min of Education, and this initiative was dropped.

## **The Action: immediate outcomes and impacts**

The immediate outcome of the installation of water and sanitation facilities was not possible to verify, although some sites were observed during the visits, and one must rely on the UNICEF Sudan Final Report to quantify this.

## Outcomes

Storage facilities for the supply chain were visited in the three states and showed a variety of results. In Lakes State in the capital Rumbek, the office of DRWSS held stock in a temporary facility but a new office and facility was being constructed during the field visit. In Rumbek East County a new storage facility and office for the pump mechanics, hygiene promoter and the assistant commissioner had almost been completed, and would soon (in theory) have a stock of spare parts for pumps to be distributed by the team at county level. In Upper Nile State in the Capital Malakal, spare parts and supplies were stored in containers and appeared to be in good condition. However, there was a range materials such as plastic borehole casings, pump spares, latrine slabs (plastic) and open chlorine powder containers lying in the open in the yard. This material was attributed to other partners and not part of DRWSS stock, but was in any case being damaged by sun exposure. Capacity at the county level is limited and only just being developed, with the selection of assistant commissioners taking place only in 2011. However the most recent challenge is also the biggest; the blockade on the northern frontier which has halted the shipment of goods up the Nile River to Malakal. Now all supplies must come from the South until the blockade is lifted. In Eastern Equatoria State the DRWSS has good storage facilities in the capital Torit that are of good construction and well organized inside. Once again, materials such as pumps, latrine slabs and casings are lying outside in the open, because they are the property of contractors or implementing partners. However the DRWSS in Torit also pointed out that they simply have no excess storage space and thus have no choice but to leave the materials in the open.

## Impacts

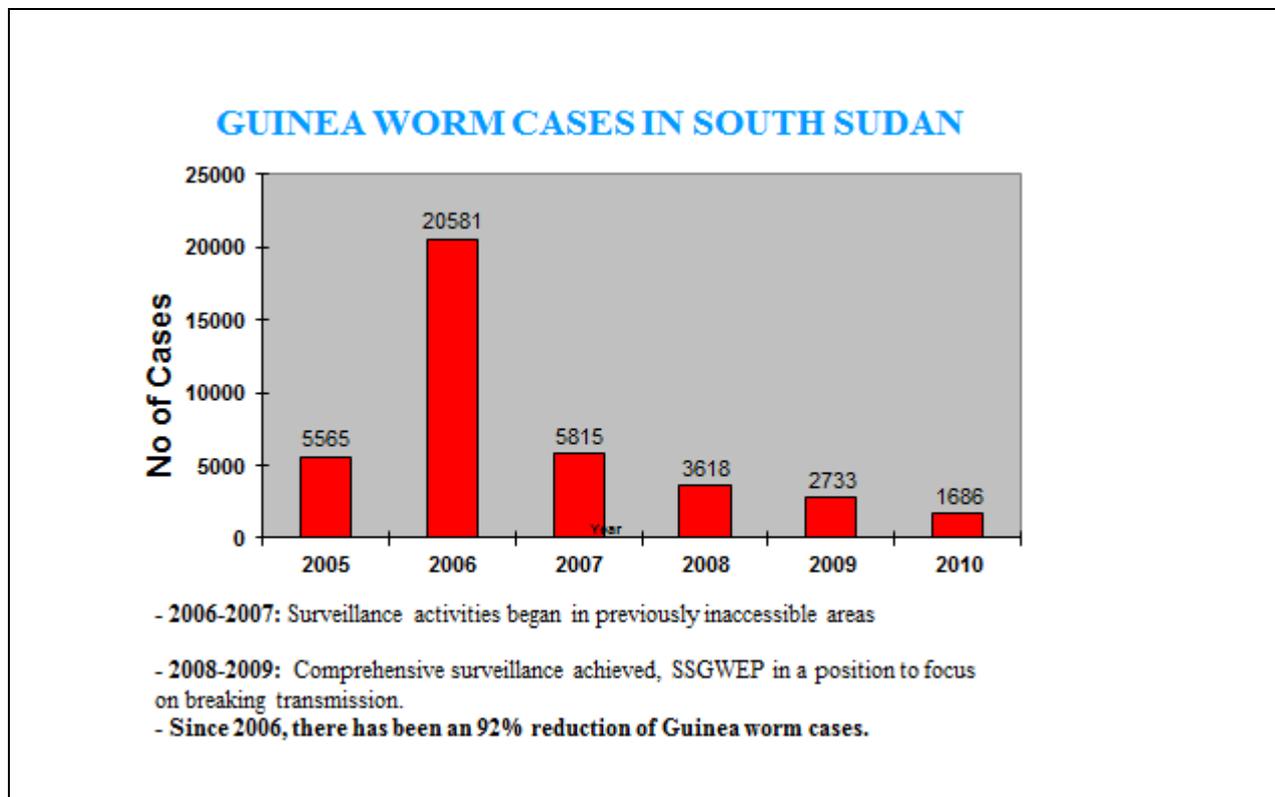
Concerning the usual WASH related diseases such as diarrheas or skin diseases, the prevalence of diarrhoea among children under 5 notably decreased from 42.9% in 2006 to 32.4% in 2010. In addition access to improved sources of drinking water increased from 48.3% in 2006 to 68.7% in 2010 while use of improved excreta disposal facilities increased from 6.4% in 2006 to 12.7% in 2010. This project significantly contributed to the increase of WASH facilities<sup>5</sup>. Cholera outbreaks in South Sudan have also reduced significantly. For instance, 2,041, 829, and 200 cases in 2006, 2007, and 2008 respectively and no cases in 2009 and 2010 in Yei, Central Equatoria State have been recorded.

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<sup>5</sup> (Source, Sudan Household Health Survey, 2006 and 2010)

There is one study which illustrates very clearly the impact of this project on population health and that refers to the part of the project providing access to safe water in Guinea Worm affected areas.

**Figure 1 – Guinea Worm Cases in South Sudan**



The above data in the graph show how guinea worm cases were reduced from **20,581** in 2006 to 1,685 in 2010 (a remarkable 95.4% reduction). Further reduction of about 32% in 2011 (**944** cases as compared to **1,396** in 2010 for the period Jan-August)<sup>6</sup> is indicated from latest data. This is without doubt a remarkable and clearly illustrated impact of the provision of access to safe water supplies.

### Adjusting Context

In terms of trying to evaluate impact of the activities it should be taken into account that the context has changed markedly since the project design of 2006 and even the mid-term review adjustments of 2009. Since the 2011 referendum, there has been and still continues to be an influx of returnees which increase population figures, increase the load on existing facilities and diminish impact on a population. This is most notable in small towns or larger urban centres and will include institutional facilities such as schools and health care facilities. With recent unrest

<sup>6</sup> UNICEF MTSP 1 : Young Child Survival and Development , UNICEF WASH South Sudan 2011

on the northern border of South Sudan, this population movement is being swelled by IDPs fleeing insecure areas. South Sudan has seen an influx of at least 337,780 returnees from the north since October 2010 (IOM, Sep 2011) and over 304,400 people have been displaced in 2011 as a result of conflict (OCHA, Sep 2011). The returnee, IDP, and refugee populations increase the pressure on the already insufficient water and sanitation services.

## **Sustainability of the Action**

This component forms the core of the final evaluation activity and was the focus of much of the interviews and observations. As per the Terms of Reference for this evaluation, 5 aspects of Sustainability will be addressed.

### Main operational Risks and Assumptions

- Continued peace building, stability and security in project area
  - Peace building in South Sudan is a clear priority for National Government and its implementing partners. However the recent security situation in the Three Transition Areas will have a clear negative impact on those areas and also in the neighbouring states such as Upper Nile, where IDPs are coming across the border. There have also been ethnic clashes in some areas linked to cattle raiding and revenge attacks between ethnic groups. Finally there are what appear to be banditry attacks along transport corridors such as the route between Torit and Kapoeta in Eastern Equatoria State. These 3 types of security risk will likely remain existent in the near and possibly intermediate future, blocking access either intermittently or full-time, and thus reducing in some areas the potential for installing sustainable solutions.

### Financial, planning and management factors

- Continued government commitment, particularly funding support
  - This is being interpreted as clear commitment from the government not only in terms of policy but also to provide financial support when and where the resources are available. In discussions with various levels of government and during the field visits it was clear that a national policy was being transmitted and received at the State level and down to the County Level. There appears to be some tension between National and State Authorities, and the allocation of resources on a state-by-state basis is not consistent. In Upper Nile state, for example, the identification of Assistant Commissioners and training of mechanics

teams has only recently been done due to a prioritization of State time and resources to the Referendum process.

- Timely external funding
  - This risk factor is difficult to assess within the scope of this evaluation. However it is a reasonable assumption that there will be a strong interest among the donor community to promote economic stability and security in the region where possible.
- Economic conditions remain stable
  - Economic conditions are evolving in South Sudan; in the south of the country there is much more economic interaction between it and its East African neighbours. This is positive and promotes sustainability in the southern part of the country. By contrast, the recent closure of the northern border to economic traffic by Khartoum authorities has had a strong negative economic impact on the border region, with a lack of necessary goods and materials being provided. This gap cannot presently be filled by increased shipping from the south; road routes are in very poor condition and transport facilities by river are limited.
- Demand response: communities willing and able to pay for services or installations
  - Although this assumption was not specifically evaluated at the community level, interviews with local authorities and committee members (whether village level or PTA for schools) indicate that most persons in the urban context (small village and larger) are prepared and willing to pay for access to water or for purchasing a quantity of water (e.g. by jerry can or 200 litre drums, which sell for 6 to 9 SSP, or 1.7 to 2.5 USD in Juba). In one community by the school visited in Rumbek, the PTA of the local community arranged to install an additional hand-pump away from the school so the neighbouring community would pay for access to a pump, but not to interfere with the school water pump.
  - This is less evident for sanitation facilities, as was demonstrated during urban visits in Torit and Rumbek and this is reflected in the low success rates of sanitation activities in the project. In peri-urban Torit, where CLTS was being implemented in an informal settlement (transients waiting for land allocation) results are mixed but nonetheless encouraging. A number of latrine pits have been excavated but not yet covered, some have been covered and some are old latrines installed before the CLTS program. Apparently there is no official status or land ownership in this community but they are willing to invest in at least basic sanitation facilities; some as a result of the CLTS project, some as a result

of an older hygiene promotion project and some inhabitants who brought with them as returnees their own acquired latrine culture. As a result of introducing CLTS in Northern Bahr el Ghazal, 223 household latrines (of 311 pits dug) were built by community themselves without any subsidy and using local materials.

#### Goods and Services in the local market

- Services: available and competent private sector and contractors
  - For this project the identification of viable implementing partners and contractors has been hampered by a shortage of skilled, competent or experienced actors. This includes drilling contractors and local organizations engaged to work with community and school sensitization for the software component of WASH activities. Many of the contractors are not local, which has limited their accountability, sometimes at great expense to the contracting authority. For UNICEF assisted project, contractors are only paid on completion of the works, no advance payment.
  - In other (non-UNICEF) projects, traces of this can be observed in the abandoned and uncompleted water supply system for the town of Torit and the abandoned heavy machinery confiscated by DRWSS in Malakal. The situation is improving and a number of individuals trained while working with NGO's and other organizations are moving into the service market. More competent service providers are coming from East Africa. The requirement of supervision of water supply services by the MWRI and implementing partners does help improve this situation but there are limits due to staff capacity. Drilling supervision, for example, requires the supervision of a hydro geologist and not a driller, because it is the quality of the installation that must be verified and not the quantity. This includes siting of boreholes as well as drilling and installing of pumps. Some contractors have recognized this and are providing their own experienced groundwater staff. This risk is diminishing and this element becoming more sustainable, but during the timing of this specific project it was one of the factors responsible for some of the low results achieved in water supply.
  - Goods: While the quality of some goods may be improving, the cost and therefore the access to these goods are still a problem. Transport is the main issue, with rapidly rising costs of fuel, poor road conditions and the recent closure of transport from the north raising the cost of materials overall. This is

exacerbated by the chain of administrative and import costs, some official and some roadside, which also contribute to the rising costs at delivery.

### Institutional factors

- Government takeover of project responsibilities
  - At the county level and below, the takeover of project responsibilities is still being constructed administration-wise. In the State of Upper Nile, Assistant Commissioners have only been identified and in all three areas visited the facilities for DRWSS were in varying degrees of construction. Training of staff on hardware and software is being implemented in the DRWSS in the States visited. This demonstrates commitment from the government, which bodes well for sustainability in the long-term, but the short-term sustainability is fragile and still requires additional support.
- Supply Chain: There was much discussion at Juba level about the supply chain as being a key element in the project but on review at the field level, this appears to be largely limited by simple logistics such as storage and transport of materials and trained staff. The supply chain infrastructure has arrived at the State DRWSS level (physically and administratively) but is only now being transmitted to the county level in the areas visited. An example visited is Rumbek East County where an infrastructure is almost in place for the delivery of materials. The main challenge at this county level appears to be the transport of supplies to the Payam level and below. However County authorities (Assistant Commissioner) in Rumbek East state that they have distributed tools to Payam level (stored with local authority), with one set per 2 man team. Some teams have a bicycle between them to share, which illustrates the limit of transport resources. Where possible, the DRWSS at county level takes advantage of NGO implementing partners and their transport in order to carry out O & M activities. What is positive in this State is the fact that some members of their mechanic teams have participated in refresher training courses. On request, a list of points for improving supply chain management in the context of the ROSS has been drawn up. The details are in Annex 4 Supply Chain Guidance Note and the structure is as follows:
  - Administrative requirements
  - Human Resources
  - Logistics
  - Management strategies - alliances

### Other Challenges to Sustainability

Aside from the risks and assumptions identified in the project design, a number of additional challenges to sustainability have been identified by participants in the interviews or observed during the evaluation. They will be presented in the section on Challenges and Recommendations.

## **Complementarity and Visibility of the Action**

With the position of UNICEF as a key partner with the MWRI for the implementation of WASH in South Sudan and also coordinating the implementation of activities funded by the Multi Donor Trust Fund, the complementarity of this project with government water policy and other possible parallel or similar actions should be high. During discussions at County level with the departments there was no indication of overlap with other line ministries or development activities of other organizations.

Visibility on behalf of the European Commission for this project in South Sudan is not evident. At most sites visited (and they were admittedly limited), supply chain facilities for DRWSS, and offices and operations of the project implementation partners - there was little or no presentation of the EC's contribution to the project actions. It should be mentioned that when some implementing partners, including the DRWSS, were questioned about the role of the EC as project donor, they sometimes claimed that their project was not funded by the EC but by the MDTF (which is essentially the co-donor for UNICEF to the EC funding of this project) or they pointed out the EC logo stickers provided by DG ECHO for emergency stocks, which is also not the funder of this project. Some EC logos were observed in early school projects in Juba, but in other sites visited this was not the case. EC visibility materials such as posters and pamphlets were not in evidence, although some old EC stickers were found in the UNICEF offices. This may be a consequence of the over-arching role of the MDTF which may have resulted in more focus being placed on the basket fund instead of its individual contributors. It should also be kept in mind that, compared to Khartoum, there is an absence of strong representation of the EC in South Sudan. In any case the issue of EC visibility appears to have become a limited priority for implementers and perhaps for the EC Khartoum Delegation itself, as there is no reference to this aspect in the official project reports or the mid-term evaluation to the EC. EC visibility in the Three Areas was not possible to evaluate.

## **Gender and Human Rights, including child rights**

During the interviews with government authorities and implementing partners, the aspect of gender was most commonly identified as a priority, while less attention was paid to Human Rights and Child Rights by authorities, implementers and beneficiaries. This issue is addressed more in detail in the following sections of Challenges and Recommendations.

## **Challenges**

The following list is a compilation of challenges highlighted during the many interviews conducted. The list represents an organization of challenges into 6 categories which cover the variety of those identified by the interviewees and are a result of observation during the evaluation. They are as follows:

- Environment & Infrastructure
- Technical
- Hygiene Promotion
- Security
- Governance
- Funding

### Environment & Infrastructure

- Rainy Season/Dry Season:
  - Affects access with many roads closed during heavy rains for transport and even smaller 4x4. Rivers used for transport can also be affected by flooding. This will impact on transport of goods, persons such as government staff and implementing partners, and other service providers such as contractors. This was especially evident with the drilling activities.
  - Affects availability of beneficiaries, especially for community-related activity or training activities where participants are required to travel for events or activities
  - Planting & harvesting, linked to seasons, will also dictate availability of community participants, especially in rural and agrarian communities but can also affect attendance of children in schools
- Communication: mainly done by mobile phones (relying on transmitter signals) and radio. This can limit communication outside of main centres or transmission nodes, including transmission of information and field data.

### Technical

- Capacity: trained human resources were not always available for:
  - Government partners, more specifically the need for trained water mechanics but also contract drilling supervisors with the proper hydro-geological background

- Implementing partners, who also contributed to contract drilling supervision, also lacked qualified staff. In some sanitation initiatives, such as CLTS, some NGO's did not have staff trained in proper latrine construction.
- Contractors: specifically drilling contractors, do not always have (or use) hydro-geologists who can do geophysics surveys and proper borehole siting. In discussion with contractors and government authorities it appears that some surveys and sitings are simply being done for form and not for results. Consequently the sitings can be ad hoc.
- Capacity: access to materials and equipment
  - This is linked to infrastructure above but also includes financial / economic factors such as available budgets and rising costs of materials with transport, fuel or security elements affecting access
- Information: This point refers to WIMS and the infrastructure limitations such as lack of offices and computer hardware at state level. At county level, data collected will usually be hard data for some time to come.
- Design: The elements listed below are addressed to a degree with standardization of water installations, but this does not appear to be the case for sanitation. Also a number of hand-pump water points observed did not include soak-away pits at the end of the drainage channel, leaving many sites with muddy standing water, animals drinking from the water and ultimately contaminated surface water around the water point.
  - Effectiveness (does it do the job?)
  - Durability (including min required maintenance)
  - Implementation: ease of installation
- Follow up of contractors
  - Bore Holes: siting, drilling, testing, equipping to ensure quality of installations.
- Operation and Maintenance: while this is linked to human resources capacity, the logistics of transport (of materials and technicians) and storage (supply chain) will affect the frequency and the level of O&M. A very important factor will be the quality of the installation; for example a poorly installed borehole may require more frequent cleaning or have a breakdown from poor quality materials installed. Poorly installed boreholes (and hand pumps) can also provoke unnecessary wear on hand pump installations if they are not straight or if too much earth material enters the hole.

### Hygiene Promotion

- Gender and Human Resources (lack of women actors) in communities or available for government at county level has regularly been cited as problematic, usually in the context of the lack of women who are literate (have some basic schooling), and can work with training materials and reporting. Also, community mobilization and hygiene work can be very intensive, can be sometimes security challenged and it is therefore preferred that this is a team effort (minimum of two persons).
- Lack of materials: lack of hygiene promotion information and training packages for promoters has been cited as a problem.

- Access to Communities: This is linked to the already identified problem of transport of persons. This is a more important issue for hygiene promotion activities rather than technical, because hygiene interventions are often initially longer than technical interventions and require reinforcing visits on a regular cycle.
- School environment:
  - Gender: fewer girls are attending school in some areas because they are more valuable to a family for marriage exchanges
  - Turnover (teachers & students): teachers leaving schools for better paying jobs such as police services, and older students trained as ‘leaders’ in hygiene at schools also leave from the school, all taking their expertise with them

### Security

- General Insecurity (non-targeted): in some of the project areas such as Eastern Equatoria State, transport and traffic along the main routes have been subject to apparently non-targeted attacks.
- Inter-ethnic tensions: in all areas visited the issue of ethnic conflicts linked to cattle raiding and revenge attacks have been cited.
- Transition Areas: these areas have been insecure due to tensions between populations and the government authorities of Khartoum.

### Governance

Existing organigramme: The structure of the administration from the National level to the State level varies from State to State, with the line Ministry not being the same. In some States it is the Ministry of Physical Infrastructure who implements Water Policy and in others it is the Ministry of Environment & Natural Resources (Unity), the Ministry of Cooperatives & Rural Development (Warrap) and the Ministry of Housing and Public Utilities (Easter Equatoria).

### States

- Evolution of Strategy and Policy: This is an ongoing process, with the most recent step being the implementation strategy of the Water Policy approved 19 August 2011.
- Capacity at State, County and Payam levels affect the application of good governance especially with the below afore-mentioned elements:
  - Human Resources (quantity & quality)
  - Institution Infrastructure
  - Decentralization (discussions with Gov’t and NGO stakeholders indicate at the county level that resources, be they funds or materials, are not evenly distributed among the payams)

### Funding

- Global: Insufficient funding from donors and from the Government of South Sudan (investment from oil revenues included), is regularly cited as a challenge by government authorities at the state level as well as the national level. However, this is also a common concern among implementing partners such as NGOs who rely on external funding. Previously a major source was the MDTF (now finished), but the common concern is for longer term funding commitments from donors necessary for institutional capacity building and supporting community approaches that contribute to building sustainable systems.
- Short term: The short term nature of recent funding provides pressure on the ground for implementing partners with a demand for not only measurable results but also a degree of sustainability, the latter of which is not easily installed with a short term action.
- Donor Requirements: donors often have different contractual requirements in aspects such as reporting and visibility. In a multi-donor environment, some of these differences may get confused or forgotten.

## Recommendations

The following list of recommendations corresponds to the above list of challenges. Some of the recommendations have been identified or proposed during the interview process by interviewees but the majority of them are proposed by the evaluator based on the observation and results of this evaluation and on experience in the WASH sector in Africa.

### Environment

- Integrate seasonal challenges in all aspects of planning
  - Timing of Implementation: while it is usually evident that many activities are more easily implemented during the dry season, it should be clearly recognized that some activities cannot be implemented **at all** during a rainy season in some locations. Drilling and equipping boreholes is a clear example of this, and attempts to simply prolong the implementation period during a rainy season should be avoided. Evidently the possibility to plan around this seasonal challenge is limited by short term funding, which can sometimes be less than the seasonal cycle (i.e. Less than 1 year).
  - Contract TORs and Processes for activities normally implemented in the dry season should be concluded during and **before** the end of the rainy season to allow a maximum displacement of resources during the limited time. The time required for mobilization of human and material resources should not be underestimated, and often requires a preparation and planning period before movement begins. Therefore, contractor selections for drilling and equipping should finish before the end of the rainy season and allow preparation time before the dry season begins. As noted above, this duration of process requires a duration of funding to match it.
  - Beneficiary locations will be variably affected by rainy season access problems. Those locations that are the most problematic during a rainy season should be prioritized.

- Proposal and Project Design must incorporate in detail the risks of rainy season limitations into the planning and budget. One of the main reasons for extending this project was rainy season delays in the south not being correctly estimated into the planning and this can be mitigated.
- Donor awareness of this issue, either in the project design or during the contract negotiations, is essential. Ensure that the project design clearly addresses this risk or that the persons negotiating the contract with the donor are fully aware of the risk.

### Technical

- Training
  - Follow-up training should be a regular component of a training program, as this allows one to check the results, and adjust training accordingly with either methodology or more appropriate skills
  - Follow-up allows for reinforcement of original training and is a means for checking for turnover.
- Boreholes:
  - professional siting by a hydro-geologist should be done for difficult areas
  - The siting of boreholes should be verified by persons responsible for supervising the drilling as being appropriate (i.e. not beside another borehole) and / or conforming to the contractor's terms of reference. All sites should be recorded by GPS during the drilling operation.
  - Qualified supervision of drilling and site confirmation should be done by persons with basic training in hydrogeology or groundwater principles and persons who are aware of the water supply needs and constraints, and not by persons experienced in drilling only. This includes verifying proper siting data is collected from geophysical surveys; sites are established by need and not by political agenda, drilling is done to the proper depth and quality, casing is installed correctly, boreholes properly developed and surface works and pumps properly installed.
- Reinforce information collection systems such as WIMS. While this appears initially as a resource problem (funding and materials) reinforcement can also be done by requiring all implementing partners (and non-partners) and contractors conform to the basic data collection needs. Implicating contractors is useful for encouraging actors (and their actions) outside the MWRI to be aware of and the information system.
- Check and adjust design for the water points with standing water problems. If a design has been followed but is not effective, and most of the water points observed with standing water had the same design, then the design should be changed to deal with the problem. A longer drainage or automatic installation of soak-away pits are the normal options but, where confronted with impermeable surfaces, the drainage could be collected in pools for non-domestic uses such as stock-watering irrigating adjacent gardens.

### Hygiene Promotion

- Where trained female staff are difficult or even impossible to find, rather than waiting for this situation to change, the development of a visual training curricula should be done, including non-literate methods of reporting, or at least the minimization of reporting and recording. If key and motivated female staff can be found to work at this level, it will not

be difficult to propose them training in literacy skills as part of their training. UNICEF has distributed pictorial hygiene resource materials such as PHAST and CHAST in 2010 - 11, but the perception within offices of RWSS of the need for literate female collaborators is clear. This adaption will take more time.

- Serious consideration should be given at county and payam level to reinforce hygiene promotion, the need for promotion to be done as a team effort and also supported by transport to the same degree at the pump mechanics and technical teams.
- To overcome turnover, training in hygiene promotion should be introduced into the school curriculum. Attempts to promote this by implementing NGO partners and even members of state level DRWSS have had no success. Intervention from UNICEF education could be a useful alternative.
- The lack of hygiene promotion materials should be verified at the team level to see if the problem is lack of resources or inappropriateness of existing materials (or both). Styles and content of information and promotion kits can be adjusted if necessary to be more portable.

Security: there is often little that can be done to improve a security situation; the best response to this type of challenge is preparation and adjustment.

- Include Risk Analysis security issues in the Activity Plan and other project design elements (adjustable list of beneficiaries) to allow for flexibility in implementation such as a shift operations. This may require a broader baseline analysis and may affect sustainability but it does facilitate project adjustment with donors and partners. Include less obvious security issues such as upcoming political events or elections not only in the country of action but also in neighbouring countries
- Ensure actors (donors, partners, contractors, beneficiaries) are up to date and aware of the security implications on project activities, planning and potential delays

### Governance

- An updated Institution Organigramme should be developed to illustrate the implementation of the Water Policy:
  - At National, State and County levels
  - Identifying differences between States where they exist
- Disseminate new strategies to partners asap
- Include challenges of decentralization in the risk analysis
- Verify status (quantity/quality) of HR needs at all levels to:
  - Evaluate impact of ongoing support measures
  - Evaluate up to date needs for: donors and partners

### Funding

- Cotonou status and possibilities should be followed up with the new status of South Sudan. The European Union has recently (May, 2011) allocated 200 million Euros to

South Sudan for development activities in education, health, agriculture, food security and democratic governance for 2011-2013.<sup>7</sup>

- Links to the AU and AMCOW should be investigated as these institutions are often entry counterpart for development donors in the water sector in Africa.
- Prepare info packages for Donors:
  - Institutional profile and structures
  - Update needs analyses
  - Update Risk analyses (security/challenges)
- Encourage and assist the applications for funding, or the participation in projects as partners, from:
  - State and County Partner levels, not just national level partners. These are alternatives to a basket fund approach where donors can include individual country donors (e.g. UK via DFID or France via AFD) who will fund more targeted actions at state or county level, twinning initiatives promoted by donor provinces or states and even cities, and finally NGO's who have either own funds or who
  - Local Organizations such as South Sudanese NGOs or CBOs

## **Lessons Learned**

This section will not include technical or operational lessons learned as such, since many of the solutions to items such as design faults or human resources challenges have already been addressed in the lists of challenges in recommendations. Of more importance are the lessons that can be learned in order to improve the overall process of the project action and thus have a definitive impact in sustainability; whether it is technical or social, hardware or software. This list is shorter than the above but will nevertheless present sufficient challenge to implement.

### Follow-up

This is the most important lesson to be highlighted by the evaluation and is especially relevant to an implementation model where the coordinator works mainly with implementing partners. The need for follow-up to ensure actions were taking place, or that results were being achieved, can be illustrated by the following cases:

- In the drilling program in Guinea Worm areas, boreholes were not being installed where they should have been and thus the problem continued as people were still constrained to

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<sup>7</sup> The money will be given once the Republic of South Sudan signs up to the Cotonou agreement. The Cotonou Agreement is a treaty between the European Union and the African, Caribbean and Pacific (ACP) group of states. It was signed in 2000 in Cotonou, the largest city in Benin, by 78 ACP countries and the then fifteen member states of the European Union. Its main aim is reduction and eventual eradication of poverty while contributing to sustainable development. The criteria for signing the Cotonou agreement is by a member country to respect human rights, good governance, independent judiciary, existence of a national development and acceptance from member countries.

use contaminated surface water. In one case where the original site could not be drilled (for access or security reasons), a borehole was simply drilled beside an existing one and a contract on request by locals. This represents a gap between implementation and quality control and supervision.

- A visit of a peri-urban CLTS program showed that while the triggering process resulted in a number of holes being dug, some of the holes were too big or unstable and could not be safely covered by local materials or safely used afterwards. Slabs were not provided, as per the CLTS strategy. UNICEF supports private sector/NGOs/CBOs to establish sanitation outlets to meet the demand created by CLTS. Communities are then encouraged to purchase required hardware by making payments at the outlets, which would in turn generate employment opportunities. However there is still a present need to match demand with the provision of hardware components and technical support to upgrade latrines to a standard which conforms with the minimum WHO standards (rigid and washable floor slab required). The project visited did not have this element of technical follow-up or support for a design component. An additional observation made was that some of the holes were clearly excavated during the recent (and ongoing) rainy season, which is not the best condition for earthworks. The consequences of latrine promotion with collapsing latrines must be clearly considered and this should be included into a CLTS. The timing of excavations must evidently be linked to the appropriate timing of the triggering process.
- A visit to 2 school latrine block installations showed one school system being managed very well and the second school latrine block with doors locked and garbage piled around the facility. The brief visit did not allow for an investigation but the facility, one of the project results, was expected to be functioning.

The above examples do not present uncommon scenarios but rather examples of actions being implemented in South Sudan that for the moment have no impact and therefore no sustainability. If sustainability is a clear objective and it is intended to be evaluated at some future date, the minimum mechanisms of ongoing verification must be put into place. Since it is not a long-term expectation of external or international organizations' to carry this out, these mechanisms must be installed and checked and tested to be functioning with the responsible authority, whether it is government, school or community level.

### Sanitation Methodology

Sanitation targets were reduced in the project extension with initial targets being too high. This was not due to technical challenges of construction but more due to the difficulty in introducing sanitation into a limited latrine culture. The original sanitation promotion program, with provision of latrine slabs, was changed for the CLTS approach. Observation during the survey suggests that there is a need for support with the hardware in the CLTS approach. Also, good latrine construction was observed as a result of the original sanitation program AND from returnees constructing their own latrines based on their own experience outside of South Sudan, either in the North or in neighbouring countries where they were exposed to a latrine culture. A lesson that could be taken here is that with such a mixture of social and cultural awareness, a multiple strategy to sanitation promotion could be taken that can include the strong promotional elements of CLTS, the missing hardware support of either technical follow-up or even provision of slabs to ensure safe design, and the profiting of the newly imported latrine culture among returnees.

### **Conclusion**

While it is clear that sustainability of the original action and objective is challenged in some areas, the context has changed very much since the design and inception of the project (2006-07). The project extension which followed the recommendations of the mid-term review, the adjustment of original targets and methodologies, and the strong partnership between UNICEF, government authorities and implementing partners all reflect strategic attempts to adjust to this evolving context. This evolution would have challenged the sustainability of most static strategies that would have been based on assumptions of 5 years ago. Consequently, the recommendations proposed, within the perspective of the lessons learned, are also a reflection of a need for a degree of adaptability of the actors and stakeholders to pursue the same WASH objectives but in the context of the present and immediate future which is still evolving politically, economically, socially and culturally. The strategies of today will likely require some adapting or tuning of 'tried and true' methodologies until the cycle of challenges begins to lengthen and stabilize, but it is this capacity to accept and build in adjustments into a strategy which will be as valuable a contribution to sustainability, as it will be to try to design a concrete sustainability for the near future.