

UNITED METHODIST COMMITTEE ON RELIEF (UMCOR) - SUDAN

Improved Water Supply to Vulnerable Communities in South Darfur
Phase IV (G131)

FINAL PROJECT REPORT

May 1, 2010 to April 30, 2011

Submitted to:

Ginghamsburg United Methodist Church in Ohio

By

UMCOR-SUDAN

September 8, 2011

Program Title: **Improved Water Supply to Vulnerable Communities in South Darfur – Phase IV**

Country/Region: **Sudan / South Darfur State**

Disaster/Hazard: **Emergency**

Report Period: **May 1, 2010 to April 30, 2011**

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I. DESCRIPTION OF THE PROBLEM THAT THE PROJECT SEEKS TO ADDRESS

A. Background

The Republic of Sudan has been experiencing war and conflict for over two decades. In 2005, the Comprehensive Peace Agreement (CPA) was signed, bringing an end to the 21 year conflict between the Muslim North and the Christian South. However, three years after the signing of the CPA, some of the conflicting interests have yet to be settled. While there was discussion on ending the north – south war, a new crisis emerged in the Western States of Darfur between the Sudan Armed Forces (SAF) and various militants, namely the Sudan Liberation Army (SLA) and the Justice and Equality Movement (JEM). The conflict impacted approximately 4.2 million conflict-affected people in the Darfur. Over two million (2.2)¹ residents are internally displaced, and an additional 238,000 Sudanese refugees are in eastern Chad. The conflict has displaced families and disrupted community structures that might normally provide for orphan children. As a result, children have sometimes been forced to fend for themselves in a hostile environment.

This project seeks to improve access to water and sanitation in Assalaya Locality and improve access to hygiene facilities at one school in either El Daein or Adilla Locality. The project is in its fifth year of implementation.

Security Situation

The security remained relatively calm in UMCOR's areas of operation (the four localities of Al Daein, Bahr Al Arab, Adilla and Assalaya). Humanitarian intervention resumed in El Ferdous location after the area was opened for UN agencies and NGOs. Only Northern El Daein (Haskanita areas) has experienced insecurity during the reporting period. Humanitarian agencies traveling to the operation areas have continued to use rental vehicles due to continued vehicle hijackings. Regular WFP flights from Nyala to El Daein town resumed and NGO staff is again able to travel between the two locations.

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II. SUMMARY OF OVERALL STATUS OF THE PROJECT

A. Description of accomplished activities during the reporting period

The activities planned during the current grant period (May 1, 2010 to April 30, 2011) include:

- Construct one water yard with three troughs in Umgrejo (Assalaya Locality);
- Rehabilitate two motorized boreholes (1 in Umgrejo , 1 in Bigera Shaila in Assalya locality);
- Train and equip one Watsan Committee (6 people);
- Train and equip one Hand Pump Repair Team (2 people);
- Conduct ongoing water quality monitoring of the rehabilitated borehole;
- Educate 5,050 residents of Umgrejo on good hygiene practices (5 hygiene promoters);
- Construct 2 VIP latrines (4 stalls) at two target schools in Adilla or El Daein Locality;
- Conduct various peace building activities targeting the community members (supported by OFDA funds);

¹ USAID, April 2008

- Conduct an impact evaluation.

Expected Results:

1. At least 5,050 individuals in Umgrejo village have access to 15 liters per day (lpd) from improved water sources.
2. At least 50% of residents surveyed remember and practice hygiene education messages.
3. 100% students and teachers at the targeted local primary school have access to clean latrines (measured 3 months after completion).
4. At least 100 nomads and local residents identify areas for joint cooperation as part of a peace-building workshop (supported with OFDA funding).

The main activities carried out during the period between May 1, 2010 up to April 30, 2011

- The construction of water yard in Umgrejo (Assalaya Locality) was successfully completed with four animal troughs instead of three, after budget realignment UMCOR managed to construct another water yard in Bigera Shaila with two animal troughs.
- The rehabilitation of a motorized borehole in Umgrejo was successfully completed by installing a new submersible pump with 2 inches outlet and 14 cubic meter capacity, also a new Perkins type generator (16.5 KVA). The new pump now produces 15 cubic meters per hour, above the old pump capacity by 50%. An additional borehole was successfully rehabilitated in Bigera Shaila water point in Assalaya locality by installing a new submersible 2" Grundfos pump (SP14A25) with a 14 cubic meter capacity/hour and a Perkins generator (16.5 KVA). The new pump produces 14 cubic meters per hour and is almost double the old pump capacity of 8 cubic meters/hour.
- Training of a watsan committee for the borehole in Bigera Shaila and Umgerigo villages was completed in December 2010, and the trained water and sanitation committees were provided with tools (4 wheel barrows, 5 shovels, 10 rakes, 10 diggers, 1 pipe wrench 24" and 1 pipe wrench 18").
- 12 community members (eight pump operators and 4 pump repair team members) were trained in the operation and maintenance of 2 water points (including the submersible pumps and generators) in Umgrejo and Bigera Shaila villages in Assalaya locality. The training workshop was held in Assalaya town for three days.
- During the reporting period 9760 people in Umgrejo and Bigera Shaila villages were reached with hygiene promotion messages aimed to promote good hygiene practices among the targeted community.
- Construction of a VIP latrine with 4 drop holes at Digna Primary School in El Daein Locality was completed, and the construction of another block of VIP latrines, with 4 drop-holes at El Farouq School in Ed Daein town was also successfully completed, and the latrines were handed over to school authorities.
- A training workshop in peace building was conducted in Asalaaya locality with 30 participants (5 female and 25 male) selected from Bigera Shaila, Al Legam, Umgrejo and Asalaaya town. The training was carried out for 2 days. Topics covered included:
 - Understanding the concept of peace and its importance within the environment in which we live.
 - Understanding conflict and its impact.
 - Conflict resolution, negotiation, and mediation skills (modern and traditional approaches).

Strategic objective #1: Increase community access to safe water
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Water Supply and Infrastructure Development

Water Yard Construction

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Planned activities:

Damaged water extraction equipment will be replaced in 2 targeted villages (Umgrejo and Bigera Shaila) in Assalaya Locality with submersible pumps that will improve the present water yield. Pump rooms for the protection of the new water equipment will be constructed at the rehabilitated water point.

Cross-contamination at the source will be prevented by the construction of 2 improved, protected water distribution points with stand taps, donkey-cart stands and 3 separate water troughs for animal consumption. Normally, one water yard has between 4 to 6 water troughs for animal use. The targeted water yard already has one functioning water trough. By creating separate animal troughs, UMCOR will improve the sanitation conditions of the water yard and improve health conditions in the targeted villages. Damaged elevated water tanks will also be rehabilitated.

Achieved

Construction of water yards:

The construction of the water yard in Umgrejo village was successfully completed, with four animal troughs instead of three, 2 human tap-stands with 40 taps, and 2 donkey-cart stands. All the people in the area are now receiving water from the protected water point, and after a budget realignment UMCOR managed to construct another water yard in Bigera Shaila with two animal troughs.

Borehole Maintenance

Planned activities:

UMCOR will rehabilitate 2 boreholes in Umgrejo and Bigera Shaila in Assalaya locality. The identified borehole's aquifer is still full, but water is not pumping out.

Borehole rehabilitation:

The rehabilitation of a motorized borehole in Umgrejo was successfully completed by installing a new submersible pump with a 2 inch outlet and 14 cubic meter capacity, and also a new Perkins type generator (16.5 KVA). The new pump now produces 15 cubic meters per hour, above the old pump capacity by 50%. An additional borehole was successfully rehabilitated in Bigera Shaila village in Assalaya locality by installing a new submersible 2" Grundfos pump (SP14A25) with a capacity of 14 cubic meters / hour and a Perkins generator (16.5 KVA). The new pump produces 14 cubic meters / hour and is almost double the old pump capacity of 8 cubic meter / hour.

Train and Equip 1 Watsan Committee

Planned activities:

UMCOR will train 2 Watsan Committees responsible for coordinating hand pump / borehole maintenance, liaising with the Water and Sanitation Department (WES), and coordinating the work of the hygiene promoters. The committee will have at least 6 members and will be supplied with clean up tools and spare parts for the water yard including filters, oil seals, switches and fan belts.

Train and equip one Watsan Committee (6 people)

Training of a Watsan Committees for the boreholes in Bigera Shaila and Umgerigo villages was completed in December 2010, trained water and sanitation committees were provided with tools (4 wheel barrows, 5 shovels, 10 rakes, 10 diggers, 1 pipe wrench 24" and 1 pipe wrench 18") .

Training and Equip 1 Hand Pump Repair Team

Planned activities:

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UMCOR will train and equip 2 hand pump repair team (4 people) in Umgrejo community and Bigera Shaila. This team will have the skills to repair simple malfunctions of the rehabilitated borehole.

Train and equip one motorized Pump Repair Team (2 people)

12 community members (eight pump operators and 4 pump repair team members) were trained in the operation and maintenance of 2 water points (including the submersible pumps and generators) in Umgraiyo and Bigera Shaila villages in Assalaya locality. The training workshop conducted in Assalaya town for three days

Water Quality Monitoring

Planned activities:

Monitor the quality of the water from the rehabilitated borehole to make sure that acceptable levels of bacteria are maintained.

Conduct ongoing water quality monitoring of the rehabilitated borehole

A water quality test was conducted after the rehabilitation of the boreholes and the borehole water tested free from bacteriological contamination. Samples were taken and tested from 2 sites/sources of water of Umgerijo and Bigera Shaila in Assalaya locality. Samples tested were free from contamination as there were no bacteria colonies seen, all standard practices were observed in handling and testing of the samples.

School Sanitation

Planned activities:

Two permanent VIP latrines with 4 stalls will be constructed in two selected schools in El Daein Locality. Three (3) stand-up taps will be constructed in the school in El Daein.

Construct 2 VIP latrines (4 stalls) at 2 schools and 3 taps for hand washing at one target school

Construction of a VIP latrine with 4 drop holes at Digna Primary School in El Daein Locality was completed, the construction of another block of VIP latrines, with 4 drop-holes at El Farouq School in Ed Daein town was also successfully completed.

UMCOR had planned to connect water to the school and to install 3 taps but the Water Department is yet to give permission for water connection. UMCOR worked with PTCs to lobby the DWC for approval, but they (DWC) insisted that the school will have to contribute water user fee in line with the practice in Darfur whereby water users pay for water consumed. This demand was not acceptable to the school authorities because parents did not want to make additional payments for water use (aside from the fee paid at the main water yard for household consumption). UMCOR therefore could not make the water connection to the school because DWC remain unwilling to waive the water fee requirement for the school. The funds were realigned for the additional borehole rehabilitation in Bugera Sheila.

Hygiene Promotion

Planned activities:

UMCOR plans to reach 9,760 residents in Umgrejo and Bigera Shaila with hygiene promotion messages during the project period. UMCOR will recruit 5 community hygiene promoters (rather than the planned 10) responsible for disseminating hygiene messages in the target community. Fewer hygiene promoters will be recruited because UMCOR usually maintains a ratio of hygiene workers to community members of 1:1,000.

Educate 5,050 residents of Umgrejo on good hygiene practices (5 hygiene promoters)

During the reporting period 9,760 people in Umgrejo and Bigera Shaila villages were reached with hygiene promotion messages aimed to promote good hygiene practices among the targeted community

Peace Building Activities

UMCOR agreed with the donor to conduct additional peace building activities in the targeted community using OFDA funds.

Conduct various peace building activities targeting the community members (supported by OFDA funds)

- A training workshop in peace building was conducted in Asalaaya locality to the 30 participants (5 female and 25 male) selected from (Bigera Shaila , Al Legam, and Umgrejo and Asalaaya town) The training carried out for 2 days, The topics covered were:-
 - Understanding the concept of peace and its importance within the environment in which we live.
 - Understanding conflict and its impact.
 - Conflict resolution, negotiation, and mediation skills (modern and traditional approaches).



Figure 1: Peace Building Training in Assalaya

B. Description of implementation methodologies and approaches

UMCOR used methodologies and approaches for rehabilitation projects and education activities that are culturally sensitive and require community participation. The approach has encouraged the sense of project ownership by the community. Local resources (both human and material) were given the highest priorities for utilization before considering outside resources.

C. Qualitative and quantitative progress towards achieving project goals and objectives:

Table1: Overall progress versus selected indicators

Performance / impact indicators	Cumulative Progress (May 2010 – April 2011)			Comments
	Project Target	Achieved To Date	% Achieved To Date	
Number of beneficiaries receiving water from protected water points	5,050	5,050	100%	
<i>Realigned fund Bugera Sheila Number of</i>	<i>11,000</i>	<i>11,000</i>	<i>100%</i>	

<i>beneficiaries receiving water from protected water points</i>				
Number of protected water yards constructed	1	1	100%	
<u>Realigned fund</u> <i>Bugera Sheila</i> Number of protected water yards constructed	1	1	100%	<i>Additional borehole</i>
Number of boreholes rehabilitated	1	1	100%	
<u>Realigned fund</u> <i>Bugera Sheila</i> Number of boreholes rehabilitated	1	1	100%	<i>BH in Bigera Shaila</i>
Number of VIP latrines constructed	1	1	100%	
<u>Realigned fund</u> <i>Number of VIP latrines constructed</i>	1	1	100%	<i>Additional block of VIP latrines constructed in El Farouq school.</i>
Number of tap stands constructed	2	2	100%	
<u>Realigned fund</u> <i>Bugera Sheila</i> Number of tap stands constructed	2	2	100%	<i>2 additional tap stands constructed in Bugera Shaila village.</i>
Number of Watsan Committees revitalized, trained and/or established	1	1	100%	
Number of hand pump repair teams formed and trained	2	2	100%	
<u>Realigned fund</u> <i>Bugera Sheila</i> Number of Watsan Committees revitalized, trained and/or established	1	1	100%	<i>Additional</i>

Number of people that receive messages on good hygiene practices	5,050	5050	100%	
<i>Realigned fund Bugera Sheila Number of people that receive messages on good hygiene practices</i>	11,000	4,710	42.8%	<i>The hygiene activities only started in January 2011 due to added funds</i>
Number of liters available per person per day after the intervention (at target sites)	>15	-	-	Umgrejo = 22.18l/p/d
<i>Realigned fund Bugera Sheila Number of liters available per person per day after the intervention (at target sites)</i>	>15			<i>13.18l/p/d. The population is too high to reach the target</i>
Percent of Water Points with 0 fecal coli forms per 100 ml	>90	0%	0%	The water points include BH, tank and draw point for all water points
Estimated time used in water collection after project implementation per day (min)	7 mins	-	-	For both water site it is less than 7 mins
Number of peace building initiatives conducted (target: 1/population cluster)	1	1	100%	Conducted for the two water points.

D. Issues and problems encountered, lessons learned and adjustments made to the project

The adjustment made was the increase of the water point by one as there was savings to cover an additional than previously budgeted.

III. IMPACT ANALYSIS (E.G. INCREASED INCOME, SAFE AND FRIENDLY COMMUNITIES, ATTITUDE CHANGE, IMPROVED LIVING STANDARDS, IMPROVED KNOWLEDGE AND PRACTICE)

No impact assessment was carried out.

IV. ADDITIONAL FUNDS AND IN-KIND MATERIAL RESOURCES RAISED

No additional funds were included.

V. INVOLVEMENT OF VOLUNTEERS

There were no volunteers involved in the implementation.