



Final Report

**Life Saving Multi-Sectoral Program
South Sudan
03 February 2004 to 31 May 2005**



**Grant Award:
DFD-G-00-04-00054-00**

**Presented to:
Office for Foreign Disaster Assistance**



TABLE OF CONTENTS

1	EXECUTIVE SUMMARY	2
1.1	Agency	2
1.2	Program	2
1.3	Period	2
1.4	Budget	2
1.5	Related objectives	2
2	OPERATIONAL FRAMEWORK	3
2.1	Objectives of operation	3
3	PROGRAM OVERVIEW AND PERFORMANCE.....	3
3.1	Monitoring and Assessment	3
3.2	Demographic Profile of Targeted/Reached Population	3
3.3	Beneficiaries Targeted and Reached by Objective	4
3.4	Cumulative Beneficiaries Targeted and Reached	4
3.5	Achievements, Constraints and Adjustments	4
3.6	Success Stories	5
3.7	Overall Project Performance	5
4	BUDGET AND FINANCIAL DETAILS.....	6
4.1	Budget	6
4.2	Summary of Cost Effectiveness	6
5	CONCLUSION.....	6

Annex A: Financial Summary Report

Annex B: Medair Logframe

Annex C: Map of Medair Operating Locations



1 EXECUTIVE SUMMARY

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<p>1.2 Program</p> <p>Program title: South Sudan Life saving multi-sectoral programs Contract number: DFD-G-00-04-00054-00 Country: Sudan Region of Activity: Upper Nile/Jonglei Regions: 5 MRT mobile sites Pibor County: 1 fixed site in Lekuangole Disaster: Acute living conditions due to civil strife and natural disaster (possible return of IDPs should peace be maintained) Total number of beneficiaries targeted: Upper Nile region: MRT locations-possible large group of IDP and 5 regular locations among the following: Ruweng county (78,000); Payuer (23,000); Menime (25,000); Jiech/Ayod (53,000) ; Atar (26,000); Pieri (10,000)¹ Jonglei region: Lekuangole, Pibor County (20,000)</p>	
<p>1.3 Period</p> <p>Period of agreement: 03 February 2004 to 31 May 2005 Time period covered by the report: 03 February 2004 to 31 May 2005 Submission date: 31 August 2005</p>	
<p>1.4 Budget</p> <p>Dollar Amount Requested from OFDA \$ 800,000 Dollar Amount from ECHO \$ 950,000 Dollar Amount from Medair/other \$ 450,000 Total Dollar Amount of program \$ 2,200,000</p>	<p>1.5 Related objectives</p> <ul style="list-style-type: none"> • WatSan, Non Food commodities • Health • All above

¹ These figures are the estimates of Medair and do not necessarily match the counterpart figures given.



2 OPERATIONAL FRAMEWORK

2.1 Objectives of operation

Overall Goal:

To reduce the levels of morbidity and mortality in southern Sudan with an emphasis on:

- a. 5 locations in Upper Nile / Jonglei Region through the Mobile Response Team (MRT)
- b. Lekuangole, Pibor County

Specific Objectives:

Objective 1: *Increased access to Water and sanitation facilities*

- a. Water assistance provided to communities in acute crisis in Upper Nile
- b. Improved involvement of community in the management of WatSan services in 5 locations of Upper Nile and in Pibor County
- c. Increased access to safe drinking water, sanitation facilities, and awareness of appropriate hygiene in Upper Nile and in Pibor County

Objective 2: *Increased household security for communities in acute crisis*

- a. Assessments of General health, WatSan and Coping mechanisms among vulnerable communities in Upper Nile
- b. Non food items distribution assistance provided to communities in acute crisis in Upper Nile

3 PROGRAM OVERVIEW AND PERFORMANCE

3.1 Monitoring and Assessment

These activities consisted of:

- Site visit reports produced after rapid needs assessments
- Monthly situation reports sent to program coordinator and manager, country director and desk officer
- Monthly field level progress meetings
- Quarterly field visits by watsan coordinator
- Quarterly progress meetings for all programs, held in Nairobi
- Bi annual visit of HQ staff
- Collaboration with counterparts, civil authorities and specific target groups
- End of project evaluation from outside consultant

3.2 Demographic Profile of Targeted/Reached Population

3.2.1 Upper Nile Region MRT locations

Upper Nile/Jonglei region extends from the borders of Bor and Pochalla counties to southern part of the Blue Nile state, and northwest to Ruweng County. It encompasses Nuer, Dinka, Anyiak, Shilluk and Murle tribal groups, but is predominantly inhabited by the Nuer people. Bahr El Ghazal is predominantly Dinka Padang people, and Sobat is a mixture between Nuer and Dinka. A large number of the beneficiaries are IDPs. Population figures: Ruweng county (78,000); Payuer (23,000); Menime (25,000); Jiech/Ayod (53,000); Atar (26,000); Pieri (10,000).

3.2.2 Lekuangole, Pibor County, Jonglei Region

The inhabitants of Lekuangole area are the Murle tribe. Murles are nomadic-pastoralists and agro-pastoralists with most of the people residing around the Pibor River. They have been a largely marginalized tribal group due to their perceived hostility with their neighbour, Dinka Bor in the West, Nuer in the North, Taposa in the South and Anyiak in the East. Lekuangole is



also inhabited by a group of Nuer IDPs (with over 900 people aged 12 and above). Population estimate is 20,000.

3.3 Beneficiaries Targeted and Reached by Objective

Objective	Targeted Beneficiaries	Reached Beneficiaries ²
1a: Water assistance provided to communities in acute crisis in Upper Nile	76,200 (target population of the following communities: Pagol, Payuer, Menime, Jiech/Ayod, Atar, Pieri, and Lekuangole)	29,000
1b: Improved involvement of community in the management of watsan services	56,200 (target population of the 5 targeted communities: Payuer, Jiech, Ayod, Atar and Lekuangole)	64,150
1c: Increased access to safe drinking water, sanitation facilities, and awareness of appropriate hygiene in the 5 locations	56,200 (same communities as for 1b)	56,550
2a: Assessments of general health, watsan and coping mechanisms among vulnerable communities in Upper Nile	76,200	82,000 ³
2b: Non-food distribution assistance provided to communities in acute crisis in Upper Nile	30,000	25,200

Please note that for objective 1a, the reached beneficiaries figure compared to targeted beneficiaries less than half because it only represents direct beneficiaries of emergency interventions and was dependent on number of emergencies reported/responded to from the targeted figure. The targeted beneficiary represented the population from which emergencies may arise and Medair would respond.

The reached beneficiary figure for objective 2b was also lower than anticipated, but was a result of the OFDA approved transfer of funding for blankets to pit latrines.

3.4 Cumulative Beneficiaries Targeted and Reached

The cumulative targeted population was 76,200. Cumulative reached beneficiaries are difficult to determine as there is significant overlap. A conservative estimate would be 78,600, but could be as high as 100,000. Due to the nature of emergency responses, reached beneficiaries in non-targeted areas would be counted in the cumulative as well, though this would not necessarily correspond to targeted numbers.

3.5 Achievements, Constraints and Adjustments

The logframe in Annex B provides details on results accomplished versus objectives. A more detailed narrative of the more significant achievements is listed in section 3.6.

Medair encountered four major constraints during this project. Three of these were anticipated in the proposal and the fourth encountered while drilling in Atar. In summary:

- Minor insecurity incidents were anticipated, but March 2004 saw a dangerous increase in insecurity in Lekuangole and the Medair team was evacuated by OLS. Medair's absence also resulted in the destruction of the water treatment system deployed in the area. Adjustments were made for the team to relocate to Awoda and Ajiep, and continue their work in these two underserved areas in Bahr el Ghazal. What initially was a temporary plan, became long-term when a safe level of security did not return to Lekuangole. Lekuangole remains at security level 4 and therefore inaccessible to OLS NGOs for humanitarian assistance at the time of writing this report.

² Medair has avoided double counting where possible. Overlap is difficult to determine, but formulas were based on SPHERE standards or modified versions depending on the circumstances in the region, i.e. 500 people served per borehole is the norm, but in Medair locations where there were not pre-existing boreholes, a figure of 1,000 people was used; whereas in reality, the number is higher. Please refer to section 3.2.4 in the proposal for more details.

³ This figure represents a conservative number of beneficiaries from rapid needs assessments. The number of direct beneficiaries of multi-sector (health, watsan, food security) interventions was 37,000 (Atar: 7058, Jiech: 3554, Ajiep: 18,000, Shilluk: 5,400, Awoda: 3000).



- Medair's drilling rig and vehicle could only fit OLS' Buffalo planes, but unfortunately these planes were either given priority to WFP or were out of service from technical problems. All OLS agencies were to have equal access to flights, but in reality it would appear UN agencies were preferred. An option of using non-OLS flights was prohibited, but Medair did request special permission on several occasions to utilize non-OLS services, which was granted. The most severe problem occurred during the evacuation from Lekuangle, with the loss of the drilling rig and vehicle (both have yet to be recovered).
- If flight availability was not an issue, weather often was. During the rainy season (April-September), air strips are often unusable. Medair locations were in some of the most remote parts of South Sudan, with air access the only transportation available.
- Medair's previous work in Atar demonstrated the difficulties in working in this area, but after a geophysical survey, Medair anticipated providing 5 successful boreholes. Due to the geology in the area, many agencies refused to drill, leaving Atar County with no boreholes. Although the geology proved more difficult, 2 boreholes were drilled and hand-pumps installed. These difficulties will be considered in designing future proposals, in order to project for more time and funding for drilling in this and similar areas with challenging geological features such as those encountered in Atar.

3.6 Success Stories

3.6.1 Pochalla Refugee Intervention

In August 2004, a large movement of people from Ethiopia to Sudan was reported, due to ethnic conflict. Medair participated in a multi-agency assessment, resulting in the provision of sanitation facilities and hygiene assistance to the refugee community, numbering between 8,000 and 10,000. This intervention occurred in two stages: distribution of 2,000 buckets and construction of 40 latrines in Pochalla town, where the refugees were initially staying. Training of hygiene promoters also served the needs of the host and refugee communities. Construction of an additional 70 latrines in a camp where the refugees were later resettled formed the second part of the intervention.

3.6.2 Ayod Water Program

Medair was able to repair all 8 boreholes in Ayod County and all are properly functioning. Some of these had been broken for two or more years, causing greater stress on other water sources. An additional 5 successful boreholes were also drilled, including 3 in villages with no previous borehole. Medair also enjoyed cooperation with Medic, a local NGO in overcoming technical problems. This cooperation resulted in a total of 19 new boreholes for Ayod County.

3.6.3 Atar Drilling Program

During the dry season, people have to walk for up to four hours from their homes to the river to fetch water. Atar's geology and poor access (plane only), led other agencies to classify the area as too difficult to attempt drilling, leaving the area in a hopeless situation. However, Medair's mandate is to work in these remote and forgotten crises. Medair's persistence, despite the following factors: low water potential, deep holes that reached the capacity of the drilling rig (over 100 meters), poor access, the pressure of night-time work done to avoid the presence of bees during the day, and five drilling attempts, finally resulted in 2 boreholes drilled and hand-pumps installed. This represents a significant accomplishment in an area with no previous safe water points.

3.7 Overall Project Performance

When factoring the environment and constraints encountered during this project, the projects overall performance was successful. An outside consultant conducted an evaluation of this project and came to a similar conclusion. The executive summary and/or evaluation will be available upon request. Highlighted below are some of the main points from the preliminary report:

- Medair's approach has ensured community consultation and involvement.
- Medair has good logistic documentation and administrative/coordination system in Lokichoggio and Nairobi, but when these tasks fell upon team leaders operating in the field, it proved too demanding and could easily interrupt project activities.



- The project has created a cost structure in Atar that cannot easily be locally supported, but the community is planning to introduce a cost recovery system to ensure financial and maintenance sustainability.
- Unlike other areas in Upper Nile, Atar's geophysical limitations and remote location made drilling expensive and difficult.
- Cultural belief systems make transformation of hygiene practices difficult and lengthy, with Medair requesting the assistance of civil authorities to convince local chiefs of the benefits accrued from good hygiene.
- The two safe water points provided in Atar alleviated water scarcity for a portion of the population, but may be over-taxed by surrounding communities still without access to safe water.
- Additional boreholes in Ayod has not only provided a greater water supply, but have reduced water-based conflicts that were previously occurring.
- Poorly organized SRRC structures hindered Medair from maintaining project sustainability in some locations.

The evaluation concluded that overall the project had achieved its intended objectives, with the exception of providing only 7 of the 10 planned boreholes. In general terms though, providing 7 boreholes was quite an achievement within the context of South Sudan and Upper Nile in particular. Medair agreed with the report's initial findings and areas of weakness are being evaluated and strategy created to prevent their future occurrence.

4 BUDGET AND FINANCIAL DETAILS

4.1 Budget

Please see Annex A for budget and finance details and the Final Financial Report with notes in addition to this document.

4.2 Summary of Cost Effectiveness

Since the water table in areas of drilling was so low, Medair's only water source option was to drill deep boreholes. This was a costly endeavour, of not only finances, but time as well. Difficulties encountered delayed the drilling process, which pushed the project timeframe into the rainy season, where the teams had to contend with the delayed flights and logistics. Each time a flight was not available to move the drilling rig, resulted in additional costs. Despite the high drilling costs incurred, Medair was able to create local community sustainability for water points provided and methods and materials used in latrine construction were compatible with the local situation. The realities of uncontrollable and unknowable expenses caused many agencies to avoid these difficult areas, but Medair felt it imperative to provide these much needed water and sanitation services. Future cost analysis and scenario planning will enable Medair to better evaluate strategies for providing relief and sanitation services in emergency situations in remote settings.

5 CONCLUSION

Medair was pleased to be able to provide support to these remote locations with a difficult operating environment, and wish to thank OFDA for their support. The needs of many in crisis situations are often forgotten, leaving large populations beyond traditional approaches of relief aid. The environment in Atar represented an example where the remoteness and geological difficulties deterred aid agencies from utilizing the necessary intervention resources, but Medair made a significant impact by providing safe sources of water in a community where none existed previously.

The recently signed peace agreement offers the Sudanese greater rehabilitation and development opportunities; however, insecurity and emergency situations continue to occur, with large numbers of IDPs and returnees adding a challenging dynamic. Despite the harsh logistical and technical limitations characterizing Medair's operating locations, our emergency response strategy provided ongoing humanitarian assistance in South Sudan, even in the event of insecurity and forced evacuation. Medair wishes to thank OFDA for their support of this project, and the granting of the extension request enabling us to meet our objectives in support of the people of South Sudan.



Annex B: Medair Logframe

Goal	Verifiable indicators	
To reduce the levels of morbidity and mortality in southern Sudan with an emphasis on 5 locations in Upper Nile, and Pibor county	- Reduction in number of deaths due to waterborne diseases.	
Objectives	Verifiable indicators	Results and Comments
Objective 1a. Water assistance provided to communities in acute crisis in Upper Nile:	<ul style="list-style-type: none"> - 2-5 emergency interventions with mobile team, distribution of buckets and water sachets, and emergency water treatment as needed - 5 emergency hand pump repairs/rehabilitations 	<p>5 emergency interventions have been carried out 2,000 buckets have been distributed 4,000 water sachets have been distributed Emergency water distribution system deployed in the 1st quarter in Lekuangole, reaching 1,000 households. 7 emergency repairs interventions to multiple boreholes in Pakam (2) and Pochalla (5)</p>
Objective 1b. Improved involvement of community in the management of watsan services in 5 locations in Upper Nile.	<ul style="list-style-type: none"> - Qualified local water and sanitation structures operating in 5 locations - 1 pit latrine constructed per PHCU - Up to 30 community representatives educated about community participation in 5 locations - Local system of Operation and maintenance strengthened - DDC trained where PHCC facility will be established - Community cost sharing initiated - Local system of Operation and Maintenance strengthened 	<p>14 Village Water Committees (VWCs) have been established in 5 locations (Pochalla, Ayod, Jiech, Atar and Pauyer) 3 VWCs (15 people) have received 5 days training on borehole maintenance, management and basic administration skills 9 pit latrines have been constructed, 1 in each PHCU. Sensitization to hygiene practices, use and maintenance of the pit latrines are monitored during the visits of the team to the various locations A training plan for the DDC (District Development Committee) was developed for Lekuangole but not initiated due to evacuation Cost sharing was initiated in Lekuangole, prior to the evacuation; the community salary contribution for March was 30% Community participation workshops have been conducted in 4 locations. 30 persons in Ayod, 37 persons in Atar, and circa 30 in Ajiep and Payuer 47 pump mechanics have been trained and refreshed. Training comprised of a 2-week tailored training in maintenance, repair, and platform construction and management skills A 6 days Training of Trainers course has been carried out for 7 water and hygiene supervisors</p>



<p>Objective 1c. Increased access to safe drinking water, sanitation facilities, and awareness of appropriate hygiene in the 5 locations.</p>	<ul style="list-style-type: none"> - 10 new hand-pumps are created - Existing hand-pumps rehabilitated/repaired - 20 pit latrines in public places - The target population is more aware of the hygiene practices that create the greatest risk to health - The target population has more access to adequate information regarding the use of water and sanitation facilities - Up to 6 sand filters in schools and PHCUs constructed - Existing hand-pumps are maintained - 20 pit latrines constructed at public places - The target population is aware of the hygiene practices that create the greatest risk to health - The target population has adequate information regarding the use of water and sanitation facilities 	<p>7 bore holes have been drilled and hand pumps installed in Ayod (5) and Atar (2)</p> <p>6 existing bore hole repaired in Ayod</p> <p>1 hand pump assessed, with Medair negotiating supplying the pump</p> <p>263 pit latrines have been constructed</p> <p>3 geophysical surveys have been carried out</p> <p>6 sand filters have been distributed (2 each in Atar, Awoda and Payuer)</p> <p>3 productive bore-holes have been drilled in Lekaungole</p> <p>4 boreholes have been rehabilitated and are functioning out of a possible 12 in Ajiep</p> <p>3 pit latrines have been completed in Awoda and a 8 in Ajiep</p> <p>135 health educators have been trained</p> <p>142 hygiene promoters refreshed</p> <p>348 health promotion sessions held</p> <p>1 hygiene coordinator trained</p> <p>140 workers and 100 church leaders in 4 villages received training in STD prevention. The 4 day training was aimed at promoting the dissemination of health education messages</p> <p>4-day training held in February 04 targeted at the Nuer community</p> <p>9 Nuer community educators were trained and 7 graduated. Of these 4 remain active</p> <p>Over 20,000 people reached with hygiene messages (for example. 3,000 reached at STD clinic, 2,060 reached during distributions)</p> <p>Face washing and environmental cleanliness are promoted through the village health educators and through a child to child initiative</p> <p>Routine education activities also include hygiene education conducted at the PHCU twice per week and at household levels.</p>
<p>Objective 2a. Assessments of General health, Watsan and Coping mechanisms among vulnerable communities in upper Nile</p>	<ul style="list-style-type: none"> - 10 multi sectoral (rapid) needs assessments conducted in liaison with other agencies - Inter agency multi sector responses to address the needs detected 	<p>10 multi-sectoral needs assessments have been carried out (Atar, Ajiep, Akobo, Awoda, Shilluk,, Awerial, Robout, Pagak, Thangrial, and Duk Padiet)</p> <p>4 interagency responses have been carried out in response to the above (Atar, Ajiep, Shilluk, and Awoda).</p> <p>500 IDP kits distributed in Awoda (IDP kits received through EP&R from UNICEF)</p>
<p>Objective 2b. Non food distribution assistance provided to communities in acute crisis in Upper Nile</p>	<ul style="list-style-type: none"> - Distribution of water buckets and blankets to up to 5,000 households completed (IDP or identified vulnerable population) 	<p>3,200 blankets distributed to IDPs in Rubout</p> <p>50 latrine slabs and latrines constructed for 6,000 refugees as part of emergency intervention in order to meet the sanitation needs of the incoming refugees. As approved by OFDA, 2/3rds of the planned budget for blankets was used for the slabs.</p>



Annex C: Map of Medair Locations of Operations

In 2004-2005 Medair supports multi-sectoral programmes in: Leal, Koch, Myendit, Pieri, Yuai, Jiech, Pagil, Ayod, Gorway, Menime, Atar, Wunlem, Alam, Wunangwe, Awoda, Ajiep, Padak, Payuer, Pagol, Lekuangole and Pochalla.

