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FINAL REPORT

Assisting the Vulnerable Conflict-Affected in Darfur South Darfur, Sudan



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COUNTRY CONTACT	HEADQUARTERS CONTACT	PROJECT SUMMARY	
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House No. 19/1, Block No. 13	45 SW Ankeny Street	End Date	October 31, 2012
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1. Program Overview

Mercy Corps Scotland (MCS) implemented Water Sanitation and Hygiene (WASH) activities in addition to Agriculture and Food Security (AFS) and Economic Recovery and Market System (ERMS) activities in three IDP camps, including Dereige, Sakaly, and Elserief camps, and in the Abga Rajel rural area in South Darfur. Under WASH, the project focused on improving access to safe drinking water, increased access to sanitation facilities, promoting improved hygiene practices, and increasing participation of communities in WASH programs by conducting capacity building trainings. Under the AFS sector the project assisted conflict-affected populations to improve crop production and increase access to food through strengthening seed systems and agricultural inputs supply. The WASH and agriculture and food security activities were integrated to ensure water availability and sustainability in the demonstration gardens and in the household vegetable farms. The ERMS component focused on supporting economic asset development and promoting temporary employment.

Through its interventions, MCS aimed to directly benefit 105,410 individuals of the most vulnerable population in Dereige, Sakaly, and Elserief camps, and in the Abga Rajel rural area of South Darfur. The project was implemented by MCS closely coordination with the state and local level administrations, local NGOs and communities in planning, implementing and monitoring.

2. Performance Summary

General overview

The project has been implemented for 29 months, from June 2010 through October 31, 2012, with an overall goal of improving the well-being of vulnerable conflict-affected communities in South Darfur by addressing emergency WASH needs and integrated interventions with agriculture, food security, and economic market systems.

The project improved access to clean water and sanitation facilities by building new water and sanitation facilities and rehabilitating old ones in Dereige, Sakaly, and Elserief camps and in Abga Rajel area, reaching a total 67,336 people. Through integrated capacity building and awareness raising activities the project emphasized the use of safe water, promoting sanitation and hygiene practices for all beneficiaries including the inhabitants of the IDP camps, the pastoralists and the farmers and had a significant impact on the reduction of water related diseases. The project strengthened community based water management systems and empowered communities by ensuring their participation in the design, implementation, decision-making and management of project activities to sustainably manage their water resources and effectively deliver water and sanitation services.

Interventions under the Agriculture and Food Security sector were aimed at increasing availability of food through increased crop production and increased access to food through vegetable kitchen gardens. Project monitoring revealed that the target population has benefited from MCS agriculture and food security interventions. Beneficiaries reported availability of food and improvement in household incomes and indicated high levels of satisfaction with the changes that have taken place in their (family's) lives since they became involved in the food security program. The local seed supply system was revived through targeted training and follow-up support to selected farmers to engage in seed multiplication. Seed fairs were organized to enable farmers to access seeds using seed vouchers and they were able to grow the seeds and avail a good yield because of the good quality seeds and the very good rains received during the seasons.

Farmers were trained in seed preservation and storage in order to reduce crop losses during post-harvest handling and be able to wait instead of immediately sell off their produce when prices are lowest at harvest. Community-based Extension Workers were trained in extension methodologies and equipped

with toolkits to enable them to offer extension services. Demonstration gardens were established for the demonstration of various technologies, including drip irrigation. Farmers were trained in vegetable production and supported with vegetable production kits, including vegetable seeds, hand tools and small scale drip irrigation kits, enabling the farmers to grow and consume vegetables. Some of the farmers sold their surplus vegetables for household income while others preserved the vegetables for dry season consumption. Farmers were trained in waste recycling including compost pit preparation, to improve soil fertility by applying compost, and briquette making in order to reduce the consumption of wood fuel.

Under the economic recovery and market systems component, vocational training and business skills training were conducted with the aim of stimulating growth for micro and small enterprises while at the same time mainstreaming business skills training and support to selected vulnerable households. The interventions were implemented in the three IDP camps (Dereige, Sakaly and Elserief) and the rural area of Abga Rajel. MCS collaborated with the Nyala Technical College and Nyala Technical School to sponsor 101 local artisans for short term vocational skills training. The artisans were supported with startup tool kits to enable them to establish their own businesses. To date, 75% of the vocational training graduates have established their own businesses and are offering services. The daily income earned by the artisans at the start of their businesses range from \$5 to \$10 and is increasing as the artisans gain more experience and customers' confidence. MCS, in collaboration with Nyala University, trained 50 facilitators on entrepreneurship business skills training. MCS used the trained facilitators to train 770 small scale entrepreneurs in business skills to enable them improve and grow their businesses. Follow up visits by MCS staff to some of the trained entrepreneurs indicate improved ways of doing business and increased incomes through improved profit margins and costs analysis. MCS used temporary labor through Cash for Work to establish and maintain 3 demonstration gardens. A total of 580 workforce laborers, 77% women, were employed through Cash for Work, and the average pay was 22.5 SDGs per day.

Sector performance overview

2.1 Water, Sanitation and Hygiene

SECTOR #1			
Water, Sanitation, and Hygiene (WASH)			
Beneficiaries Targeted	74,690		
Beneficiaries Reached	69,462		
Geographic Area (s)	<i>South Darfur: Dereige, Sakaly , and Elserief camps, Abga Rajel East, and Abga Rajel West</i>		
Sub-sector 1	Water Supply		
INDICATORS	BASELINE	TARGET	PROGRESS
<i>Number and percent of households water supplies with 0 coliform bacteria per 100 ml</i>	3,821	10,036	<i>6,724 (67%) of the households with 0 coliform bacteria per100 ml.</i>
<i>Average water usage of target population in liters per person per day</i>	7	15	<i>19 liters per person per day</i>
<i>Number and per cent of water points with measurable chlorine residual exceeding 0.2 mg/l</i>	30 (77%)	35	<i>35(100%) of water points with measurable chlorine residual exceeding 0.2 mg/l.</i>

Sub-sector 2	Environmental Health		
INDICATORS	BASELINE	TARGET	PROGRESS
<i>Number of community cleanup/debris removal activities conducted</i>	6	42	<i>99 clean-up exercises were conducted in IDP camps and Abga Rajel area.</i>
<i>Number of vector-borne disease environmental control activities implemented</i>	N/A	3	<i>3 space sprayings were conducted in the three camps.</i>
<i>Number of bathing facilities completed</i>	576	2000	<i>2109 bathing facilities were completed benefiting 10,645 people</i>
Sub-sector 3	Sanitation		
INDICATORS	BASELINE	TARGET	PROGRESS
<i>Number and percent of household latrines completed that are clean and in use in compliance with Sphere standard</i>	437	2000	<i>2129 new household latrines were constructed benefiting 10,645 people</i>
<i>Number and percent of household hand-washing facilities completed and in use</i>	968	5000	<i>3639 hand – washing facilities distributed for 3639 people</i>
<i>Number and percent of households disposing of solid waste appropriately</i>	2188	10036	<i>(75.5%) 7527 households disposed solid waste appropriately</i>
Sub-sector 4	Hygiene Promotion/behaviors		
INDICATORS	BASELINE	TARGET	PROGRESS
<i>Percent of target population demonstrating good hand-washing practices</i>	28073 (6%)	74690	<i>69,462 (93%) people demonstrating good hand washing practices.</i>
<i>Percent of target population demonstrating correct water usage and storage</i>	48,997 (65.6%)	74690	<i>67,221 (90%) people demonstrating correct water usage and storage.</i>
<i>Number and percent of clean water points functioning three months after completion</i>	16 (46%)	35	<i>35 (100%) water points are clean and functioning.</i>

2.1. Water, Sanitation and Hygiene Promotion (WASH)

Interventions under the WASH sector focused on: 1) Operation and maintenance of water systems, water quality testing and rehabilitation and repair of hand pumps; 2) Construction of new household and permanent school latrines and rehabilitation and replacement of old household latrines; 3) Solid waste management, vector control and construction of bathing facilities; 4) promoting good hygiene standards through trainings and campaigns; and 5) building capacity of community members and WASH committees. During the life of the project the following activities were implemented.

2.1.1. Water supply

Clean water provision has been the primary focus of the project. Through support to the operation and maintenance of eight water systems in Dereige, Sakaly and ElserEIF camps, a total of 46,678 individuals (7780 households) were reached. The project constructed three elevated tanks (25 cubic meters each), two in ElserEIF camp and one in Sakaly camp, and a total of 48 water quality test exercises conducted for *E. coli* with 857 water samples tested for *E. coli* in the three camps. Water collection containers (Jerry cans) were distributed to 2631 people. A total of 252 ground water exercises have been conducted in three boreholes in Dereige, three boreholes in Sakaly and two boreholes in ElserEIF.



In addition, the project rehabilitated and repaired hand pumps: 13 hand pumps in Abga Rajel area benefiting 6500 people, and eight hand pumps benefiting 4000 people in the IDP camps. MCS distributed 2 hand pump tool kits and 50 fast moving spare parts to water committees in the Abga Rajel area.

On the capacity building front the project conducted a series of trainings on water chlorination (for 113 people), on operation and maintenance (20 people); on water management and leadership (182 people); and on hand pump repair (94 technicians).

2.1.2. Environmental Health

A series of trainings, awareness raising events, and environmental health campaigns have been coordinated by the project. A total of 7 trainings on proper waste management practices were conducted benefiting 100 people. MCS supported community members with 346 sets of cleaning tools and 5000 waste management materials to facilitate 387 solid waste management exercises in the three camps and Abga Rajel Areas. MCS supported 17 vector control trainings for 594 community members and constructed 11 drainages and backfilling of ditches during the rainy season benefiting 50,178 people. Training sessions on acute watery diarrhea were organized, benefiting 1281 people. Seven vector space sprayings were conducted to eradicate adult mosquitoes in Dereige, Sakaly and ElserEIF camps, benefiting 50,178 people. In addition to spraying campaigns, Mercy Corps Scotland supported 16 breeding sites treatment exercises to reduce the density of the mosquitoes and prevalence of malaria incidents in three camps. In addition, 2955 bathing facilities were constructed benefiting 2955 households.

2.1.3. Sanitation

To improve sanitary practices, MCS supported the construction of 4212 new household latrines benefiting 21,060 people and rehabilitated 6812 old latrines benefiting 34,060 people. In addition, 15 permanent latrines were constructed, six in public places, two in health clinics, and 17 in IDP schools benefiting 850 students. The project rehabilitated ten school latrines and constructed 15 permanent hand washing facilities. Ten temporary school latrines, benefiting 500 students, were constructed and distributed 48 temporary steel hand washing stands for 13 schools. A total of 69 people were trained in the production of latrine slabs.



2.1.4. Hygiene promotion

Hygiene promotion has been an important component of the project through the provision of training, home to home exercises and the use of IEC materials. PHAST and CHAST trainings were conducted for

94 teachers, 77 school clubs members and for 372 community hygiene promoters. A total of 557 home to home visits exercises were conducted, benefiting 27,556 households. There were 970 IEC materials were distributed to school clubs and beneficiaries in IDPs camps and the Abga Rajel area, and 16 drama and video shows were conducted benefiting 6048 people.

MCS supported 13 schools with latrine cleaning materials, soap, and cleaning tools. School pupils were mobilized by trained teachers and school clubs and conducted activities such as child to child discussions, cleaning of latrines, demonstration of usage of latrines and hand washing with soap at critical times. Public hygiene promotion campaigns were conducted to promote adequate water use and storage in the project areas. Community hygiene water dialogues were held at water points including demonstrations on best practices in water management, on hand-washing practices, collection of water, proper water usage and storage. Hand washing facilities were distributed for 7498 households. Hygiene education sessions were completed, benefiting 8,115 people, and soaps distributed for 25,319 households.



2.2. Agriculture and Food Security

SECTOR #2 Agriculture and Food Security	To improve food security amongst vulnerable households for subsistence consumption and better nutrition through crop production.		
Beneficiaries Targeted	23,000 IDPs: 17,400		
Beneficiaries Reached	23,025		
Geographic Area (s)	Dereige Camp, Sakaly Camp, Elserief Camp and Abga Rajel		
Sub-sector 2.1.	Seed System and Agricultural Inputs		
INDICATORS	BASELINE	TARGET	PROGRESS
<i>(Projected) increase in number of months of food self-sufficiency due to distributed seed systems/agricultural input for beneficiary families</i>	N/A	N/A	1799 households (8,995 individuals) supported with vegetable production kits.
<i>Number of people benefiting from seed systems/agricultural input activities</i>	N/A	1700 households (HHs) (8,500 individuals)	1700 HHs (8500) individuals supported with seeds through seed fairs.

Sub-Sector 2. 2.1: Seed Systems and Agricultural Inputs

A key component of the project included developing local seed enterprise through a value chain approach. Major activities included a rapid seed security survey, to ascertain seed needs, gaps and opportunities for development of seed value chains including seed market analysis. Selected contact farmers were trained and guided on how to select suitable varieties and types of seeds and agronomic practices involved, including skills, pest and disease control on farms and after-harvest and storage practices. Seed fairs were organized through the project to stimulate marketing of local seeds, enterprise growth and provide an opportunity for vulnerable households to select seeds of their preference. In addition to staple seeds the project supported vegetable production.

1) Local Seed Production Enhanced and Seed Fairs/Vouchers Introduced

Seed Security Participatory Survey: A rapid, area-specific seed security participatory survey was conducted to ascertain availability and accessibility of seeds for both the IDPs in the three camps and rural residents of the 19 Abga Rajel villages. The survey explored existing potential for improving the local/informal seed production system. The survey identified the preferred staple crop seed varieties by the community. The survey revealed that there are insufficient seeds in the community due to the poor harvest the previous year 2011.

Seed Multiplication: MCS trained 30 local seed producers in order to revive the existing but significantly disrupted local/informal seed production systems and to improve accessibility and availability of good quality seeds in the IDP camps and at the village level. The seed producers were trained in basic seed production, seed selection and seed storage and preservation. MCS supported the 30 local seed producers with startup seeds and tools to multiply local staple seeds of sorghum, millet and groundnuts in Abga Rajel area. The seed producers received a very good yield because of the high quality seeds and plentiful rains.



Seed Fairs and Seed Vouchers: MCS organized seed fairs, through which 1700 farmers were able to access staple crop seeds using seed vouchers. MCS worked with the local seed suppliers that provided the seed during the seed fairs. The seed fairs enabled IDPs and vulnerable rural farmers increase their food production through access to quality staple crop seeds. The farmers received sorghum, millet and groundnut seeds which they planted and benefitted from very good yields because of high quality seeds and very good rains. During the final program evaluation, 93% of respondents reported benefiting from MCS agriculture and food security

interventions. Sixty-one percent reported availability of food and improvement in household incomes.

2) Improved access to food through kitchen gardens, home gardens and urban agriculture

Training and equipping community based extension workers (CBEWs): The project trained 65 community members as community-based extension workers as one way to build local capacity in agriculture extension and also to ensure sustained support supervision and guidance beyond the project timeline. Each of the CBEWs received a vegetable production kit including vegetable seeds, hand tools and a small scale drip irrigation kit.

Tree/Vegetable demonstration nursery training: In response to the need to improve nutrition, while at the same time demonstrating vegetable gardening as an avenue for reliable income generation, MCS established three demonstration gardens (one in Elsereif camp, and two in Abga Rajel) and trained 360 farmers to run the demonstration nurseries.

Vegetable gardening through drip irrigation technology: MCS, working with community leaders, selected and trained 1799 resource-poor households on vegetable production and drip irrigation technology. The trained farmers were supported with vegetable production kits which included vegetable



seeds, hand tools and small scale drip irrigation kits. Vegetables crops included okra, onions, tomatoes, watermelon, baby spinach, carrots, cucumber and *kudra*. The farmers were able to grow and consume vegetables. Some of the farmers sold off the surplus vegetables for household income while others dried the vegetables for dry season consumption. The vegetable production intervention was highly rated by the respondents, with 59% of people surveyed rating it as one of the most important MCS food security intervention to the community.

Farmer training on waste recycling (compost preparation and briquette making): MCS trained 451 farmers in compost preparation and briquette making. This enabled farmers to acquire skills to be able to improve the soil fertility through application of compost. Briquettes use in cooking will reduce the demand for wood fuel hence reduction in tree cutting.

2.3 Economic Recovery and Market Systems

SECTOR #3 Economic Recovery and Market Systems		Improve business skills and income generation opportunities for vulnerable households	
Beneficiaries Targeted	7,720 IDPs: 7,055		
Beneficiaries Reached	7,105		
Geographic Area (s)	Deriege Camp, Sakaly Camp, Elserif Camp and Abga Rajel		
INDICATORS	BASELINE	TARGET	PROGRESS
<i>Number of people assisted through economic asset development activities</i>	N/A	123	820 people received trainings in basic business skills and entrepreneurship
<i>Number and percent of people utilizing economic assets created to support their livelihood pattern</i>	N/A	65	101 people trained in vocational trainings and supported with startup tool kits
<i>Number of people employed through Cash-for-Work (CFW) activities</i>	N/A	400	580 people employed through Cash for Work (CFW)
<i>Average USD amount per person earned through the Cash-for-Work (CFW) activities</i>	\$2	\$3	\$3
<i>Number and percent of women employed through Cash-for-Work (CFW) activities</i>	N/A	N/A	447 (77%)

Sub-Sector 2. 3.1: Economic Asset Development

Key interventions under the economic recovery and market systems component included vocational training and business skills training which were aimed at stimulating growth for micro and small enterprises while at the same time mainstreaming business skills training and support to selected vulnerable households. The interventions were implemented in the three IDP camps (Deriege, Sakaly and Elserif) and the rural area of Abga Rajel.

1) Vocational Skills Trainings



MCS collaborated with the Nyala Technical College and Nyala Technical School to sponsor 101 local artisans for short term vocational skills training. The training was for three months duration and 36 artisans were trained on mobile repair and maintenance at Nyala Technical College. 35 carpenters and 30 blacksmith were also trained at Nyala Technical School. After graduating from the vocational training, artisans were equipped with business startup kits constituting of tools and inputs required to set up their own enterprises. To date, 75% of the vocational training graduates have established their own businesses and are offering services. The daily income earned by the artisans at the start of their businesses range from \$5 to \$10 and

is increasing as the artisans gain more experience and benefit from rising customer satisfaction.



Carpentry Product



Blacksmith



Mobile Repair Workplace

2) Business Skills Training



businesses.

MCS, in collaboration with Nyala University, trained 50 facilitators on entrepreneurship business skills training using the ILO Start Your Business and Grow Your Business training modules. The facilitators attended eight-day trainings and received training manuals translated to Arabic. MCS used the trained facilitators to train 770 small scale entrepreneurs in business skills to enable them to improve and grow their businesses. Follow up visits by MCS staff to some of the trained entrepreneurs indicate improved ways of doing businesses and increased incomes through increased profit margins and costs analysis. The key limiting factor was the lack of access to finance/capital to grow their

Sub-Sector 2.3.2: Temporary Employment

Nursery labor within community demonstration nursery units: MCS used temporary labor through Cash for Work to establish and maintain 3 demonstration gardens. A total workforce of 580 laborers was employed through Cash for Work and the average pay was 22.5 SDGs per day. Women made up 77% of the workforce.

3. Monitoring and Evaluation

All activities undertaken were regularly monitored by MC Scotland. The project developed several monitoring and data collection formats that allow the organization to track the progress against targets, as well as record basic information on project beneficiaries and performance.

A final evaluation, was also conducted. Some of the key findings of the final evaluation include:

- i) The evaluation revealed a significant increase in the number of people using water from „protected“ sources.
 - The majority of respondents, 98.2%, reported Drilled borehole and Hand Pump as their source of drinking water.
 - All drinking water is treated at the source and points of use. The distance traveled to access water by households has also reduced significantly, 97.1% of respondents can access water within a distance of one kilometer and 99.6% of respondents collect the water within an hour’s time.
 - The majority of the respondents reported that they had a special container for storing household drinking water. 90.3% of respondents store water in improved clay pot with a tap, the recommended “Zir” container that is relevant to the local context of Darfur.
 - The average quantity of water used in most households was 137.5 liters per day (this implies an average per capita of 19.23 liters per person per day.
- ii. A remarkable increase reported in the number of people having functional latrines in their home compounds.

- 92.1% of the respondents have access to latrines
 - 98.2% of all households with latrines reported that all household members including children use the latrines consistently.
 - All beneficiaries with latrines in their households received assistance from MCS to put up the facilities.
 - MCS has established seven school latrines.
- iii. Good hygiene behavior was noted in the program areas.
- 92.8% of the respondents reported regular hand washing with soap,
 - Seventy seven percent of respondents reported clean-up campaigns in their local areas.
 - 75.5% of respondents stored and disposed of household refuse (garbage) appropriately.
 - 78.3% of the houses visited were in good condition as they were very clean.
 - 87.7% of respondents reported that they have waste management materials.
- iv. **AFS Sector:**
- 82% of respondents reported that they had benefited from some kinds of services in agriculture, and 96% out of them reported MCS as the major services provider.
 - 93% of respondents reported benefiting from MCS agriculture and food security interventions.
 - 61% of the respondents reported availability of food and improvement in household incomes.
 - 59% of the respondents rated vegetable production intervention as one of the most important MCS food security interventions to the community.
 - 56% of the respondents reported that they received both seed multiplication and seed preservation and storage, 38% indicated seed preservation and 13% seed multiplication.
- v. **ERMS Sector**
- All vocational training graduates reported receiving tools after completion of the vocational training and 57% of them started up their business.
 - 99% of respondents reported that they received training on planning and management of small scale business skills.
 - 87% of respondents reported that the training was conducted by MCS and it was helpful in their work as it contributes to increase in their daily income.
 - 86% of respondents confirmed that MCS is actively involved in Cash for Work activities in their locations and the work is satisfactory to 92% of them.

4. Coordination

MCS staff coordinated with WES/UNICEF for the WASH program exit strategy and the implementation of program standards, and with the South Darfur State Ministry of Health and WHO for facilitation of the AWD and vector control trainings.

In the AFS and ERMS sectors, MCS staff coordinated with the Ministry of Agriculture and Forestry, the Horticulture Department, FAO, WFP, the Nyala University, Nyala Technical College, and Nyala Technical School.

MCS staff sent weekly and monthly updates to WES, UNICEF, OCHA, and HAC. MCS staff participated in the bi-weekly camp meetings and organized periodical meetings with the beneficiaries to evaluate and strengthen program activities or to discuss program development.

5. Challenges and lessons learned

Below are the most frequent challenges that MC Scotland encountered during the life of the project.

- i. Delays in signing technical agreements, which caused severe start-up delays;
- ii. On-going conflict posed security concerns and caused repeated access restrictions to some project areas; and
- iii. There is still an overwhelming demand for agriculture and food security, as well as economic development interventions and funding is the limiting factor.

6. Conclusion

Despite start-up delays due to signing of agreement processes and some security and access related constraints, the project has largely achieved all deliverables and to some extent exceeded targets.