**CARE International Switzerland**

**South Darfur Programme**

**SDEARP Final Evaluation Report**

**Al Jawhara for Training and Consultancies**

**April 2012**

**Acknowledgement**

I would like to sincerely acknowledge all those who have contributed to the success of conducting this final evaluation. Sincere thanks go to Head of CIS Field Offices in Kass and Gereida for the logistical assistance.

My thanks also go to community leaders in Alsalam IDP camp, Kass and Greida for their time and efforts to conduct successful FGDs and to complete the household questionnaires.

Many thanks go to the PHC expert Mr. Fouad Yousif and Nutrition expert Mr. Ali Abdelkarim for their technical assistance.

Special thanks go to Mr. Yousif Ali Yousif, CIS WASH Area Manager in Gereida for the invaluable and systematic information and support he had provided to the team. Similarly, we highly appreciate the technical information provided by Mr. Musa Ahmed Musa, CIS Water Technician and for escorting us to a safe haven during the attack on Gereida.

**Table of Contents**

Contents

[Executive Summary 4](#_Toc334304965)

[**1.** **Introduction** 6](#_Toc334304966)

[**2.** **Background:** 8](#_Toc334304968)

**[3.](#_Toc334304984)****[Methodology:](#_Toc334304984)** [9](#_Toc334304984)

[**4.** **Findings:** 12](#_Toc334304985)

[**4.1** **Water Supply** 12](#_Toc334304986)

[**4.2** **Sanitation:** 15](#_Toc334304987)

[**4.3** **Hygiene** 17](#_Toc334304988)

[**4.4** **Health** 18](#_Toc334304989)

[**4.5** **Nutrition** 27](#_Toc334304990)

[**4.6** **Lines of Inquiry:** 32](#_Toc334304991)

[4.6.1 **Project target and coverage:** 32](#_Toc334304992)

[4.6.2 **Accountability:** 32](#_Toc334304993)

[4.6.3 **Achievements against results:** 32](#_Toc334304994)

[4.6.4 **Relevance, appropriateness and effectiveness:** 35](#_Toc334304995)

[4.6.5 **Ownership of program by targeted communities:** 36](#_Toc334304996)

[4.6.6 **Working with partners:** 36](#_Toc334304997)

[4.6.7 **Mainstreaming cross-cutting issues:** 36](#_Toc334304998)

[4.6.8 **Sustainability:** 37](#_Toc334304999)

[**5.** **Challenges:** 38](#_Toc334305000)

[**6.** **Conclusions:** 39](#_Toc334305001)

[**7.** **Lessons Learnt:** 40](#_Toc334305002)

[**8.** **Recommendations:** 41](#_Toc334305003)

[**8.1** **Water and Sanitation:** 41](#_Toc334305004)

[**8.2** **Health and Nutrition**: 42](#_Toc334305005)

[**8.3** **Hygiene**: 42](#_Toc334305006)

# Executive Summary

* The main purpose of this report is to present the SDEARP final evaluation findings. The focus of the report is on how far the project managed to achieve its overall and specific objectives, and subsequently, on the overall impact of the project on the beneficiaries since April 2010.
* The evaluation was faced by logistical constraints in movement from one location to another and with insecurity incident.
* Mix-approach methodology was used for data collection and reflection including pre-structured questionnaires, FGDs and KII.
* CIS water supply interventions have been implemented for IDPs in Kass and Gereida where CIS managed 72% and WES 28% of water sources. The intervention had resulted in increase of household water consumption to more than 40 l/p/d and all beneficiaries walk about 500m to the nearest water point.
* Water quality is controlled by chlorine treatment and 92.6% of beneficiaries reported that water is clean and safe. However, there is some contamination in some sources. It is noticeable that the contamination at water points reaches its peak during the rainy season and improves in dry seasons. At household level the contamination is higher.
* Beneficiaries have expressed their satisfaction about the sanitary services delivered by CIS. Donkey/horse carts were useful for waste disposal and sustainable. The community will keep up the momentum of continuous collection and disposal of waste and awareness-raising. Horses will be replaced by donkeys because of cost-effectiveness and reliability.
* The pattern of waste disposal differs among households where 75% rely on the donkey carts as the most appropriate way of discharging solid waste. 14% burning the solid waste and 11% buried it.
* Sanitary awareness-raising campaigns have covered 80% of the intended beneficiaries at different levels.
* Like other components the activities of the Hygiene sector divided between service delivery and awareness-raising. The community contribution was very significant as all beneficiary households have dug their wells while CIS provided the slabs and low cost shelter. Low-costs inputs for hygiene are very essential for sustainability because they are likely affordable by the IDPs.
* 97.4% of the targeted IDP households have benefited from CIS support to construct household latrines.
* The findings of the field visit to the health centers indicate that the institutional support to health centers has remarkably improved their performance. The CIS supported health centers deliver satisfactory PHC services (EPI & RH). They are, also, linked to the nutrition centers through a system for screening and referral of malnutrition cases to the Outreach Therapeutic Program center (OTP) or SFP center as the case may need.
* The implementation strategy of this project includes a partnership between State Ministry of Health and CIS. Under this partnership the Ministry provides adequate personnel to run the HC. On the other hand, CIS pays the monthly incentives.
* The Health Centers are well equipped, spacious and adequately staffed, however, there are some variations from National Standards in terms of number and positions of health personnel.
* 73% of the beneficiaries of health component have acquired adequate knowledge on family planning from the project. 25% of the beneficiaries had attended 3 awareness-raising sessions and this is a high score bearing in mind the extreme difficulty to reach the IDPs.
* 93% of women at reproductive age improved their knowledge about family planning from the awareness-raising events organized by different actors, and 66% acquainted their knowledge from CIS awareness-raising campaigns. They prefer child spacing of two years as the best option. 88% of married women stated that they can plan their deliveries using the different means as they learnt from the project.
* In accordance with the National Standards the available capacity of the two HCs in Kass doesn’t cover the target population of 63,000 persons. Each center should cover 20,000 persons at maximum in addition to a maximum of 10,000 estimated to be covered by the mobile clinic. This gives a total of 50,000 leaving 13,000 IDPs and host community members without access to PHC.
* Awareness-raising campaigns were effective, as the majority of women at RH age have confirmed that they had benefited from CIS awareness-raising campaigns in terms of safe lactation, child care …etc.
* The CIS has supported 6 Nutrition Centers in Kass town and surrounding villages: 3 SFPs; 2 OTPs and 1 Stabilization Center (SC). They provided nutritional services to 3,583 target beneficiaries. The project has managed to effectively coordinate contributions from different sources.
* Knowledge of IDPs, particularly women, about malnutrition is adequate for positive reaction.
* The efforts of project to improve the nutrition status successfully reduced the malnutrition rate a level lower to the SPHERE standard. In 2009 the malnutrition rate was 17.9% reduced to 17% in 2010 and further to 10.8% in the present. However, the nutritional situation is very sensitive to the availability of food.
* The project is, generally, rated as successful and highly relevant to the community needs and MDGs.
* The project was implemented at acceptable rate of effectiveness as the envisioned outcomes were achieved within a challenging environment. The targets and indicators show that the objectives were generally met.
* The likelihood of project sustainability is very high based on inbuilt mechanisms, ownership and following up. Follow up needs to be strengthened.

1. **Introduction**

The main purpose of this report is to present the SDEARP final evaluation findings. The focus of the report is on how far the project managed to achieve its overall and specific objectives, and subsequently, on the overall impact of the project on the beneficiaries since April 2010. The writing process included defining the main aim of the report, collection of data from primary and secondary sources, focus on relevant information and facts, organization of information and careful revision of the draft.

The report covers the components of water, sanitation and hygiene as WASH sector, and health and nutrition as a separate sector. Inter-relation between the two sectors is of course considered. The report highlights whether the CIS has – through addressing problems under these sectors - managed to maintain the minimum standards of well-being among a population of 299,129 beneficiaries consisting of IDPs, host community and people living in surrounding villages. While WASH services are provided in the three targeted Localities Nyala (Al-Salam camp), Kass and Gereida; health and nutrition services are provided in Kass Locality only for IDPs, host community and surrounding villages.

The scope of this report is limited to determining the relevance, effectiveness and impact of the interventions and the extent to which the project achieved its objectives and delivered its expected results with reference to the verifiable indicators listed in the log frame. It is not part of this scope to assess the technical aspects of the construction of the water sources, health centers or nutrition centers. It is not concerned with the management history of these facilities by other NGOs as well. The scope doesn’t, also, include assessing the awareness-raising messages.

The scope, also, include determination of the extent to which the adopted project intervention strategies and approaches contributed to achievement of the project objectives; the extent to which the program contributed to the resilience of targeted communities, and the extent of ownership of the program by local communities.

Identification of the key lessons learnt and provision of general and sector-specific recommendations is an important element to this scope.

**Overall objective:** To contribute to the reduction of mortality and morbidity among highly vulnerable populations in camps through the provision of basic services including WASH, health and nutrition services, and basic livelihoods support to returnees in surrounding areas.

Constraints: confidentiality of information about malnutrition, mortality and morbidity at the SMOH.

Logistical constraints: travel from Nyala to Gereida is difficult; either your timetable matches the UNHAS flights schedule or you go by road using old cars. The road is, also, not always safe. This had affected carrying out the evaluation in terms of timeliness and, subsequently, the cost.

The evaluation assesses how improved water availability has affected various user groups, particularly the poor, and discusses the results and effect of project’s components in the livelihoods of IDPs in the targeted areas with consideration of health, environmental, and gender dimensions.

The report is composed of six main sections an introduction and methodology that explains the procedures of data collection and analysis. Section three represents the main body of the report where findings are presented by component. There are five components making up this project: Water supply, sanitation, hygiene, health and nutrition. Each is covered by a subtitle under the main title of the findings.

Section four summarizes the main challenges that have been facing the project at the implementation and success stages and still facing it at the sustainability level.

Section five is a list of conclusions drawn from the main body of the report as a reflection of the evaluation team. They cover all the components and sections of the report. These conclusions are followed by realistic recommendations that may be useful for future interventions.

**Objectives of the Evaluations:**

The overall purpose of the evaluation was to assess the impact of the program since April 2010 on the beneficiaries and local partners. The subsequent specific objectives included the following: -

1. Measure the specific outcomes of the project in relation to its expected results,
2. Determine the relevance and effectiveness of the interventions used.
3. Determine the extent to which the project achieved its objectives and expected results with reference to the verifiable indicators listed in the log frame, and indentify any unexpected project outcomes;
4. Determine the extent to which the adopted project intervention strategies and approaches contributed to achievement of the project objectives;
5. Determine the impact of the project on the lives of IDPs, host communities and surrounding villages separately;
6. Determine the extent to which the program contributed to the resilience of targeted communities, and the extent of ownership of the program by local communities.
7. Identify key lessons learnt and provide general and sector-specific recommendations to inform CIS’ on-going response in South Darfur, through the extension of SDEARP and other CIS’ interventions in Sudan.
8. **Background:**

Sudan is a multicultural society with hundreds of ethnic and tribal divisions and languages with the Arabic as the official language in the country. Overall, the adult literacy rate in Sudan is 69%. The primary enrolment is 46%, while 82.2% of the cohort completed primary school education. Eighty one percent (81.1%) of the population has access to improved drinking water source, while only 27% enjoy improved sanitation.

With an annual growth rate of 2.8% the total population as projected from 2008 census is equal to 33,419,625 people, 88% are settled, including 49% in urban areas, while 8% are nomads. Almost 6.9% of the population is internally displaced. There has been increasing urbanization, with natural disasters, civil conflicts and poor conditions in rural areas.

The average household size is 5–6 persons, while fertility rate is 5.7; annual crude birth rate is 31.2; and annual crude mortality rate is 16.7 per 1,000 people (17.2 males, 16.3 females). 43.2% of the population is younger than 15 years including 15% under 5 years. Over fifty three percent (53.4%) is in age group 15-64 years, and 3.4% are 60 years and above. Life expectancy at birth is 59 years (58 years for males and 61 years for females), while 78 out of every 1000 children do not live to see their fifth birthday. (RF: Sudan Population Census, 2008, Central Bureau of Statistics Khartoum)

Sudan MDG Indicators:

The South Darfur State is located in the western part of Sudan and covers an area of 127,300 km2 with a total population of 4.31 million (2010). Of the total state population, 56% of people are rural, 22% are urban and 22% are nomadic. Most of the population is agro-pastoralists. Thus the state is characterized by large numbers of livestock (Cattle, sheep, goats, camels and horses). The total number of livestock is estimated at 15 million.

Armed conflict caused significant population displacement and hence 1,016,692 internally displaced persons (IDPs) are living in camps and/or with other rural/urban hosting communities. This situation has resulted in the serious deterioration of basic services, especially in locations with high IDP concentrations, and WASH services were among the most affected.

According to the 2008 Census, only 52.1% of South Darfur’s population had access to improved drinking water whilst 44.1% had access to improved sanitation.

***Malnutrition:*** Prevailing child malnutrition % <5 is 16%.

Child mortality < 5 MR/1000 is 105, IMR is 68, Measles Immunization is 58% of children between 12-23 m.

***Maternal Mortality:*** MMR/100 000 is 509 and births attended by skilled health staff is 57% (Often estimated for 10 years period).

***Environment:*** Access to an improved water source is 70% and access to improved sanitation is 64% (RF: Sudan Household Survey 2010).

***Food Security:*** Cereal supplies to the markets are insufficient, the scarcity of cereals in the market is due to last year’s poor harvest and farmers are mainly relying on sale of groundnuts. The State Ministry of Agriculture has published the post-harvest assessment report indicating a cereal deficit of approximately 200,000 MT.

Also Agricultural Bank of Sudan has injected extra quantities of millet in Nyala market to bridge the gap and stabilize the cereal prices, In March 2012, sorghum prices are 4% higher compared to February 2012 and 45% above the prices in March 2011. (RF: WFP).

The Goat prices have increased by 8% compared to February 2012, and are 51% higher compared to March 2011, Groundnut prices are stable compared to February 2012, but 63% above March 2011.(RF : WFP).

***Nutrition and Health:*** During March 2012, the Nutrition unit has re-prioritized the BSFP locations based on the findings from the comprehensive food security assessment. . (RF: WFP).

1. **Methodology:**

**Study location(s):** Nyala, Kass & Gereida for WaSH component; Kass for health and nutrition components.

The evaluation team pursued the following mixed-methods approach:

1. The evaluation team leader held an introductory meeting with CIS Khartoum, and together with the PHC and Nutritionist held a number of meetings with the programme staffs in Nyala, Gereida and Kass. These meetings provided the evaluation team with adequate understanding of the project context and the TOR. The issues discussed in these meetings included the following: -
2. Evaluation methodology:

The evaluation methodology was prepared according to the TOR; however, CIS was demanding more details while the evaluation team leader thought that was distraction from the core assignment. A compromise was reached at the end by adding more details to the methodology (Attached as annex 1).

1. Evaluation plan,

Same as methodology, the evaluation plan drafted and elaborated as demanded by CIS (Attached as annex 2).

1. Consultation on relevant issues,
2. Collection of secondary data, and
3. Logistics arrangement.
4. Field-level data collection (triangulation):
5. Qualitative information (Including views of the relevant experts on WASH and health and nutrition and CIS contribution) has been collected through FGDs at State and community levels. A reflective FGD was conducted in WES premises in Nyala (See list of participants annex 5). This was followed by 14 of FGDs all camps with Sheikhs, Women Associations (Failed to meet them in Alsalam camp, alternatively we met with a group of beneficiaries), Youth Association and WUC. In Kass we met with Sheiks Committee, Overall WUC, WUC of Battary and Rohal camps, Youth Association and Women Associations of Rohal and Ghabat/Dawagin camps. In Alsalam camp we met with Sheiks Committee, Youth Association and a group of women. In Gereida we met with Sheiks Committee, WUC, Women Association and Youth Association.
6. The evaluation team has, also, collected data from State Ministry of Health (PHC & Nutrition), WES (Water Corporation), Kass Hospital. Data collected through interviews with Key Informants. Similar KIIs and FGDs were organized at community level with community leaders, activists, VDCs and IDP camp committees.
7. Quantitative data were collected through pre-structured questionnaire for household surveys. Collected quantitative data analysed and contrasted to the project indicators in order to measure progress towards achieving project objectives (See attached questionnaire annexes 3 and 4).
8. Desk review of project documents from CIS, partner NGOs and local government authorities.

This methodology was prepared by the evaluation team based on CIS guides of the TOR. Views of CIS staff in Nyala and key stakeholders were incorporated to update the methodology during the first stages of the evaluation process.

1. SPHERE and other interagency standards recognized by CIS have been used as main reference for measurement and judgment.
2. Sample size:

The sample size has been determined by the following variables and respondents were drawn through a combination of cluster and systematic random sampling from the beneficiary lists:

Confidence level 95% and Confidence interval 5%

Table No. (1)

|  |  |  |
| --- | --- | --- |
| Category | Population | Sample size |
| WASH | 218,129 | 384 |
| Health & Nutrition | 81,000 | 382 |
|  |  |  |
| **Total** | **299,129** | **766** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Location** | **Category** | **Sector** | **Population** | **%** | **Sample size** |
| Al Salam camp | IDPs | WASH | 64,000 | 29.34% | 113 |
| Kass | IDPs | WASH | 34,500 | 15.82% | 61 |
| Gereida | IDPs | WASH | 119,629 | 54.84% | 210 |
| Kass |  |  |  |  |  |
| **Subtotal** | | | **218,129** | **100%** | **384** |
| **Kass** | Camp Residents | Health & Nutrition | 51,750 | 63.89% | 244 |
| **Kass** | Host Community | Health & Nutrition | 11,250 | 13.89% | 53 |
| **Kass** | Surrounding Villages | Health & Nutrition | 18,000 | 22.22% | 85 |
| **Subtotal** | |  |  | **100%** | **382** |
| **Grand Total** | |  |  |  | **766** |

The sample size of each category was distributed proportionally between different locations.

1. Deliverables:

The following outputs are the main deliverables:

* Draft evaluation report;
* Final evaluation report;
* Final evaluation methodology;
* Final data collection tools;
* Evaluation work plan and budget;
* List of interviewees.

1. **Findings:**
   1. **Water Supply**

It was confirmed by all key stakeholders is that the infrastructure of water supply in the IDP camps had been established by Oxfam UK and handed over to ICRC. The ICRC, in turn, handed over delivery of WASH services to CIS as part of its phasing out plan. CIS has managed to fill the gap and maintains the delivery of water services to the IDPs in Kass and Gereida IDP camps. However, the displaced community leaders argue that the need is too big for one NGO to meet. They call for more partner NGOs to share the responsibility with CIS for both wider coverage and sustainability (The number of IDPs remains controversial).

CIS water supply interventions have been implemented in Kass and Gereida mainly for IDPs. The main activities included operating and maintaining 6 water supply yards (4 in Gereida and 2 in Kass and water distribution network (storage tanks and water pints). In addition to the water yards CIS also maintained 3 hand pumps in Kass and Gereida IDP camps.

CIS covers 70% of water supply need in Gereida IDP camp, where CIS managed to maintain the average consumption rate at above 15l/p/d for beneficiaries in Gereida camps, but have no water intervention in Al Salam camp.

In Kass the CIS has, also, took over 2 water yards and associated distribution networks. The intervention of CIS in Kass maintains the average water consumption at above 40L/p/d. However, there is a general problem in Kass water supply and that is the contamination of ground water. The project didn’t address this problem other than chlorination because it is out of the scope of the project.

The responsibilities of CIS are synergized to achieve sustainable supply of drinking water for 106,278 IDPs in Kass and Gereida camps. CIS is doing that in collaboration with WES. This partnership is so necessary because management of water sources is expensive and challenging. It requires continuous supply of fuel, regular maintenance and careful handling. CIS in collaboration with the community manages 72% of the water sources while WES manages 28% in all IDP camps.

In fact, the construction of the water yards and hand pumps in the IDP camps has substantially improved the access of IDPs to clean potable water at reasonable distance. According to our interviews 88% of IDPs walk less than 500 meters to fetch water compared to a baseline of 75.6%. This has, in turn, increased the average water consumption of the IDP household per day to match the SPHERE standard.

Water consumption has dramatically increased compared to the baseline indicator which was 17.6 liters/person/day. The daily average consumption of 88.3% of the IDPs is more than 40 liters per person in contrast to 67% before CIS intervention. Only 22% of the beneficiaries reported that the water source is located more than 500 km away from their homes. However, through the FGDs we found out that the water points are fairly distributed and the beneficiaries walk further distance when there is a problem with the nearest water source.

These achievements have been sustainable since 2007 to date. This sustainability could have not been achieved without the continuous supply of fuel, regular preventive maintenance and support to WUCs to run the water sources. The SPHERE standard is no longer applicable for the situation in Kass. The question is how to maintain the sustainability for a long-term in the future? This is best answered by the CIS exit strategy. The core components of the exit strategy include building the capacity of WUCs and, then, shifting the responsibility to the community in collaboration with WES.

For example, when IDPs first arrived to Kass in 2007 there was no single water source for them. The NGOs that launched emergency response provided them with bladders and tankers. Access to drinking water was constrained by shortage in amount and far distance. The construction and maintaining of water sources for IDPs has not only improved their access to drinking water but also reduced the burden on households

The main problems that irritate the smooth supply of water are the following as reported by beneficiaries: -

* The main problem for less than ¼ (22.2%) of the beneficiaries is the distance to the water source. They reported that even the distance of 500 meters is not comfortable.
* Only 7.4% of the beneficiaries in Kass IDP camp argued that there is bad smell and taste in the water. This argument has been emphasized by WES Officers in Nyala who stated that there is a chronic problem of contamination that is not addressed.

The CIS intervention has resulted in a percent increase of IDPs secure access to safe water that exceeds SPHERE standards.

85% of the beneficiaries have confirmed their satisfaction of the services delivered by CIS. So, the increase in satisfaction of services is to be measured against the baseline indicator which is not available.

Those who are not satisfied were referring to minor issues like distribution of water containers (Jerry cans) and provision of cleaning materials after the end of the project. The continuation of the project by OFDA makes it difficult for the beneficiaries to distinguish between ECHO and OFDA projects.

The method used by CIS for water quality treatment was chlorination of water in storage tanks. This method is practical and cost-effective and managed to control the residuals at acceptable level. Water test is done by CIS and WES on weekly basis at water tank, water source and household levels to check faecal coliform per 100ml. It was 93.8% before CIS intervention and the project target is 100% 0 faecal coliform per 100ml for Kass and Gereida beneficiaries. The baseline indicator of 93.8% is questionable of being too high because the progress reports show a highest o faecal coliform per 100ml of 89% in contrast to 44% as lowest. The rate fluctuates from month to month and from season to season. It is noticeable that the contamination at water points reaches its peak during the rainy season and improves in dry seasons. At household level the contamination is higher because the water exposed to factors of contamination such as air, unclean hands … etc.

It is evident that shallow ground water in both Gereida and Kass proved to be contaminated. Contamination is detected at the tank, water source and household levels, albeit in Kass there appeared to be gradual progress at household level where 8% of the households in Kass and 47% in Gereida managed to have, somehow, safe drinking water. This progress in water sanitary level is mainly attributed to the awareness-raising and KAP activities. See below table and graph illustrating the situation in Gereida:

Table No. (2)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Month** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** |
| **Rate of Risk** |  |  |  |  |  |
| No Risk (0) | 55 | 56 | 21 | 64 | 38 |
| Low Risk (1 - 3) | 18 | 11 | 11 | 12 | 8 |
| Medium (4 - 9) | 18 | 0 | 58 | 4 | 21 |
| High Risk (> 10) | 9 | 33 | 11 | 56 | 33 |

Graph No. (1)

* 1. **Sanitation:**

The specific objective of this component was to improve access of 218,129 conflict-affected communities to safe water and sanitation.

The direct beneficiaries of WASH are 64,000 in Al Salam IDPs camp in Nyala, 34,500 in Kass IDPs camp and 119,629 in Gereida IDPs camp. The implementation of sanitary activities went on smoothly from the start of the project throughout to the end.

Critical discussions have been led in the FGDs with the key informants about the sanitary situation in the camps. They have expressed their satisfaction about the services delivered by CIS. The initiation of providing IDPs with donkey/horse carts was useful for waste disposal. So the discussion was focused on the sustainability factors: How to keep up the momentum of continuous collection and disposal of waste on one hand, and how to maintain a regular awareness-raising and mobilization of people to effectively participate in the cleaning campaigns on the other hand. This integration between service delivery and awareness-raising is one of the strengths of the project design. The concerns of the beneficiaries can be summarized as follows: -

* The donkeys are more feasible than the horses because they are cheaper, less expensive and survive longer by adopting the local environment. There is a plan to replace the horses with donkeys in order to increase the number of carts and enhance sustainability. The swap value of selling horses is realized by having more donkeys.
* The participation of youth is an essential factor for success and sustainability. Youths complain about being eliminated by the Sheikhs. Their Association is not involved in the cleaning campaigns and other events in Gereida and Kass camps, while effectively participate in Alsalam camp.
* Coordination between the Camp Sanitation Committee (CSC) (Board of Sheikhs) and the local authorities. There is confusion between the CSC and the Locality on the dumping grounds for solid waste.
* Close follow up of the carts’ operators to make sure they participate according to the agreed schedule. There are some corridors in the camps don’t benefit from the solid waste collection service due to lack of close follow up and supervision.
* Lack of a written operation agreement between CIS, CSC and Cart Operator caused confusion and resulted in less commitment of operators to fulfill their obligations. The existing agreement between CIS and Sheikhs is not comprehensive and it lacks clear terms of engagement of the operator as a third party.

The pattern of waste disposal differs among households where 46% rely on the donkey carts; 29% dispose their solid waste in open yard (This is, also, later collected by carts), so the valid percentage is 75%. Another practice is burning the solid waste and this is practiced by 14% and 11% buried their solid waste.

The awareness-raising campaigns have covered 80% of the intended beneficiaries at different levels. The number of family members who attended awareness-raising sessions was assessed as a crucial indicator for level of coverage. The majority of households (54.6%) sent only one member to attend awareness-raising sessions; 26% were represented by two members; those households who had a chance to participate by three members represent 10.9%; and finally only 8.5% of the targeted households participated by four sessions. Those percentages indicate that the IDPs can’t spare much time for awareness-raising sessions because they are too busy with their socio-economic activities.

However, the beneficiary households have learnt a lot from CIS awareness-raising sessions and a remarkable difference has been achieved in the practice. This has been manifested by 99.5% of IDPs who wash their hands after using toilet and 90% of IDP women wash their hands before making food (See diagram below).

Graph No. (2)

* 1. **Hygiene**

Like other components the activities of the Hygiene sector divided between service delivery and awareness-raising. The community contribution was very significant as all beneficiary households have dug their wells while CIS provided the slabs and the shelter.

The shelter provided is of low-cost and appropriate for a temporary settlement, however, the slabs are relatively expensive. Low-costs inputs for hygiene are very essential for sustainability because they are likely affordable by the IDPs.

One of the positive aspects of this project is the apparent focus on appropriate and sustainable WASH solutions to the IDPs in Kass, Assalam and Gereida camps underlined by 100% coverage of beneficiary households in accordance with SPHERE standards.

The result of the survey is that 97.4% of the targeted IDP households have benefited from CIS support to construct household latrines.

80% of the beneficiaries know that CIS has conducted all awareness-raising events, while the other 20% mentioned that other actors have, also, organized some events. The benefits they gained from the awareness-raising events – organized by all actors - in terms of knowledge reflected on the improvement of the knowledge and practices of the beneficiaries:

* Storing water in appropriate places,
* Covering water containers properly,
* Filtering water by available means,
* Cleaning water container by soap,
* Regular cleaning of water containers,
* Voluntary cleaning water sources,
* Using donkey carts to supply gravels to water sources for cleaning Jerrycans.

Similar to Sanitation, attendance of hygiene awareness-raising sessions was limited to one family member and for 1 - 2 sessions. This indicates that effective awareness-raising is to be for a maximum of 2 sessions because the number of those who attended more than two sessions was insignificant. It seems that two sessions cover the whole package and beneficiaries. They want to avoid repetition unless there is an advanced training course for some potential trainers or community leaders.

* 1. **Health**

The expected result of SDEARP health component was ‘strengthened primary and reproductive care service provision in Kass and surrounding areas to offer quality care. The proposed activities to deliver this intended result included rehabilitation and equipping of 6 PHC clinics and supplying them with consumables to an acceptable standard. The targets were to increase the number of fully immunized children by 20%; and to increase the number of women deliver at PHC facilities by skilled health personnel by 20% as well.

The change was measured against the situation in March 2011 as baseline indicator.

The findings of the field visit to the health centers indicate that the institutional support to health centers has remarkably improved their performance. The CIS supported health centers deliver satisfactory PHC services (EPI & RH). They are, also, linked to the nutrition centers through a system for screening and referral of malnutrition cases to the Outreach Therapeutic Program center (OTP) or SFP center as the case may need.

The evaluation team had conducted interviews with health personnel and assessed the status of the health centers using a check list. The following points summarize the main findings on the institutional capacity and service delivery of each HC.

First, it was observed that the locations of health centers were carefully selected to increase access of IDPs and other beneficiaries to PHC facilities. Thus, health centers are evenly distributed inside and outside the town. The number of inside centers is 3: Kass Kabir, Hai Elkifah and a mobile clinic. The outside centers are 3: Abrum and Singita and Alkreewa. The outside centers were established for the communities in the surrounding villages. Unfortunately, they were all inaccessible during the evaluation period, however, we collected adequate information from the progress reports and CIS staff members.

Second, the health centers deliver the standard PHC services (EPI and RH).

Third, the screening and referral system of malnutrition cases to feeding centers/ or TFC, OTP and SFP is conforming to the national standards. They use the Middle-Upper Hand Circumference (MUAC) and body mass index (weight-for-height). The MUAC is more used because it is more accurate.

The evaluation team preferred to report on each center separately to have more insight about institutional capacity and service delivery:

**Kass Kabir Center:**

Kass Kabir Health Center is managed by Clinical Supervisor or Medical Director. This center was established and started service delivery since November 2009. It serves the northern sector of the IDPs camp and the host community in Kass. Nevertheless, the number of the target beneficiaries in this sector is not available to decide whether the HC zone coverage is standard. The standard zone for a Family Health Center is a circle of 5 km radius with a population of 10,000 to 20,000. However, we can make practical estimate by dividing the total number of beneficiaries over the 6 HCs that gives 13,500 in average, however, CIS records tell us that catchment population for Kass Kbir clinic 65,000, Hai Elkefah 75,000, Mobile clinic 20,000, Singita 15,000, Abrom 15,000 and Elkreewa 10,000 (reference CIS TA health 2011). Comparing South Darfur to other States in terms of access to PHC facility within 5 Km we find that South Darfur has the highest percentage of proportion of population not having access to PHC. See Graph No. (3) below:

Source: PHC Expansion Plan, Federal MoH

The implementation strategy of this project includes a partnership between State Ministry of Health and CIS. Under this partnership the Ministry provides adequate personnel to run the HC. On the other hand, CIS pays the monthly incentives.

The Family Health Center (FHC) is designed to provide services under the following three categories:

1. Mother and Child Health (MCH),
2. Disease Control (DC),
3. Health Promotion (HP).

The standard personnel for a FHC are 12 core staff members and additional 10 staff members. The table below shows the existing health personnel in Kass Kabir family center:

Table No. (3)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Position | Number | No | Position | Number |
| 1 | Medical Doctor | 1 | 8 | Senior midwife | 2 |
| 2 | Medical Assistants | 4 | 9 | Midwife | 7 |
| 3 | Lab Technician | 1 | 10 | Health Promoter | 3 |
| 4 | Clinical supervisor | 1 | 11 | Medical Registrars | 2 |
| 5 | Pharmacist | 1 | 12 | Cleaners | 6 |
| 6 | Vaccinator | 2 | 13 | Guards | 5 |
| 7 | Nurse | 6 | 14 | Driver | 1 |
|  | Total | 16 |  |  | 26 |
| Grand Total is 42 cadres | | | | | |

The above number of staff members and respective positions are compared to the national standards as follows:

Table No. (4)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Current Personnel** | | **National Standard** | | Remarks |
| Position | Number | Position | Number |  |
| Not Available  (NA) | 0 | Family Medicine Physician | 1 |  |
| Medical Doctor | 1 | Medical Doctor | 1 |  |
| Lab Technician | 1 | Lab Technician | 1 |  |
| Nurse | 6 | Nurse | 3 |  |
| Pharmacist | 1 | Pharmacist | 1 |  |
| Vaccinator | 2 | Nutrition and Immunization Cadre | 1 |  |
| Medical Registrar | 2 | Statistician | 1 |  |
| Senior Midwife | 2 | Senior Midwife | 1 |  |
| Not Available |  | Psychologist | 1 |  |
| NA | 0 | Health Oversees | 1 |  |
|  |  |  |  |  |
| Midwife | 7 | Nurse Midwife | 4 |  |
| NA | 0 | Dentist | 1 |  |
| NA |  | Dentist Technician | 1 |  |
| NA | 0 | X-ray Technician | 2 |  |
| NA | 0 | Ophthalmology Tech. | 1 |  |
| NA | 0 | Ultra Sound Tech | 1 |  |
|  |  |  |  |  |
| Medical Assistant | 4 | NA | 0 |  |
| Clinical Supervisor | 1 | NA | 0 |  |
| Health Promoter | 3 | NA | 0 |  |
| Cleaner | 6 | NA | 0 |  |
| Guard | 5 | NA | 0 |  |
| Driver | 1 | NA | 0 |  |
|  |  |  |  |  |

It is clear that the personnel positions and numbers don’t entirely conform to the National standards. There are some posts available in Kass HC and not in the National Standards for FHC and vise versa. However, there are very important posts not filled such as Dentist, Ultra Sound and Psychologist.

With existing institutional and technical capacity the Health Centers still deliver the following PHC and clinical services:

* Outpatient, short stay
* General investigation
* RH services (family planning, delivery room, antenatal care)
* EPI and micronutrient vitamin (A)
* Drugs & pharmaceutical services

They have sufficient area with very good constructed building to serve all facility services room for (doctors, medical assistant, lab for general investigation, dressing, delivery room, short stay, pharmacy, outpatient, EPI, medical registration, drugs storage) all these units are well equipped with basic equipment to provide sufficient services for the target beneficiaries.

**Clinical services:** Kass Kabir FHC delivers clinical services to IDPs and host community at Kass Kabir sector. The number of population served by this facility is estimated to be 20,000 (The maximum of a FHC according to the national standards for health center categorization). In spite of that it delivers very good clinical services with lab investigation and other supportive clinical services.

Generally, the clinical service quality delivered by the Kass Kabir FHC in Kass is rated by the evaluation team as acceptable.

**MCH services:** There is MCH component delivered by the center’s service providers as well as RH, EPI, Nutrition; just screening malnutrition cases for referring to nutrition centers OTP or SFP.

**Reproductive health services:** RH is also provided at the center with family planning services and antenatal care; they received about 800 pregnant women per month; 200 out of them come for their first visit to the center. Cases of obstructed labor are about (7-8) cases per month, and bleeding cases are about (8-9) cases per month. All similar cases are referred to Kass Hospital. The increasing number of women at reproductive age to the HC is attributed to the awareness-raising efforts.

The beneficiary's number served by the center for RH is decreasing when compared to the number served before CIS took over management of the center. The reason is the absence of the incentive used to be provided to beneficiaries.

**EPI services:** EPI services delivered in collaboration with Health Services Department at Kass Locality. The vaccination section is well equipped with standard cool chain required. Services are delivered by trained vaccinators. For documentation purposes there is a health registrar for records keeping. This could be an impetus for development of health information system at the Locality level.

The number of targeted children vaccinated per month is about (1400 - 1500), the drop outs is (10 – 15) per month. The dropout rate was lower – compared to last year - for the same reason of motivation by incentive. However, the project had initiated some precautionary measures such as health education sessions in order to minimize dropout rate.

The supervisory visits to health center were not regular. The project officers rely on the reports of the Clinic Supervisor with limited monitoring. The evaluator noticed that there is no fixed schedule for the supervisory visit.

In accordance with the National Standards the available capacity of the two HCs in Kass doesn’t cover the target population of 63,000 persons. Each center should cover 20,000 persons at maximum in addition to a maximum of 10,000 estimated to be covered by the mobile clinic. This gives a total of 50,000 leaving 13,000 IDPs and host community members without access to PHC. This gap remains uncovered even with the presence of Kass Hospital because it provides secondary health services and to the whole Locality population.

The centers are well constructed; however, they don’t meet the family center National Standards. In order to upgrade them to a higher level that meets the family center standards, we must calculate the population that is supposed to be served by the center. In accordance with the MOH national standards the family center should serve a population between 10,000 and 20000. The population size that justifies a family unit is 5,000 to 10,000 with similar services delivered by the center. The nature of these temporary facilities is considered.

If the National Standards are to be met, the geographical zone and population must be clearly defined. Furthermore, adequate number of health personnel with the required qualifications must be assigned for each FHC. This is the responsibility of the SMoH but CIS can play an advocacy role.

**Hai Elkifah Health Center:**

Hai Elkifah Health Center was handed over by HUMEDICA on the 1st of July 2010 which coincided with the starting of the project. It is managed by Clinical Supervisor deputized by the Medical Director during his absence.

The center serves the southern sector of the IDPs camp and host community. The number of the target population is also estimated, based on the guides of the National Standards, to be 20,000.

Hai Elkifah is the only center that is built of permanent materials. Others are built of local non-permanent materials because it is temporary infrastructure for IDPs who may return to their home villages in short or medium term. All centers are spacious enough to allow privacy.

The health personnel who run Hai Elkifah HC are, more or less, same as of Kass Kabir HC. They are listed in the table below:

**Center personnel:**

Table No. (5)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Position | Number | No | Position | Number |
| 1 | Medical Doctor | 1 | 8 | Senior midwife | 1 |
| 2 | Medical Assistants | 4 | 9 | MW | 7 |
| 3 | Lab Technician | 1 | 10 | HE | 3 |
| 4 | Clinical supervisor | 1 | 11 | Medical Registrars | 3 |
| 5 | Pharmacist | 1 | 12 | Cleaners | 6 |
| 6 | Vaccinator | 2 | 13 | Guards | 7 |
| 7 | Nurse | 6 | 14 | Driver | 1 |
|  |  |  | 15 | Storekeeper | 1 |
|  | Total | 16 |  |  | 29 |
| Grand Total is 45 cadres | | | | | |

It is, also, not in full conformity with the National Standards, however, they deliver the following PHC and clinical services satisfactorily:

* Outpatient, short stay,
* General investigation,
* RH services (family planning, delivery room, antenatal care),
* EPI & micronutrient vitamin (A) form,
* Drugs & Pharmaceutical services.

MCH services: Similar to the other center this center delivers MCH as well as RH, EPI, and screening of malnutrition cases.

Reproductive health services: The turnover of beneficiaries for family planning services and antenatal care is slightly different compared to Kass Kabir FHC. This center receives about 700 pregnant women per month 150-200 as first visit of them. Average of obstructed labor cases is (6-7) per month, and bleeding cases are about (5-7) cases per month referred to the Hospital.

The turnover of the beneficiary women to Hai Elkifah FHC has, also, been affected by the lack of in-kind incentive.

**EPI services:** EPI services delivered in collaboration with Health Services Department at Kass Locality. The vaccination section is well equipped with standard cool chain required. Services are delivered by trained vaccinators. For documentation purposes there is a health registrar for records keeping.

The number of children vaccinated per month ranges between (1300 and 1500), the dropouts for reaching target is approximately (9 – 13) per month.

They did some precautionary measures as health education sections to minimize dropouts from targeted children that must be covered.

Annual feedback report is, also, not available.

General achievements f the project can be summarized in the following points: -

* 73% of the beneficiaries of health component have acquired adequate knowledge on family planning from the project. 25% of the beneficiaries had attended 3 awareness-raising sessions and this is a high score bearing in mind the extreme difficulty to reach the IDPs.
* 93% of women at reproductive age improved their knowledge about family planning from the awareness-raising events organized by different actors, and 66% acquainted their knowledge from CIS awareness-raising campaigns. They prefer child spacing of two years as the best option. 88% of married women stated that they can plan their deliveries using the different means as they learnt from the project. 66.2% pursue natural planning, 33.4% use contraceptives and only 0.4% use condoms.
* The 22% who don’t plan their deliveries justify that by their understanding of religion (21.5%) and refusal of husband (46.2%) and fear of side effects (32.3%). These three issues need to be critically addressed in the educational materials.
* One of the impressing achievements of the project is the apparent increase in number of pregnant women who go to licensed midwives. 76.4% of pregnant women go to licensed midwives in contrast to 13.6% still go to traditional midwives. KI women activists stated that the majority of the women used to go to traditional midwives before the project intervention. The semi-final progress report shows an increase of 27% compared to 2011 baseline indicator which is unknown.
* The knowledge of the women on RH has improved by the project. A quick test to mention 4 alarming signs during pregnancy gave the following results: -
  + 60.4% mentioned bleeding,
  + 49.2 mentioned legs swelling,
  + 33% mentioned serious fever,
  + 41.1% mentioned headache,
  + 49.7% mentioned anemia.
* The improvement of women’s knowledge has resulted in increasing number of women seeing the Doctor during pregnancy as illustrated below:

The percentage of women who saw the Doctor during the project duration:

Only once 31.3%

Twice 22.0%

Three times 46.7%

Those who couldn’t see the Doctor for follow up were constrained by one of the following factors:

Difficult access 1.3%

Husband restrictions 0.8%

Affordability 5.1%

Behaviour 7.6%

All these factors were well addressed by the health education package and this explains the low rates of those who were unable to see the Doctor for pregnancy follow up.

* 78% of women at reproductive age have confirmed that they had learnt safe lactation from CIS awareness-raising campaigns. 92% affirmed that natural lactation is the best food for babies. This knowledge has also reflected on the child care where 91.1% of mothers take their children when not feeling well to the Doctor, while only 7.1% take their children to traditional herbiest and 1.8% to Sheikh (Religious healers). Similarly, 100% of mothers take their children who have diarrhea to the Doctor and know how to use or prepare ORS.
* The quality of services provided by all HCs is good and better than health services provided by HCs in same rural context where there is no external support.
  1. **Nutrition**

The specific objective of Nutrition component was to improve the nutrition status of children under-5. This was planned to be achieved through delivering the following two results:

1. Strengthened nutrition care service provision in Kass and surrounding areas to offer quality care.
2. Increased knowledge and awareness on key nutrition issues among women and men.

The evaluation team has visited the Supplementary Feeding Centers in Kass IDP camps. The focus of the assessment was on the service delivery and knowledge acquiring.

The CIS has supported 6 Nutrition Centers (NC) in Kass town and surrounding villages: 3 SFPs; 2 OTPs and 1 Stabilization Center (SC). They provided nutritional services to 3,583 target beneficiaries.

The project has managed to effectively coordinate contributions from different sources (WFP, UNICEF & others).

Knowledge of IDPs, particularly women, about malnutrition is adequate for positive reaction. Mothers know the symptoms of the malnutrition and the urgency to take the child to the SFP. The majority of women (69%) are familiar with the old man image, this indicates the highest prevalence of this type of malnutrition. About 29% know the round face symptom and only 2% know other symptoms.

The intensive awareness-raising campaigns have resulted in increasing immunization coverage to 78% the majority of them received their doses at CIS static centers. The target was 81,000 and the baseline indicator was 50% of women demonstrate knowledge about child nutrition.

The beneficiaries of the nutrition component received awareness-raising on nutritional issues through campaigns and educational sessions. The majority of the target groups know that the nutritional events are organized by CIS.

The efforts of the project to improve the nutrition status successfully reduced the malnutrition rate to a level lower to the SPHERE standard. In 2009 the malnutrition rate was 17.9% reduced to 17% in 2010 and further to 10.8% in the present. However, the nutritional situation is very sensitive to the availability of food. That is why the malnutrition rate goes up and down with the success and failure of the harvest and free food distribution. The malnutrition rate fluctuates during the hunger gap from June to October. In Kass the previous agricultural season was not successful and the WFP had stopped its free distribution for more than 4 months.

The two graphs below show the fluctuations of the malnutrition rates in Kass and Gereida respectively. In Kass the GAM show a declining trend during the project period from 19.2% in 2010 to 10.8% in 2011 after a sharp increase of 5% between February and July 2010. The intervention has, also, maintained the emergency threshold indicator below 15%.

Graph No. (4)

-

In Gereida and without health and nutrition intervention the GAM is 14.2%; the SAM is 3.9% compared to 1.3% in Kass for the same period, and the emergency threshold is above 15%.

Graph No (4)

Source: CIS, Nyala Field Office.

The GAM and SAM rates in Kass Locality have been confirmed by the State Ministry of Health of South Darfur, PHC and Nutrition section as follows:

Table No. (6)

|  |  |  |
| --- | --- | --- |
| **Category** | **Year** | **Year** |
| **February 2011** | **February 2012** |
| **SAM** | **1.30** | **1.30** |
| **GAM** | **10.8** | **10.8** |

96% of the beneficiaries are satisfied about the services being provided by the 6 nutritional centers run by CIS. They confirmed that the nutrition services had improved the health situation of their children under-5. Evidences – according to them – include disappearance of malnutrition symptoms, gaining weight and recovery from malnutrition related diseases. The services are mainly feeding and awareness-raising for care takers. It delivered antenatal and post natal nutritional education to pregnant women and referral to health facility as well as feeding. 86% of pregnant women confirmed that the Nutrition Center refers some cases to the FHC or Hospital.

It was observed that the awareness-raising is stronger when it is provided at the health or nutrition center and less effective when it is outreach. The reasons were the lack of incentive for HPs and difficulty to find the target beneficiaries at home. It was, also, observed that the awareness-raising was not gender sensitive as there was much focus on women at the expense of men.

The SFP centers are located in close proximity to heath centers in order to facilitate referral of screened cases of vitamin (A) deficiency. They are constructed of local materials in sufficient area. The buildings are in good condition ad spacious enough to serve target beneficiaries.

Each center is staffed with adequate number of services providers headed by a Nutrition Officer. The project supported each center by sufficient materials and equipment to provide high quality services. The average of admission at OTP & SFP is 3 cases per day. The number of cases admitted with vitamin (A) deficiency and treated during the last 2 years was about 20 cases.

The OTP centers, on the other hand, are also fairly distributed over the IDP camps in order to increase the access of beneficiaries to nutritional services.

The OTP centers are spacious, well equipped and adequately staffed with service providers. The daily average of cases admitted at OTP 32 cases.

OTP centers provide, relatively, high quality services on treatment and referral. It is noticeable, from the OTP’s records; that the number of new admissions at has decreased from 15 new cases per day before the project to 4 cases per day (e.g. Abdellgabbar OTP center).

Referral of cases with vitamin (A) deficiency to Kass Hospital for treatment at TFC center is going smoothly.

The TFC (or SC) center operates inside Kass Hospital to receive malnutrition and vitamin (A) deficiency referrals for treatment. It is well equipped and adequately staffed to provide TF quality services. It had served 983 cases in 2011 and the average number of cases admitted per day was 5 cases. This rate is, currently, decreasing following the general decrease in GAM.

Only one case of sever vitamin (A) deficiency was detected and admitted in year 2010.

All nutritional centers together served about 11,383 beneficiaries during the life of the project.

* 1. **Lines of Inquiry:**
     1. **Project target and coverage:**

The target groups of the project components were well defined. They are IDPs living in given camps. The direct beneficiaries for water and sanitation were the same as the target group while beneficiaries of health and nutrition identified according to the case, for example, malnourished children under 5, pregnant women, PHC seeker…etc.

In general the project had exceeded the proposed number of beneficiaries in most of the components (see section 3.5.3).

* + 1. **Accountability:**

Defining accountability *as “an obligation or willingness by an organization to explain its actions to its stakeholders”*, the evaluation team has pointed out a number of good practices that demonstrate CIS transparency with stakeholders. For instance, the consultation of beneficiaries, represented by their community leaders, on the design of the project keeps the community informed. Second, the project has, also, ensured satisfactory and appropriate involvement of the CBOs and effective coordination with WES, SMoH and local authorities in the implementation process. Third, the progress reports submitted to the donor were comprehensive and transparent.

The community leaders and CBOs had confirmed through FGDs that CIS responds to their concerns. A good example is the decision of replacing horses with donkeys for dragging carts for solid waste collection for more effectiveness and efficiency. There are a number of similar other examples where the project management took correction measures in response to one of the stakeholders feedback or initiation.

* + 1. **Achievements against results:**

The impact of each component has been mentioned in the respective section; however, a summary is demonstrated by the table below for more visibility:

Table No. (7)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Result | SPHERE Indicators | Target | Baseline Indicator | Achievement |
| 106,278 IDPs in targeted camps in South Darfur have continued access to sufficient potable water within a reasonable distance from their homes. | Max 15L/P/D | Minimum 15/l/d | Per capita water supply 17.6 l/p/d | ≥40 |
| 500 m | Average distance to water point is ≤500m for all IDPs. | 75.6% | 100% |
|  | 100% 0 faecal coliform per 100 ml at water point. | 93.8% |  |
|  | 80% of household water samples have 0 faecal per 100ml. | 36.8% | 92.6% |
|  | Residual chlorine at water points and at household is 0.2-0.5 mg/l. | 100% | 100% |
| 218,129 IDPs have continued equitable and sustainable access to and properly use basic household sanitation and solid waste disposal facilities. | 20 persons/pit | Number of person per latrine stance ≤ 20. | 17 person/stance | ≤7 |
| 20 persons/pit | 100% of households have access to a latrine. | 81.4% | 97.4% |
| 250g of soap/p/m | 75% of household’s latrines are equipped with hand washing facilities. | 54.3% | 100% |
|  | 95% of household dispose solid waste appropriately. | 96.2% | 75% |
|  | Refuse is observed in less than 25% of household compounds. | 28.2% | ≤25 |
| 218,129 IDPs practice reasonable personal and domestic hygiene. | 100% | 75% of adults wash hands before food preparation, before eating and after using the latrine. | 55.2% | 90%  99.5% |
| 100% | 80% of households store water in clean and covered containers. | 87.5% | 100% |
|  | Good personal hygiene is observed in 85% of KAP Survey respondents are free. | 75.9% | NA |
|  | 75% of household compounds are free from human excreta | 71.6% | ≥90% |
|  | 75% of household latrines are clean. | 58.6% | ≥75% |
| Strengthened primary, reproductive health and nutrition care service provision in Kass and surrounding to offer quality care. |  | 5 static and one mobile clinic, and 6 nutrition centers are rehabilitated, equipped and supplied to an acceptable standards. | Lower than acceptable standards. | Acceptable standards |
|  | 20% increase in number of children fully immunized. | NA | 78% |
|  | 20% in number of women who deliver at PHC facilities by skilled health personnel. | NA | ≥30% |
|  | % of pregnant women reported to PHC for deliveries referred to Kass hospital for EmOC. | NA | 76.4% |
| Increased knowledge and awareness on key health and nutrition issues among women and men to promote referral and support women’s and child health. |  | 50% of women and men demonstrate knowledge of child spacing. | NA | ≥50% |
|  | 50% of women and men demonstrate understanding of the importance of skilled delivery, ANC and PNC. | NA | 93.6% |
|  | 50% of women and men demonstrate knowledge about maternal and child nutrition, caring practices, and health seeking behaviour. | NA | 91% |

* + 1. **Relevance, appropriateness and effectiveness:**

The beneficiaries of the project in question are IDPs who were forced to displace within South Darfur and to camp inside and at the outskirts of Kass town, Gereida and Nyala. Their movement started in 2003 and continued to 2007. So, they are living in emergency situation where responses prioritize, by virtue, water supply, sanitation, hygiene (WASH) and PHC and nutrition. Among other emergency responses these are quite relevant to the needs of target groups in IDP camps. These interventions were identified through KAP survey (WASH) and joint quality assessment (Health and Nutrition). The target communities were involved in both and participated in identifying their needs and priorities.

Direct relevance to two MDGs (Child health and maternal health) was ensured. Project components demonstrated full adherence to the blueprints of two goals. Recently, the UN Initiated the Scaling Up Nutrition (SUN) movement which is a worldwide effort to address maternal and child nutrition as keys to progress in health and development. Indirectly, the project components were relevant to other goals such as poverty reduction, gender equality and environmental sustainability.

The expulsion of CARE International and Oxfam GB among other INGOs from country had created a huge gap in the humanitarian work, particularly, for IDPs in Darfur. Filling the humanitarian gap was a necessity to carry on the activities of the expelled NGOs. Using its expertise in similar humanitarian contexts and sectors, bearing in mind the pressing needs, CIS taking over was appropriate.

The project had managed to deliver the expected results in all components with normal delays and deviations from the planned schedules. The context where the project was implemented was so challenging and difficult. The presence of clear and integrated procedures and implementation strategy that involved key stakeholders had enhanced effectiveness. Nevertheless, lack of autonomous monitoring function at field level had negatively affected effectiveness.

* + 1. **Ownership of program by targeted communities:**

The local communities had been involved in the project at the stage of formulation at consultation level but not in the design itself. This had created a sense of partnership among them. This consultation continued during the implementation process albeit initiation often came from CIS and never from the committees representing the communities. The continuous contact with the project management, awareness-raising and capacity building had developed a strong sense of ownership among the local communities. For example, they asserted ownership of water points, sanitary facilities, and health and nutrition facilities. The negative side of this aspect is that they have developed sense of dependency. It is, somehow, a complicated and dynamic phenomenon. What so ever the case they need to assert full ownership of their resources for sustainability because exit of NGOs is inevitable.

It worth mentioning that viewing the target community as one united group is misleading. There are significant differences and disputes between elderly and youth, men and women and between different tribes … etc. Some groups had been eliminated during the implementation process.

* + 1. **Working with partners:**

Involvement of key stakeholders, at appropriate level, was central to CIS implementing strategy. The local communities, for example, had been consulted at the initial stages of the project in order to identify their needs and priorities and to assess their capacities. NGOs operational in the project areas had been involved in a joint assessment. This gave CIS, as a new comer, an opportunity to better understand the context and how to coordinate its activities.

One of the strengths of the implementation strategy is organization of CBOs and building their institutional and technical capacities. Beneficiary CBOs have owned offices and assets and acquainted the basics of organizational management. This will enhance sustainability and continuation of access to donors fund even if they return to their home villages.

The project exit strategy entirely depends on transferring responsibilities to supported CBOs and specialized committees.

* + 1. **Mainstreaming cross-cutting issues:**

The project inserted some efforts to mainstream gender and environment in the project. There is apparent achievement regarding gender equity. Women are represented in all committees by a proportion ranging from 25% to 50%.

The awareness-raising on the project issues have substantially increased the knowledge of women. This have improved their lives and changed the way they communicate. Their participation in the public life has, also, been enhanced.

The project had delivered some environmental messages to the beneficiaries about environment conservation. For example, they tell them not to burn solid waste and to use environmentally-friendly building materials. Streamlining of environmental issues is very minimal.

* + 1. **Sustainability:**

The sustainability factors differ from component to another. Each component has got its own measures to ensure sustainability through ownership, inbuilt mechanism and follow up.

The water supply, for example, has great opportunity to be sustainable for long term because of the solid infrastructure, preventive maintenance, joint venture with WES to provide fuel and capacity building of WUCs. However, without levying tariff on consumers for cost recovery sustainability will be questionable.

The measures taken for sustainable sanitary services can ensure a sustainable operation of collection and disposal of solid wastes. The core of this mechanism was giving a donkey and cart to a potential person to use it for income generation and devote one day per week for garbage collection. The community members need more orientation on how does this mechanism work? The Sheikhs who are in charge of donkeys and carts need to be fairer in the distribution and selection of potential operators.

Elimination of youths from the cleaning campaign is a threat to the sustainability of sanitary services.

The sustainability of the household pit latrines is a bit fragile because the depth of 2 -3 meters can hardly complete two years. Replacement of the pit latrine requires careful pulling out of the slabs from the old one. Many households have complained of the high cost of the slabs (SDG30).

The most important factor for sustainability is the knowledge that has been acquainted by the beneficiaries in different aspects of their livelihood. It has been reflected in good practices at household and community levels. Attitudes and behaviour have changed to better. Among the attitudes to be changed is the motivation by incentive which had apparent negative effect on visiting health or nutrition centers, attending awareness-raising sessions and participating in public activities. The incentive given to beneficiaries can be perceived as positive if viewed within an emergency situation where IDPs are new arrivals, isolated from urban centers or deprived from employment opportunities. In case of SDEARP the beneficiaries had been arrived since 2007 and have adapted, to some extent, the existing socio-economic set ups in Nyala, Gereida and Kass. They have access to employment and income generating activities supplemented by the WFP free food distribution. Moreover, it is the policy of the MOH not to pay incentives for attracting patients to turn over to health facilities.

1. **Challenges:**

The implementation of this project in a prone-conflict zone had by virtue faced several challenges at all phases. These challenges could be classified into internal and external categories.

The internal challenges were related to recruitment of competent staff members and keep them for long term. Kass and Gereida are areas of high tension (during this final assessment Gereida was attacked by rebels). NGOs are, also, competing with good payers who are more attractive for senior candidates. This is connected to another challenge which is the high turnover of staff members.

Externally, the insecurity is the most serious challenge that threats the personal security of the staff members and limits their movement. This has affected meeting deadlines and the efficiency of the project.

The logistical constraints in a tough terrain and remote areas are another important challenge. This factor had, also, affected the effectiveness and efficiency of the implementation process.

The on ongoing conflict has deprived Kass and Gereida – though areas of production and commercial centers – from enjoying banking facilities. Transfer of cash to field offices for meeting operation expenses is a challenge.

The communication facilities are not reliable as well. Access to the Internet or phone networks is not easy and not continuous.

1. **Conclusions:**

* The component of water supply has significantly increased water consumption by households. This improvement in access of IDPs to clean water has shifted the situation beyond the SPHERE standards.
* The linkages between the WASH, Health, Nutrition and other CIS livelihood interventions have enhanced the sustainability factors. The beneficiaries have been shifted from mere emergency situation to recovery phase. That was the idea behind the development of SDEARP.
* Community participation was central to the implementation strategy. Beneficiaries have been involved in the planning phase at consultation level and effectively involved at the implementation phase. They have been less involved at the monitoring and evaluation phases.
* Sustainability of the water sources facing the challenges of continuous supply of fuel and spare parts. Without strong commitment from the IDPs and sufficient support to WUCs the operation of water sources will be regular and the access of IDPs to safe and sufficient potable water will be affected.
* The mechanism for operating donkey carts to collect solid waste is not strong. It needs to involve clear and comprehensive agreements and strong adherence by all parties. It also lack motivation of beneficiaries to actively involved in the cleaning campaign. Giving in-kind incentives was not a good idea, because when it stopped they lost interest. A more practical alternative is needed.
* Distinct factors for success of sanitary activities and sustainable disposal of solid waste are community mobilization and provision of donkey/horse carts. There is a gap at the final stage of getting rid of the solid waste but that was out of the scope of the project.
* One of the intended results of improving access of IDPs to safe drinking water was reduced incidence of water related diseases. This has been achieved to acceptable standard when viewed through the main characteristics of improved water services; those are quantity, accessibility, reliability, and quality. The quantity, accessibility, and reliability were found satisfactory to most users in the targeted IDP camps, while some beneficiaries in Kass and Gereida perceived problems with quality, especially during the wet season.
* The sustainability of water sources after end of the project is largely dependent on the contribution of beneficiary households. They are all willing to pay 2 SDG per month and very little are murmuring about affordability. This amount may not meet full operational cost.
* The project encourages community-oriented sanitation as the most effective way of sustainable sanitary services, however, more engagement of the community, particularly youth, was not enhanced by the project.
* Construction of latrines had considered privacy as much as allowed by the demarcation of the camp and space available for each household.
* The clinical service quality delivered by the FHCs in Kass is rated by the evaluation team as acceptable despite the variation from the National Standards.
* The in-kind incentives used to pay given to pregnant women had attracted a bigger number to FHCs compared to those show up after stoppage of the incentives. Improving knowledge of women at reproductive age and raising their awareness is more effective and sustainable than the incentives.
* The two health centers and the mobile clinics provide satisfactory PHC and clinical services (Outpatient, general investigation, RH, EPI and pharmaceutical services). However, the target population is bigger than the collective capacity of the three health facilities.

1. **Lessons Learnt:**

* Arguments from FGDs indicate that cost recovery is an essential component and mechanism for water sources to increase the likelihood of long-term sustainability.
* Provision of adequate quantities of safe water needs to be complemented by sanitary services, hygiene, and health and health promotion programs. An integrated combination of these themes represents a distinct factor for success. At a lower level provision of water supply, also, needs to be accompanied with provision of water containers and cleaning materials to the IDP households.
* Effective coordination with WES and WUCs is vital for sustainable water quality control. The involvement of WUCs is still not at the required level for taking over full responsibility in the future.
* Distribution of drinking water has shown to be more efficient when distributed in bottles, either by the water supply company or by some arrangement of public and private sector partnerships. There is a grey area on who is responsible for maintenance after the end of the project (Replacement of the broken water pipe in Elrohal camp in Kass is an example).
* Continuation and sustainability of hygiene awareness-raising campaigns require clear handing over of responsibility to Women Association and Youth Association. Volunteers need to be motivated without incentives. Activists are needed to lead community participation.
* Lack of effective follow up and update from the SMoH affects the effectiveness of quality control.
* Development of a mechanism – in collaboration with other actors, namely, WFP, UNICEF and SMOH – for protecting under 5 children from food gaps shocks is essential for maintain the current trend of declining malnutrition rates.
* Flexible procedures (with practical necessary adjustments) are a good approach for operating in a challenging environment. Project implementation process can be adjusted to the dominating circumstances.
* Well planned and transparent exit strategy that is disseminated in ample time to key stakeholders is a guarantee for smooth handing over.
* Linking emergency interventions to recovery and development is possible even in a fragile security situation.

1. **Recommendations:**
   1. **Water and Sanitation:**

* It is highly recommended to carry analytical study to explore the causes of ground water contamination in Kass and propose permanent solutions.
* Develop a mechanism for securing continuous supply of fuel and spare parts for water yards. This may require involvement of the private sector, use of appropriate technologies and training of technicians.
* WUCs need further support to effectively and sustainably manage water sources in IDP camps.
* After institutional and technical support WUCs should bear full responsibility of sustainable operation and maintenance of water facilities.
* Representation of women in some WUCs needs to be increased to play a central role in decision making process.
* Link the ongoing health and hygiene awareness education in relation to safe drinking water.
* More technical support and follow up to WUCs to protect water resources.
* A network of existing actors (Government and NGOs) should develop a comprehensive work plan for sustainable awareness-raising on WASH issues.
* Set up motivational mechanism to encourage the youth support the households that can’t dig their own pit latrines (disabled, elderly unaccompanied people, orphans and widows).
* Continue providing free or subsidized slabs because a considerable number of the IDPs couldn’t afford to pay for the slabs and other construction materials.
* The rules and regulations used by the Sheikhs need to be documented and enforced on IDPs for protecting water sources and sanitary facilities in their camps.
* Effective and sustainable management of solid waste produced from camps.
  1. **Health and Nutrition**:
* CIS need to upgrade their service delivery through more focus on the national standards.
* Strengthen the coordination with the State Ministry of Health and Health Department in the Locality. This is necessary for filling information gaps and improving transparency on politically sensitive issues such as malnutrition, mortality, morbidity rates.
* Supporting the institutional and technical capacities of the existing health and nutrition facilities including Kass Hospital.
* Increase EPI coverage to 100% for IDPs, host communities and surrounding villages.
  1. **Hygiene**:
* Advocate for incorporating hygiene education and awareness-raising in the Locality Strategic Plan.
* Enhance the role of the health and nutrition centers in providing knowledge on personal hygiene to women and men using different educational means and distribute printed educational materials.
* Increase knowledge of the practitioners, local committees and beneficiaries on the links between WASH and livelihoods. Addressing such interlinks in the design and implementation of projects will enhance sustainability.
* Support the capacity of the slabs makers for sustainable production of sufficient quantities. This entails development of appropriate transport and distribution mechanism. Use of Fero Cement for slabs-making is recommended because it is environmentally friendly and cost effective in the long run.
* The WASH educators need to be motivated in order to increase their coverage, particularly, the outreach awareness-raising sessions. The best way to achieve this, as the evaluation team sees it, is to capacitate Women and Youth Associations.
* It is recommendable to translate the education package to the local languages because a considerable number of IDPs can’t easily comprehend Arabic.