



**CARE International Switzerland**



# **Integrated Humanitarian Assistance Program (IHAP) South and East Darfur**

## **Final Evaluation**

## **Draft final report**

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## List of Acronyms and Abbreviations

CIS	Adventist Development and Relief Agency
SD	South Darfur State
ED	East Darfur State
SWC	Sate Water Corporation
RWA	Rural Water Administration
HAC	Humanitarian Aid Commission
HH	Household
MOH	Ministry of Health
ANC	Ante-Natal Care
SBV	Sexual Base violence
WES	Water, Sanitation and Hygiene Project
WUC	Water User Committee
PM	Pump Mechanic
FFS	Farm Field School
SSF	Slow sand Filter
PPT	Participatory Performance Tracker
EMONC	Emergency Management of Obstetric Neonatal Care
GSMN	Global Acute Malnutrition
TSFP	Targeted Supplementary Feeding Programme
SFP	Supplementary Feeding Programme
OTP	Out-patient Therapeutic Programme
PLW	pregnant and lactating women
MAM	Moderate Acute Malnutrition
SAM	Severe Acute Malnutrition

## 1. Executive Summary:

WASH, Health and Nutrition project is supporting the most vulnerable populations in South and East Darfur States. The project aims to provide lifesaving and integrated WASH, Health and Nutrition Services to 443,190 individuals 332,764 individuals in South (including 253,191 IDPs and 79,573 host community members) and 110,426 individuals in East Darfur (including 10,000 IDPs and 100,426 host community members). CARE target IDPs and host communities in both South and East Darfur states by increasing access to safe water supply, sanitation facilities and hygiene supplies, improving access to basic curative and preventive primary health care, and increased access to nutrition assistance for affected children under 5 and pregnant and lactating women (PLW). Integrating WASH, Health, and Nutrition activities the project will contribute to saving lives by reducing wasting and stunting levels caused by Moderate Acute Malnutrition (MAM) and Severe Acute Malnutrition (SAM).

In October 2020, CARE International Vibes Consultancy Services to conduct an end-line evaluation of the project implemented during the period 2019 to 2020 in two States (South and East Darfur) The evaluation is expected to contribute to strengthening accountability of CARE International for its donors and key stakeholders (including beneficiaries), and to learn from this experience to inform future WASH, Health and Nutrition projects. Key evaluation questions have been special focus on project relevancy, efficiency, effectiveness and impact of the project. This report therefore documents key findings of the evaluation as well as lessons learnt and recommendations useful in guiding the implementation of future projects.

In carrying out this evaluation, the consultants applied participatory, qualitative and quantitative methods to collect data relevant for addressing the evaluation questions. The Specific methods include; review of secondary documents including project proposal, log frame and different reports, 18 focus group discussions (FGDs), key informant interviews, administration of 399 household questionnaire interviews, field observation and inspection of WASH, Health and Nutrition enabling infrastructure.

Based on the findings from direct consultation of the project beneficiaries and other stakeholders; the project was implemented in adequate level of effectiveness and efficiency; this include:

### **Relevant**

The assessed project is very relevant and supported the communities to access their really needed services, which includes access to WASH, Health and Nutrition Service, and they said through FGDs, communities confirmed that the project was quite relevant to their circumstances. Before the project, incidence of water borne diseases and related deaths were quite high, but the communities were not aware of the causes.

The consultant examined several of the program's aspects and observe that WASH, Health and Nutrition program alignment with the inline authorities objectives and strategy which well coordinated with other key actors and activities well implemented without overlap and with realistic coverage to achieve program objectives and satisfy targeted beneficiaries need in appropriate access to safe and equitable water is ensured for the target population in sufficient

quantities for drinking, cooking, personal and domestic hygiene together with Health and Nutrition services especially for mothers and children's together with capacity building .

### **Efficiency**

The project was implemented in a good level of efficiency; this is manifested by; Procurement procedure were, strictly, CIS procurement policies and guidelines, provision of services done through quotations that guaranteed fair prices and high quality as appropriate. Segregation of duties is properly maintained in financial procedures as per the CIS financial system. The designed project activities were implemented and supported achieving of the results.

During evaluation and in regarding intervention planning and implementation (Efficiency), the consultant observation that; all available resources allocated in the two states have been used economically in delivering the project outputs/results, in terms of quantity, quality and timeliness for both WASH, Health and Nutrition in the two States, South and East Darfur with wonderful team.

The evaluation found that; the implementation of health activities was very good in both States; the same is for WASH interventions in South Darfur. The only observation is the implementation of the WASH in East Darfur, were shows moderate efficiency since some activities was not implemented due to COVID 19 and rainy seasons according to WASH manger justification as showed in annex (No.2.

### **Effectiveness**

Consultant assess the major achievements of the project to date in relation to its stated objectives, it looks clearly the project meet targeted community needs especially women and girls and contributed in reduction of incidence of mortality and morbidity which positively in improving quality of interaction and responsiveness to the needs of the poor rural and IDP communities, this issues well addressed in the two states ,but the consultant observed that East Darfur WASH plan need to so as to meet the project goals and objectives in which they use low technical terminology profile in which more WASH integration needed , especially for latrines intervention and awareness and WUCs activation to strengthening their roles and responsibly, on the other hand the modality of effective use of resources should be introduced and integrated their plan with other sector such as Health and Nutrition which indicate remarkable achievements in the same period planned for WASH intervention.

## 2. Limitation and challenges:

- At the time of the survey, it was still rainy season specially in East Darfur were deemed inaccessible until a later date on the other hand there is no cell coverage, and as previously mentioned the weather conditions prohibit transportation making it difficult to meet most beneficiaries such as WSASH and Health and Nutrition committees ,since they were pussy in their farms far away from their villages .
- The consultant experienced difficulties to excite the work according to the time schedules due to flight booking from Khartoum to South Darfur and back to Khartoum and from Nyala by road to Daien due to flood and road conditions on the hand we phased difficulties in transportation to different targeted areas due to far distances with very bad road conditions, flood and difficult terrain environment in the two targeted States make it difficult for vehicles meant that enumerators had to walk everywhere on foot rather using vehicles.
- Security in the in South and East Darfur hindering the consultant plan in which some location has been changed due to insecurity reasons, which imply in delaying of the consultant plan.
- The survey was conducted during the rainy season and some sampled villages were not accessible. And these had to be replaced by other accessible villages in the same area and criteria.

## 3. Introduction and background

CARE aims to provide lifesaving and integrated WASH, Health and Nutrition Services to 443,190 individuals 332,764 individuals in South (including 253,191 IDPs and 79,573 host community members) and 110,426 individuals in East Darfur (including 10,000 IDPs and 100,426 host community members). There is a need to continue meeting the protracted critical needs in the proposed 9 localities across South Darfur (Kass, Bielel and Gereida) and East Darfur (Assalaya, Bahar Al Arab, Abu Karinka, Yassin, Sheria and Ed Daein) based on their vulnerability and the critical humanitarian needs. We'll be focusing on unmet needs, whilst consolidating our support to the communities we are currently working in both states and expanding into new areas in Kass locality, namely Tobafito, and also covering health services across both states working with four local partners; AAO, Al Shrooq, JMCO and Mubadrion.

CARE targeted IDPs and host communities in both South and East Darfur states by increasing access to safe water supply, sanitation facilities and hygiene supplies, improving access to basic curative and preventive primary health care, and increased access to nutrition assistance for affected children under 5 and pregnant and lactating women (PLW). Integrating WASH, Health, and Nutrition activities the project will contribute to saving lives by reducing wasting and stunting levels caused by Moderate Acute Malnutrition (MAM) and Severe Acute Malnutrition (SAM).

The proposed interventions will ensure access to WASH services, including safe drinking water, adequate sanitation, and hygiene promotion and that the community platforms created are supported to continue operations and maintenance of the infrastructure after the project ends. The project planned to work with the community structures to increase community ownership in management and cost sharing. It will also improve access to quality healthcare through the rehabilitation and maintenance of health facilities and mobile health clinics, immunization and health

campaigns, referrals and comprehensive mother and child services (MISP). The response in both states will be coordinated with local governance and humanitarian structures, and all activities will meet the needs of the most vulnerable populations, especially women, girls, the disabled, and elderly.

### 3.1 Justification for awarding grant

In 2019 the total number of people in need of humanitarian assistance in Sudan increased to a total of 5.7 million individuals (HNO, 2019, draft). Across Sudan, there are 2.9 million people urgently in need of WASH assistance, 3.7 million people in urgent need of access to basic primary health care services, and a total of 2.9 million children under five suffering from acute malnutrition. There has been a significant deterioration in the macroeconomic situation over the past 18 months coupled with civil unrest and increased conflicts across the country for the past 6 months. Rates of inflation of over 70% along with chronic shortages for bread, fuel and medical drugs and supplies, have compounded the humanitarian needs of the already vulnerable population. Households are unable to cover their basic needs due to devaluation of the Sudanese pound resulting in increased food prices as well as other basic commodities, with food prices expected to increase 200-250% above average during the approaching lean seasonii (FEWSNET, 2019). The limited availability and access to food means that food security is likely to worsen, with vulnerable households being the most affected which poses serious protection concerns such as increased child labour, unsafe migration, recruitment and sexual exploitation or early child marriage.

Darfur remains an epicenter of large scale protracted displacement; the volatile context in the Darfur region has exacerbated the risks for women and girls. A women and girls' responsibility within their households, coupled with the lack of security in both states, exposes them to a number of GBV related risks. Furthermore, the protracted nature of the emergency has weakened any existing structures or social networks that were in place to protect women and girls.

An assessment conducted by CARE in November 2018 out of camp settings in South and East Darfur states found significant gaps in water supply. There are very few WASH infrastructures and women and girls have to travel long distances to fetch water which is putting women and girls at a risk of sexual violence. IDPs and host communities are depending on seasonal open ponds, which are highly contaminated leaving these communities vulnerable to water borne diseases. In addition some households do not have access to latrines altogether, posing a protection and SGBV risk for women and girls. Therefore, there is a critical need for WASH interventions that include the rehabilitation of existing water points, construction of sanitation infrastructure, sensitizing communities on appropriate sanitation and hygiene practices and carrying out environmental health interventions.

Across Sudan 2.9 million children are suffering from Global Acute Malnutrition (GAM). The nutritional needs in Sudan have been compounded by the deteriorating economic situation, bread shortages and crippling inflation which has reduced household's purchasing power and ability to cover their nutritional needs. Moreover there is an acute need to rehabilitate and maintain primary healthcare facilities (PHCs), build capacity of medical professionals and practitioners, provide immunization services and health education, Minimum Initial Services Package (MISP), screening and detection of malnutrition, and therapeutic feeding assistance.

Having been present in Sudan since 1979, currently implementing an OFDA-funded project in the targeted states, and working through the national partners, CARE is well placed to respond to the

current crisis by providing an integrated and comprehensive life-saving intervention across the WASH, Health, and Nutrition sectors to meet the basic needs of the most vulnerable, including women and girls.

## **4. Objectives of final evaluation**

### **4.1 Overall objective**

The overall objective of the final project evaluation is to measure progress against stated objectives. The task is to provide the project stakeholders with information about the performance of the project for the project duration (its relevancy, efficiency, effectiveness, and potential impact); document lessons learned and provide practical recommendations for future improvements. Therefore, the practical recommendations emerging from this evaluation will:

- Generate information on the level of achievement of the intervention objectives (outcomes and wherever possible any evidence of emerging impact).
- Inform and guide the design of future CARE projects;

### **4.2 The Specific evaluation objectives**

Specific evaluation objectives are on key parameters for the assessors to study:

The specific objectives need to be aligned to data and facts needed under the three project sectors with their major activities (WASH, Health and Nutrition Services). The consultant will present the types of quantitative and qualitative data and information to be gathered in the application, in addition to the detailed information about the situation of the targeted beneficiaries.

The evaluation will assess the level of achievement for the designed indicators stated in table below as USAID/OFDA Monitoring Table Template (progress indicators). Evaluation value will be measured to assess the present situation and changes after project intervention.

## **5. Evaluation Methodology**

The evaluation followed a multiple method to collect and triangulate the data, both qualitative and quantitative method for collecting data were used, this include; review of the existing project reports and other documents such as the project proposal including the targeted indicators, consultation of the different project stake holder including beneficiaries and service providers in addition to the direct consultation of the targeted households through direct meetings and using of designed HH questioner. This also includes the overall aims and objectives of the evaluation, sample frames, survey methodologies, data collection, entry and analysis

### **5.1. Desk review**

The consultant conducts a comprehensive desk to inform the design of data collection tools and to enhance the understanding of the situation in the targeted localities, namely three localities namely; Bielel, Gereida and Kass. In East Darfur State: evaluation will cover two localities namely, Assalaya, Bahar Al Arab , Abu Karinka, Yassin, Sheria and Ed Daein) as it relevant to WASH, Health and

Nutrition Services this include review of project documents, narrative / financial reports, monitoring and evaluation reports and project database and review reports from different INGOs, NGOs and government relevant institutions , then adopted the new program according to selected sites and prepare a tentative narrative plan include the sample size of each villages and shared with CIS team at HQ and South and East Darfur zonal office .

## **5.2.Focus Group Discussions (FGD):**

The FGDs were conducted for collecting the required qualitative data, it allow community members to engage in a deeper conversation about WASH, Health and Nutrition Services situation and coping mechanisms in their respective communities. These discussions will also allow for the opportunity to assess the current situation, identify needs and gaps of targeted communities with regard to the key issues for the proposed project intervention and project indicators identified In addition, it will enable a discussion into reasons for any existing differences in roles that are influenced by gender or other characteristics.

The (FGD) sessions facilitated in each locality and usually conducted with small in size not exceeding (8-12) persons who are thought to have substantial knowledge of the issue under discussion and the consultant must adhere to the CARE Code of Conduct<sup>1</sup> and CARE Security Protocol during the entire duration of work including COVID-19 related precautions according to Ministry of health and WHO guidelines which include community leaders, and some of households members, women groups and youth representatives which has been targeted by CIS especially ,vulnerable and poor women and men ,community members (including different ages and gender , Water User Committees (WUCs) and Community Health worker (CHW) .

## **5.3.Key Informant Interviews (KII)**

Key informant interviews are a crucial way to access a population of influential people who would otherwise not be captured by a typical household survey type this will include key informant persons from the relevant INGOs, NGOs, and relevant institutions. The result of these qualitative methods of interviews contributed to the details of the communities' profile on matters concerning WASH, Health and Nutrition

## **5.4.Household Interviews HHs**

The sample size in each targeted location determined by the proportion of beneficiary population in the targeted areas. Either the head of the HH is interviewed or the spouse and every effort that is made to preserve an appropriate gender ratio. Using a HH sampling method, these households were drawn from two Sates covered targeted villages which have been selected by CIS office, due to accessibility during the rainy season, the selected villages statistically representative of the whole beneficiaries.

The consultant conducted (400) structured household (HH) interviews with sampled beneficiary populations (HHs header). For quantitative data collection, a standard household survey used and take to account CIS recommendation for carrying out the household survey via phone or mobile data collection. A representative sample of targeted areas/beneficiaries selected and defined and the design of the questionnaire guided by the objectives of this assignment as outlined in the TOR agreed with CIS. The questionnaire tested on a small number of beneficiaries before implementation to a wider scale. Moreover, as per the sample size the questionnaire will be analyzed through Statistical Package for the Social Sciences (SPSS). The main questionnaires designed for household beneficiaries for the males and females headed households who are benefitting from the project activities.

### **5.5.Data sampling calculation**

Depending on the secondary data and the load of the population in the targeted areas; the sample size was calculated at 95% as a confidence level and a margin of error (5%). Sample size was calculated scientifically using one of the methodologies available. This study used Glenn. I. , 2002 method to determine the sample size. The sample size in each locality were distributed among villages locations in the proportionally according to the population size (HHs). Sample size (n) = Total Population (N) / (1+N\* r<sup>2</sup>) where r is a margin of error (degree of accuracy), the value of r lies between 1% up 10%. So the lowest is the best.

### **5.6.Field Observations**

During the course of the data collection, the program team took note of its observations. Major areas of focus for the observation include: existing water sources and rehabilitate or upgrading water schemes: management, operation and maintenance; water quality, quantity; availability, type, location, articulate tools kit, latrine condition (spot check and inspection), Health and Nutrition centers rehabilitated and functionality, availability of management committee for WASH, Health and Nutrition service, this will be useful for evaluation methodology.

### **5.7.Survey team**

The evaluation was conducted by engineer consultant as team leader, with full authorization for any discussion related to the technical and financial issues to stream line with CIS polices, strategy and regulation together with quality assurance and will be responsible for all survey process and report writing to a publishable with high quality standard.

The team leader was assisted by statistician specialists with good experience in conducting such surveys; he supported the team leader in facilitating enumerator training. Four enumerator a (two males and two females) were recruited locally form the two states for the filed works for filling households' questionnaires as planned.

It is important to ensure that the quality of data is considered and maintained from the time of the survey design, the consultant and his assistant conducted a comprehensive training for the enumerators on how to conduct interviews, the same modality given for data entry and analysis. Data entry will be carried in Khartoum by two data operators, who will be closely monitored by the

team leader and the survey supervisor, on the other hand data analysis and compiling, analyzed in line with the key thematic areas will be conducted.

### **5.8.Data Entry, Quality Assurance and Analysis**

All quantitative data collected on paper were reviewed to check for consistencies and completeness, before coding and entering into SPSS ready for analysis. Qualitative data were asked in local language and translated to English on the questionnaire. MS-Excel was used in the quantitative analysis, including for designing the data entry format, entering raw data, and analyzing the quantitative results, these were then typed and uploaded into NVIVO software. Data analysis was a rigorous process that explored descriptive statistics, specifically the frequencies, mean, sum, standard deviation and variance. Qualitative variables were coded and organized into themes and the emerging trends and patterns identified using NVIVO software, guided by the objectives and the criteria. All the findings and discussion are presented below using ratios, graphs, figures and pie charts.

### **5.9. Ethical considerations**

Before going into the details of the field assignment, the data collection teams deployed to the field Introduced themselves, explained the purpose of the end line survey and obtained the willingness of Respondents / discussants. In every engagement/meeting with participants, respect was given to local cultures and norms, meeting places were selected as per participants' consent, and every participant was kindly requested to provide his/her genuine opinions ideas. Finally, when respondents finished their points, the data collection teams extended their gratitude to respondents for their time and effort in providing data for the end line survey.

## **6. Findings, Discussion and Analysis**

### **6.1.Demographic characteristics**

#### **6.2.Gender and Heads of households age groups:**

Table (1) below shows that; of the total respondent heads interviewed, 52.9% of them were males and 47.1% were female. The majority of those who headed household are at the age groups (18-49 years), representing 73.2% of the total sample, 24.6% at the age group ( $\geq 50$  years) and 2.3% at the age groups (6-18) years respectively. The result of analysis has shown a wide presence of woman headed households in the sample which could indicate absence of a great number of men households' heads who most probably immigrated to main towns seeking an income, working in gold mines or joined rebels' groups leaving families responsibilities to women.

Table 1: Respondent by age and sex groups

Ages		Locality of the study		Total	Respondent sex by locality (2)			
		South Darfur	East Darfur		Locality	Head of HHs sex		Total
						Male	Female	
Age group	6-18 year	6	3	9	South Darfur	54	115	169
		3.6%	1.3%	2.3%		32%	68%	100
	19-49 year	125	167	292	East Darfur	74.5%	25.5%	100%
		74.0%	72.6%	73.2%		157	73	230
	>=50 year	38	60	98	Total	68.3%	31.7%	100%
		22.5%	20.1%	24.6		157	73	230
Total		169	230	399	Total	211	188	399
		100.0%	100%	100%		52.9%	47.1%	100%

Fig. (1.0) Indicates 10.8% of the surveyed households have a disabled person and while 89.2% do not have. The result of analysis indicates a high disability which might be caused by on-going war had witnessed the area.

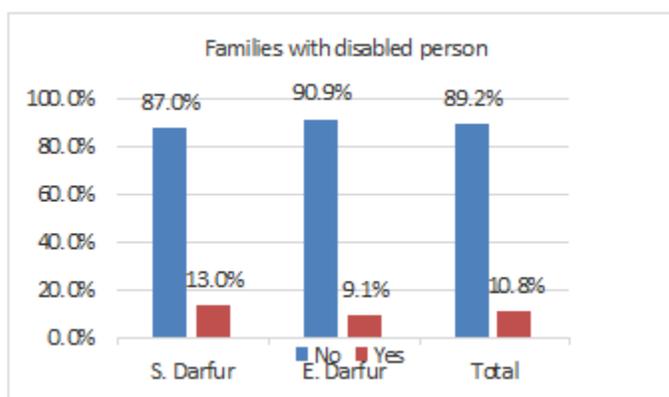


Figure 1: HH have persons with disability

Table (2) Below is shows; a summary of the surveyed households in the targeted states who have a disabled person, sum 25 disabled persons are found at South Darfur State, and while 26 in East Darfur State. The result of the analysis reached a conclusion that the disabled persons constitute around 2% of the whole surveyed households' members.

Table 2: Disabled persons by sex:

State	No. of disabled males	No. of disabled females	Total
South Darfur	12.00	13.00	25
East Darfur	20.00	6.00	26
Sum	32.00	19.00	51

***Specific Objective 1: Provide safe and clean water supply, adequate sanitation facilities and hygiene promotion activities for emergency affected IDPs, returnees and affected host***

### 6.3. Sector 1: Water Supply and Sanitation

#### Sub-sector 1: Water Supply

**Effectiveness:** In both states all surveyed household confirmed easy access to safe and cleaned water (100%) since the planned adopted for east Darfur concentrated on soft ware such as capacity and community sensitization, managements and awareness programs since they already have access t safe drinking water but they need more modality that can assist in ownership and sustainability.

*Table 3: Water sources*

Description		Main water sources		Total
		South Darfur	East Darfur	
Water tape	No.	1	1	2
	%	0.7%	0.7%	0.7%
Tanker	No.	11	0	11
	%	7.5%	0.0%	3.9%
Cart	No.	31	85	116
	%	21.2%	61.2%	40.7%
Hands pump	No.	53	0	53
	%	36.3%	0.0%	18.6%
Mini water yard	No.	35	19	54
	%	24.0%	13.7%	18.9%
Water yard	No.	15	34	49
	%	10.3%	24.5%	17.2%
Total	No.	146	139	285
	%	100.0%	100.0%	100.0%

Table (3) summarized surveyed households main water sources, cart constitutes (40.7%) of water sources for whole community in the two states, while in of S. Darfur and East Darfur States, were reported to make (21.2%) and (61.2%) respectively. E. Darfur inhabitants have (0%) non dependency on HP compared to S. Darfur communities have high dependency on HP (36.3%). Mini water yard provides water supply for 18.9% of the communities of the two states and (17. 2%).from water yard. When summing up water tape and tanker Sources 4.6% considered as optional water sources. Result of the

analysis reveals a wide variation between two states dependency on water sources such as hand pumps (36.3%) and tanker (7.5%) in South Darfur (36.3%) and Tanker water source on East Darfur since south Darfur characterized by basement complex and very shallow and low yielding aquifer, which is totally different from east Darfur which has very deep aquifer and huge ground water storage, in some areas HPs can not be installed and depend mainly in Min water yard or water yards.

### Time spend in fetching water:

Fig. (2) shows time elapsed for bringing water from source to home, some 45.1% of the surveyed households take (5-30 minutes), 17.9% could take (31-60 minutes), (19.8%) of households need (61-120 minutes) to reach home from water source, approximately (14.4%) of households take (121-300 minutes), and while a minority (2.7%) take around (0-5 minutes). The analysis has shown slight variations between the two states in time taken for bringing water to home from source which is observable at time duration (5-30 minutes).

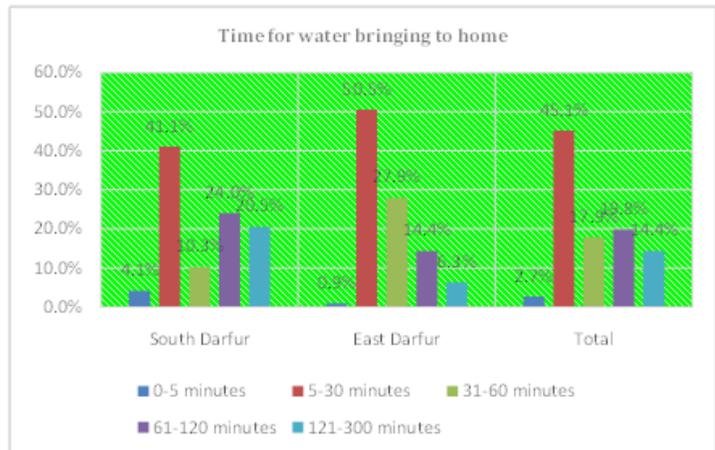
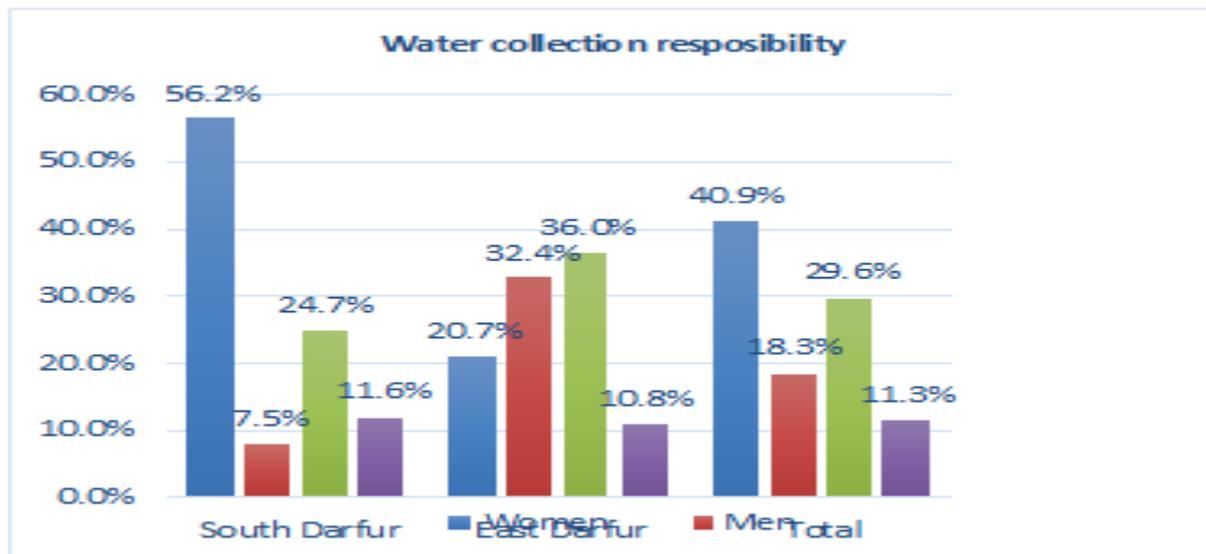


Figure 2: Time spend for water fetching

### Responsibility of collecting water:

Fig. (3) Reveals around (40.9%) of households confirmed that women are responsible for water collection. In South Darfur State (56.2%) of women are collected water, and while (20.7%) of women do the same in East Darfur State. Boys are coming second in ranking as (29.6%) of them are water collectors, some 18.3% households suggest water fetching is done by men, and while around



(11.3%) of households could say water collection is girls' responsibility.

Figure 3: Responsibility of water collection

**Easy access to water:** however, all respondents reflect their access to safe water, most of them (82.9%) could stand on a queue for water fetching, and while (17.1%) could not do (figure4).

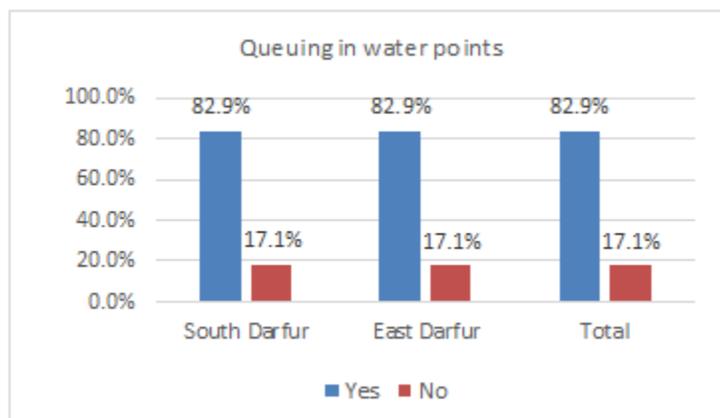


Figure 4: Queuing in water points

Table (4) illustrates some 62% of the surveyed households could wait for collecting water between (15 to 30 minutes), around 20.2% could wait between (31 to 60 minutes), and while around (17.8%) of the surveyed household could wait in a queue >60 minutes. The analysis has shown slight variations between the two states in queuing time duration.

Table 4: Time spend in water queuing

Description		South Darfur	East Darfur	Total
15-30 min	No.	67	65	132
	%	55.4%	70.7%	62.0%
31-60 min	No.	26	17	43
	%	21.5%	18.5%	20.2%
> 60 min	No.	28	10	38
	%	23.1%	10.9%	17.8%
Total	No.	121	92	213
	%	100.0%	100.0%	100.0%

### Sub –Sector: Sanitation and Hygiene promotion

The consulted households and community representatives in the FGDs, they all happy with the change project brought to their live, and they said that; this was reflected in improving their health situation and environment where they live, this was reached through different project interventions including increase in their knowledge and awareness on hygiene practices, which was resulted in changing their attitudes and practices.

**Water Storage;** As shown in fig. (5), (96.1%) of the surveyed households confirmed using a covered container for water storage, while 3.9% of the household did not use a covered container for waters storage. The analysis reflects that (3.9%) of households are vulnerable to water born infection which is transferred by contaminated water.

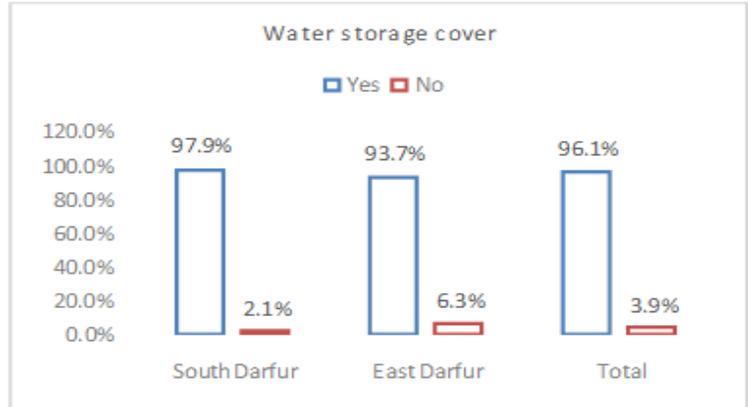
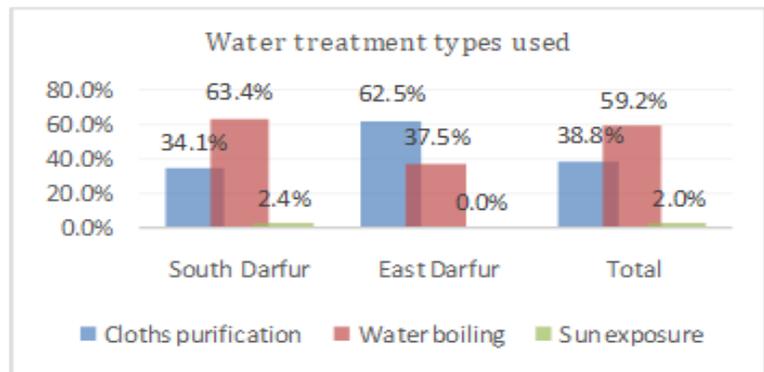


Figure 5: Water storage at home

**Water treatment at home;** part of the consulted households (19.1%) reflects that the water they are using can subjected to pollution during transport or storage and they are using different methods of treatment as they learned from project, while (80.9%) they think no need for treatment, water improvement is to some extent remarkable used in South Darfur State which reported (28.1%).



**Methods of water treatments:**

Household who treat water are using different local method, 59.2% of the households are boiling water for improvement, (38.8%) used treatment techniques of cloths purification, and while (2%) of the surveyed households do water treatment by exposing water to sun. There are no variations among states in the use of water treatment materials

Fig. (6) Displays that some (44.8%) of the households have heard of water chlorination, and while (55.2%) do not have heard. The analysis has shown a remarkable variation among states in hearing of chlorination treatment materials.

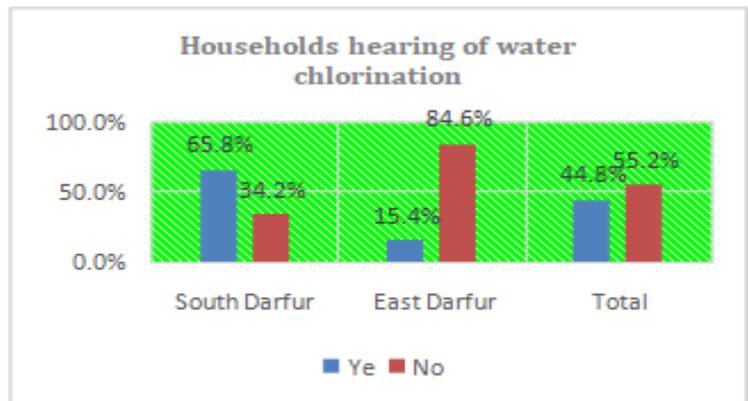


Figure 6: Methods of water treatment

## Sanitation:

Table (5) shows among the HH whom have latrines; most of them are pit latrines (35.8%) comprising (37.7%) in South Darfur and (33.3%) in East Darfur, while neighbors or shared latrines are used by (28.8%) and (41.4%) in South Darfur and East Darfur State respectively. Communal latrines comprise (14.4% & 0.0%) in South and East Darfur States respectively. Those are defecating in open area and/or bushes constitute (15.8% & 18.9%) of the surveyed households in South and East Darfur respectively. The analysis indicates slight variations between two states in using latrine types

Table 5: sanitation services

Latrine types		South Darfur	East Darfur	Total
Pit latrine	No.	55	37	92
	%	37.7%	33.3%	35.8%
Communal latrine	No.	21	0	21
	%	14.4%	0.0%	8.2%
in bushes	No.	23	21	44
	%	15.8%	18.9%	17.1%
Open area	No.	5	7	12
	%	3.4%	6.3%	4.7%
Neighbors/shared latrines	No.	42	46	88
	%	28.8%	41.4%	34.2%
	No.	146	111	257
	%	100.0%	100.0%	100.0%

## Availability of HH latrines:

Fig. (7) Shows some (71.2%) of the total households have latrines at home and (28.8%) do not have latrines. South Darfur State has the highest on latrines use (73.9%) and in East Darfur State the latrines users are (69.2%).

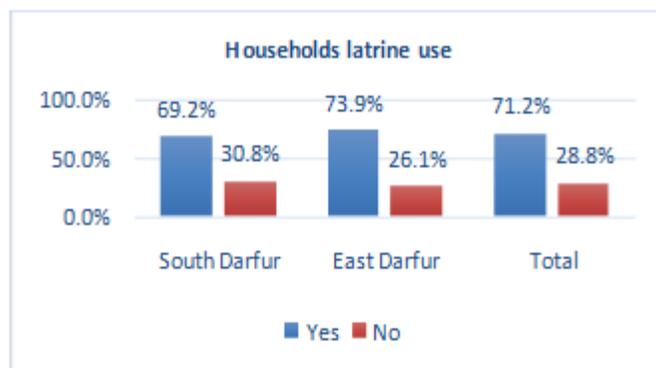


Figure 7: Availability of HH latrines

Table 6: Waste management

Waste Management		South Darfur	East Darfur	Total
Through in latrine	No.	1	11	12
	%	0.7%	9.9%	4.7%
Dump in hole	No.	3	24	27
	%	2.1%	21.6%	10.5%
Through away	No.	117	60	177
	%	80.7%	54.1%	69.1%
Keep as it is	No.	0	3	3
	%	0.0%	2.7%	1.2%
Burying	No.	5	0	5
	%	3.4%	0.0%	2.0%
Burning	No.	19	13	32
	%	13.1%	11.7%	12.5%
Total	No.	145	111	256
	%	100.0%	100.0%	100.0%

### Waste management:

As shown in Table (6) Households throw away waste constitutes (69.1%) for whole community, while in State of South and East Darfur were reported to make (80.7%) and (54.1%) respectively. Those who disposed of garbage in barrel or container outside home estimated at (12.5%) for the surveyed households, while in States of South and East Darfur were accounted to be (13.1%) and (11.7%) respectively. Some 2% of

households could get rid of waste in burying for the whole sample, and while in South and East Darfur States waste burying reported for 3.4% and 0.0% respectively. Also, households who dump waste in holes were 2.1 % in South Darfur, (21.6%) in East Darfur and only (1.2%) for the whole surveyed households. Also, households who dump waste in holes were (2.1%) in South Darfur and around (10.5%) for the whole surveyed households. The analysis has not resulted in observable variations between States in modes of handling waste.

### Hand washing:

As shown in Fig. (8); most of the surveyed households (93.8%) stated their family members do washing hands, and while (6.3%) of the households' members do not do. The analysis has not indicated any observable variations between two states

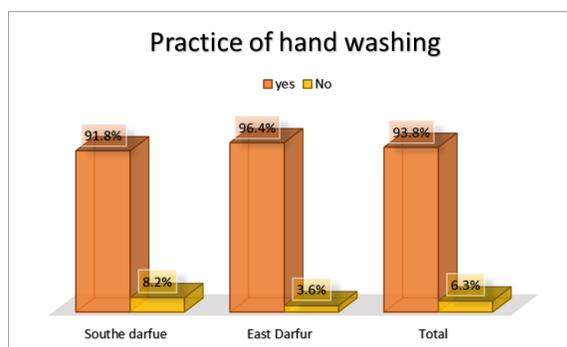


Figure 8: Practice of hand washing

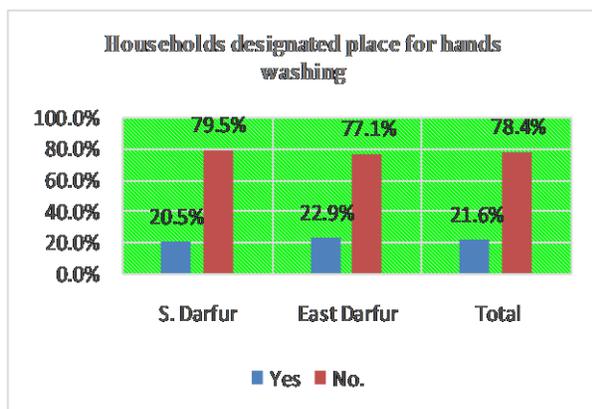


Figure 9: HH designed places for hand washing

Fig. (9) Displays nearly (78.4%) of the surveyed households designated place for hands washing, and while (21.6%) did not do.

Table 7: Materials used for hand washing

Water with soap	No.	112	72	184
	%	80.0%	68.6%	75.1%
sand with water	No.	3	1	4
	%	2.1%	1.0%	1.6%
water with ash	No.	4	0	4
	%	2.9%	0.0%	1.6%
	No.	140	105	245
	%	100.0%	100.0%	100.0%

Table. (7) indicates around (75.1%) of the surveyed households wash their hands with soap, 21.6% use only water, around (15.5%) wash their hands with sands with water and also (1.6%) use water with sand in hands washing. The analysis has not shown any variations between states in hands washing uses.

However, it is remarkably seen that approximately 3.2% of the households are still using traditional methods of cleaning their hands with sands (1.6%) and with ash (1.6%) which is neither healthy nor hygienic. More mobilization needed in hygiene promotion.

### Times of hand washing;

Fig. (10) Shows the surveyed households adoption or improvement in the use of hygienic practices some 29.1% do wash their hands using (two) of hygienic practices, and while 27.6% do the same using (one) practice, On the other hands those who adopted hygienic practices of hands washing using three, four and five are estimated for 15%, 23.4% and 5.1% respectively. The analysis did not reveal any significant difference on the surveyed households' hygienic practices states wise. However, when summing up the proportion of respondents who do wash hands using three or more of five hygienic practices, the result indicated that the surveyed households who have adopted three and/or greater hygienic practices constitute (43.3%) which is hygienically not satisfactory. Hence, Concern's Hygiene Promotion intervention needs to place particular focus on increasing awareness of these moments of hand washing amongst the community, in addition to increasing awareness of the other times of hands washing).

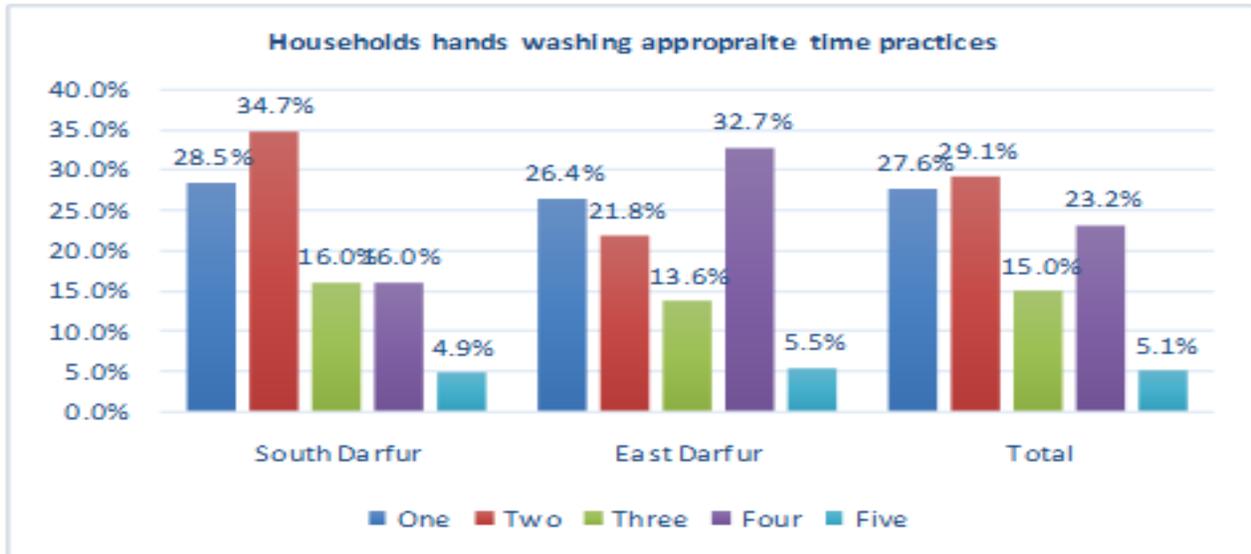


Figure 10: Appropriate time for hand washing

**Specific Objective 2:** Provide integrated and quality primary and reproductive healthcare services to reduce morbidity and mortality of the affected women, girls, men and boys among the targeted communities.

### Sub sector: Health

Health activities were implemented as planned, community members who consulted in FGDs reflects that a good work was done for them to improve their health particularly for children and maternal health, but still there is some challenges they are facing and affecting their easy access to the services.

As in fig, (11) nearly 62.2% of the surveyed households could easily obtain medicine in their village's or locality, On the other hand 37.8% of the inhabitants complained of lack of access to medicines in their villages. Easy access to health services is varies between the two states and seems better, as 85.9% of the inhabitants could easily obtain medicines locally compared with 47% in East Darfur.

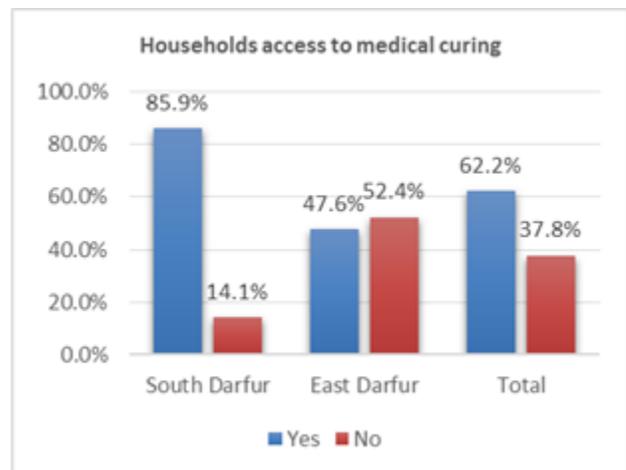


Figure 11; Access to medical services

Table 8: Alternative medicines

Alternative medicines receive		South Darfur	East Darfur	Total
Traditional medicine	No.	4	6	10
	%	22.2%	5.5%	7.9%
Go to another center	No.	11	103	114
	%	61.1%	94.5%	89.8%
Ignore	No.	3	0	3
	%	16.7%	0.0%	2.4%
Total	No.	18	109	127
	%	100.0%	100.0%	100.0%

Table. (8) Shows some 89.8% of the surveyed household who have complained of lack of access to medicines in their villages confirmed that they could obtain medicine from another center, 7.9% used traditional medicine and 2.4% denied using any treatment.

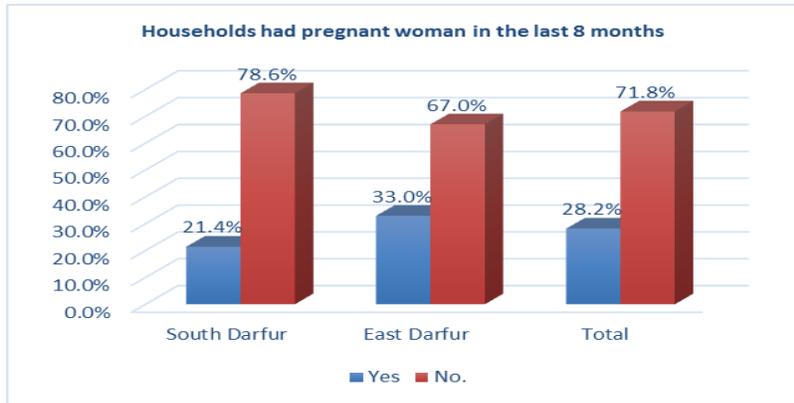
Table 9; Factors affecting easy access to medical services

		South Darfur	East Darfur	Total
Lack of medical supply drugs	No.	3	75	78
	%	21.4%	40.1%	38.8%
Lack of medical personnel	No.	2	38	40
	%	14.3%	20.3%	19.9%
Cost of services	No.	5	50	55
	%	35.7%	26.7%	27.4%
Transportation not available	No.	2	21	23
	%	14.3%	11.2%	11.4%
Cultural restriction	No.	0	1	1
	%	0.0%	0.5%	0.5%
In accessible to elderly	No.	2	0	2
	%	14.3%	0.0%	1.0%
Road to HF is not safe	No.	0	2	2
	%	0.0%	1.1%	1.0%
Total	No.	14	187	201
	%	100.0%	100.0%	100.0%

#### Factors affecting access to medical services:

Table (9) Displays the surveyed households' responses towards main reasons affecting their access to health services, some 38.8% of the households stated the main reason is (lack of medical supplies drugs), 27.4% have attributed lack of access to (high cost of services), 19.9% suggested (lack of medical personnel) is one reason, 11.4% confirmed (lack of transportation) is a barrier. On the other hand, nearly 2.5% of the surveyed households concluded that there are other minor reasons (1%) road to

HF not safe, (1%) health facilities inaccessible to elderlies and (0.5%) of the households do not know what are reasons.



**Households have pregnant women in last 8 months:**

Fig. (12) Displays nearly 28.2% of the surveyed households had a pregnant woman in the last 8 months, and while 71.8% had not. In this regards result revealed slight variation between the two states.

Figure 12: Malnourished children received curing

**ANT visits:**

Health sector in the project area has continually contributed to improving supply of health services in the target villages. This comprises the rehabilitation of health facilities, running health centers and clinics, establishment of nutritional units in some localities and provision of qualified medical staff and health workers. Health situation in the project area is progressing and witnessing great development in hosting clinical services of ANC, malnutrition screening, diagnosis and laboratory tests. An observable change is made on households' attitude towards giving much concerns to necessity of pregnant women consultation with health care, also in a public health sector a remarkable deviation towards better health situation has been as households has become more eager to be healthy that could be seen in a participation of garbage campaign, digging latrines and carrying on guidance and advice of health workers.

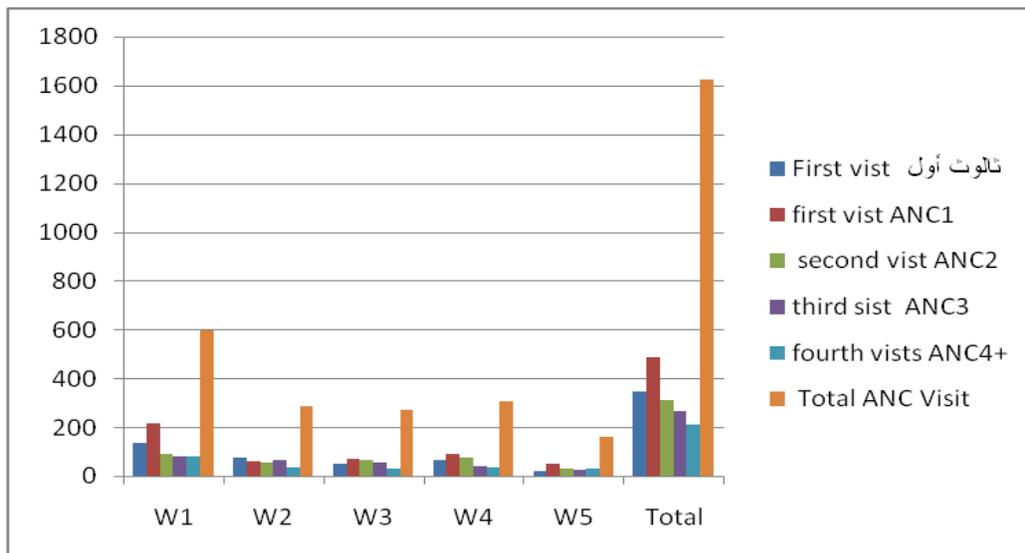


Figure 13: ANC pregnant women visits per months

## Factors affecting pregnant women attending ANC:

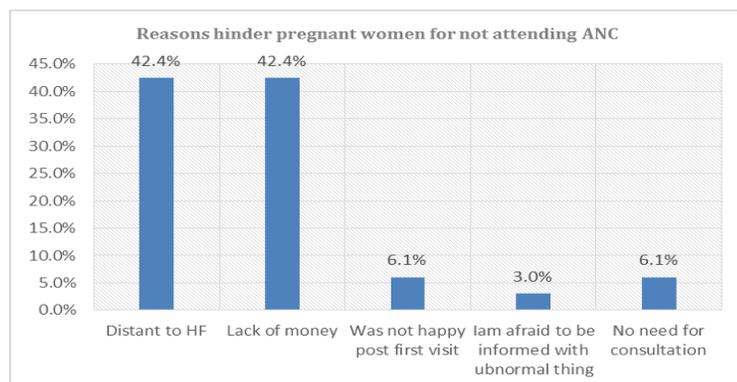


Figure 14: Reasons affecting pregnant women nit attending ANC

Women who do not attend ANC reflect that; around 42.4% of pregnant women in the surveyed households stated that distant to health facilities enforced them to not attending ANC, also around 42.4% attributed their absence of not attending ANC to lack of money, some 6.1% were not happy after their first ANC visit, as well as another 6.1% of

pregnant did not pay attention to ANC visits as importance issue, and while some 3% of pregnant women were reluctant to attend ANC because they were afraid to be informed with abnormal things.

Table 10: Who conduct capacity building training?

Associate	State of the study		Total
	South Darfur	East Darfur	
INGO's	5	9	14
	62.5%	81.8%	73.7%
NGO's/LNGO	3	1	4
	37.5%	9.1%	21.1%
Government	0	1	1
	0.0%	9.1%	5.3%
Total	8	11	19
%	100.0%	100.0%	100.0%

Table (14). illustrate 73.7% of the trainees confirmed that capacity building trainings were conducted by INGO's, around 21.1% stated that NGO's/LNGO's had carried on the trainings, and while 5.3% suggested that trainings program

## Sub sector; nutrition

Fig. (16) Reveals that a total of 23.7% households have infants at 0-5 month's age and 37.9% do not have. Result indicates slight variation between two states in infant's numbers.

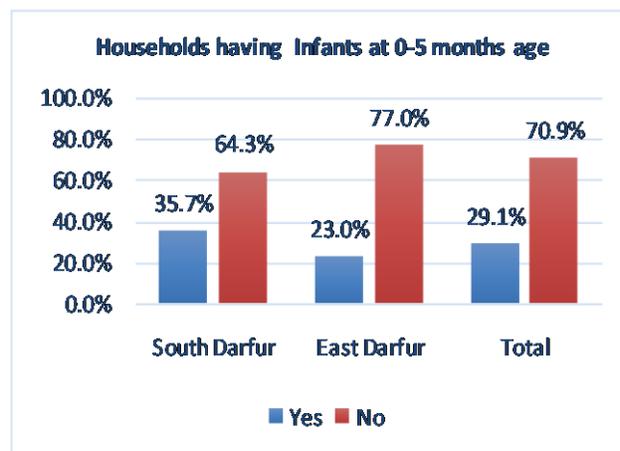


Figure 15: HH having infant 0-5 Months age

Fig. (17) Shows only 38% of the household's infants (6-23 month) have received foods from 4 or more food groups. Other infants (6-23 month) have not received. There are slight variations among states in food received by infants.

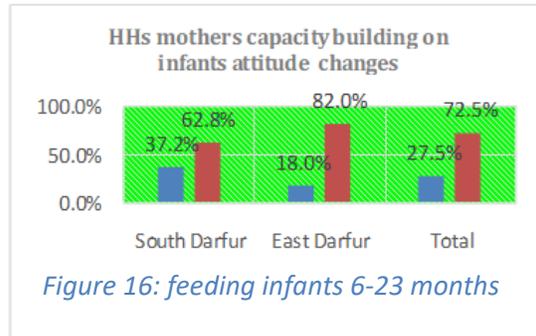
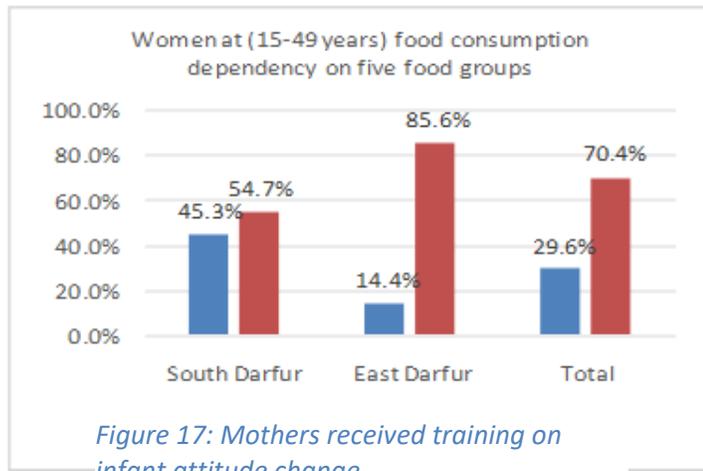


Fig. (18) Displays some 27.9% of the surveyed mothers' households have received training on infants' attitude change, and while 72.9% do not have received. The results indicate that there is a wide variation among mothers of surveyed households in two states regarding infants' attitude change which is low in East Darfur (18%) when compared to training received in South Darfur (37.2%).



29.6% of the surveyed mothers households confirmed that women at (15-49) are taking five or more food groups in their daily food regime, and while 72.5% do not take. In this regard the state of South Darfur is the highest in five group food taking by mothers

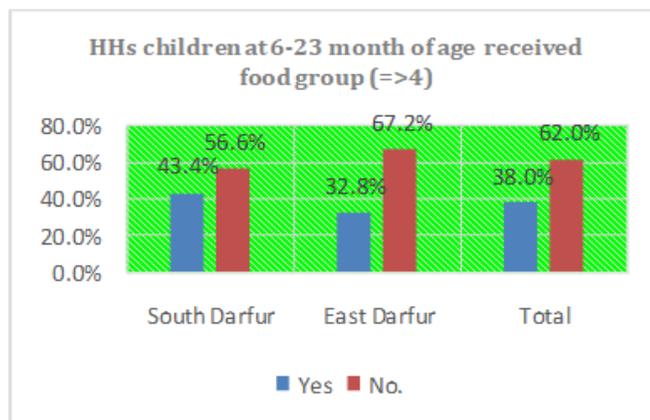


Table 11: Mother knowledge of breastfeeding practices.

Descriptions		State of the study		Total
		South Darfur	East Darfur	
I have no experience	No.	46	21	67
	%	36.5%	24.1%	31.5%
Early breasted	No.	21	7	28
	%	16.7%	8.0%	13.1%
Exclusively breasted until 6 months	No.	44	41	85
	%	34.9%	47.1%	39.9%
Continued breast feeding at 2 years	No.	15	18	33
	%	11.9%	20.7%	15.5%
	No.	126	87	213
	%	100.0%	100.0%	100.0%

Table. (12) Gives description on the average number of mothers who have knowledge of breastfeeding practices. The result reflects that nearly 39.9% mothers have (exclusively breasted until 6 months), some 31.5% denied (any experience on breastfeeding knowledge), around 15.5% are (continuing breastfeeding at 2 years), and while approximately 13.1% could do (early breasted). The interviewed mothers in the whole surveyed sample shows wide gap of variation in mothers' knowledge on breastfeeding practices as only 15.5% of the surveyed mothers being reported having knowledge and practices of breastfeeding.

Fig. (19) Shows 82.1 of the under 5 years' children households have malnourished, and while other do not have. There is no variation among states in numbers of malnourished children.

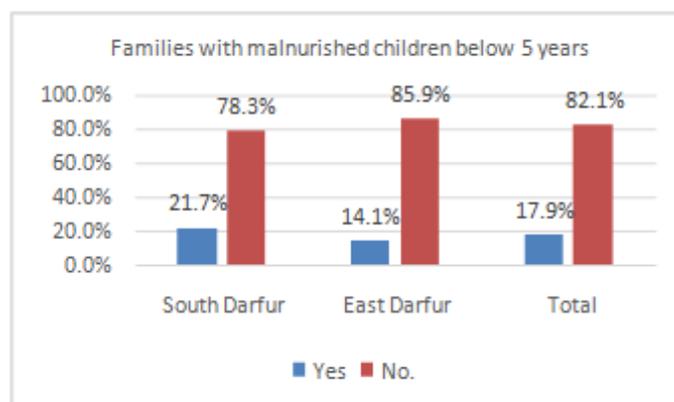


Figure 18: Malnutrition among children under 5 years

Fig. (20) Illustrates (26.7%) of the surveyed households with malnourished children received curing, and while 79.3% did not receive. (More detail about drugs supply for malnourished children are presented in table (22) at annex 4)).

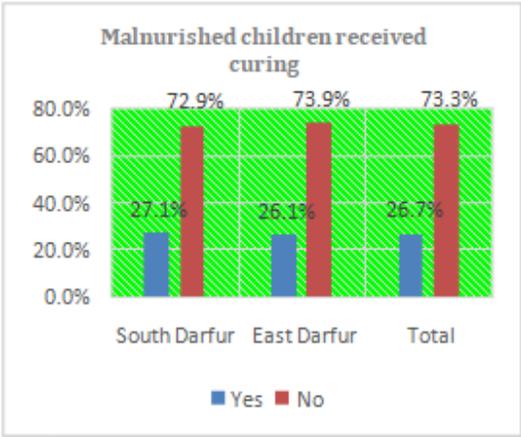


Figure 19: Malnourished children received curing

**Malnourished children SAM/MAM**

Mobiles clinic services that work in harsh remote areas contributed greatly to project success in a health sector. Their services reached deprived communities and in particular malnourished children. Cases of malnutrition are screened where the process of curing is embarked on at nutrition centers. Chronic cases of SAM/MAM are referred to hospitals in main towns’ as the project coordinates with State Ministry of health and WHO in order to reduce mortality rate among malnourished children

Fig. (21) Show that 46.5% of the surveyed households confirmed having children at age (6-24) months, and while 53.5% of households do not have. (More details of food taken by children yesterday are presented in table (22) at annex 4).

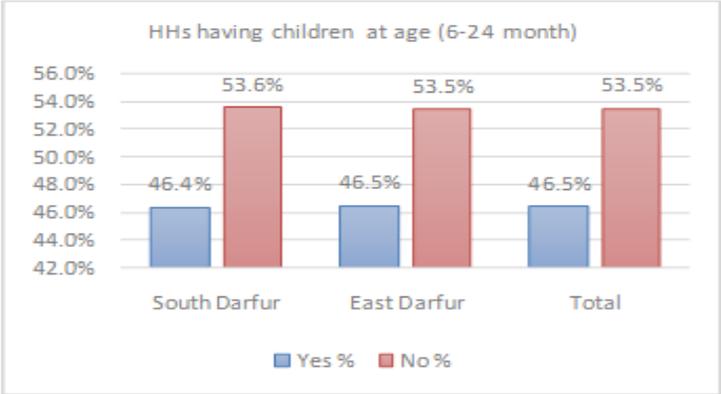


Figure 20: children age (6-24) months

**Food security problems**

Most of targeted family suffer from low income, they need to improved household economic activity and welfare ,most they have no to be secured for their annual plan ,they feed their children with low nutrient food which affected their grows and health especially for children of age over 2 years when they usually stop their breast feeding ,which indicate very low as indicated in fig (16), which shows only 38% of the household’s infants (6-23 month) have received foods from 4 or more food groups. Other infants (6-23 month) have not received, this gab spread in the tow targeted state

## 1. Conclusions and Recommendations

### 7. Water sector

- The WASH activities have increased access to safe drinking water from protected water sources such as hand pumps, Min water yards and water yards. Furthermore, communities' knowledge on water treatment, using protected water sources and other key hygienic practices have significantly improved, which may have positive impact in decrement of water-borne diseases such as diarrhea and other water related diseases especially among children's.
- Integrating protection and gender issues into programming yields WAH such as provision of safe drinking water contribute to reduction of distance travelled by girls and women to the nearest water point, positively contributed of reduction of risk of violence against girls on the way to or from water points (SGBV). There is need for continuous deliberate efforts to mainstreaming these components in all future programming
- The technical and the basic management trainings delivered did effectively grow the capacity of committees' members, although limited to the ordinary maintenance of the systems, also because the spare parts were not provided by the project (CIS) for long. The WUCs are encouraged to set up a limited cost-recovery system, to spend on Operation and Maintenance (O&M) and to purchase of small spare parts for maintenance, this will encourage them to be able to manage their water source effectively as further step when exit strategy occurred, where the modality done by CIS regarding of water voucher will effectively assist in cost recovery of the community water tariff system in the coming future.
- Environmental management of the area around water points that includes fencing is an area requiring attention. On the other hand Periodic reports, that enhance accountability, should be provided at all levels, but from end line evaluation observations and interviews the WUCs had no lists or records of users or of their finances, they need more training in book keeping and monitoring of their water source performance, their roles with the care taker to regulate use of water sources which reduces abuse, they watch over the water source which may reduce vandalism.
- Weak of community consultation meetings regularly to discuss the critical issues to discuss their role in water management, to enhance communities' ownership and resilience and sustain the service, this also will need to continue focusing on capacity building and promoting community contributions by working together with other actors in the areas, involve, youth, women in all project cycle and not depend on Omda, Shakih or community leader in committee selection process alone, to avoid conflict between community groups, Water committee need to be selected through participatory approach, women representative is essential, according to the survey all groups interviews confirm this facts therefore, CIS intervention plan to put a strong emphasis on developing beneficiaries' ownership and self-reliance

- Women role and participation in WUCs and other WASH community-based water source management committees is one of the big challenges, due to cultural and historic reasons, women are often the primary collectors, transporters and users of water in The South and East Darfur States. They tend to have the main responsibility for health, child care and are managers of domestic water as well as promoters of home and community based sanitation activities. However, their involvement in key WUC roles was associated with more effective water management, including regular meetings and revenue collection, and improved functioning of water systems, but the percentage of women involvement is very low since they playing an important role in these regards, we can conclude that the participation of women and girls in WASH decision making structures is a critical milestone towards their empowerment.
- From evaluation KII interviews, WASH CIS managers report and Water Supply Infrastructure indicators ( Number of water points where measures for protection measures and cleanness are applied / number of water points supported calculated as percentage , average people whom receive at least 14 l/d/p , HHs reported having access to collect all water needed from the improved water sources/Total sampled HHs as percentage, the two states did a wonderful job to reach the set target and above 85 % and 90% for East and South Darfur respectively out of 80% as a target.

## 8. Sanitation and Hygiene Promotion

- Hygiene promotion campaigns and trainings of community members within the committees were very effective in reducing the open defecation according to direct observation and FGDs. Soap is sometimes replaced by ash or sand, as recommended during the hygiene promotion, however, most of the beneficiaries from targeted community after participating in FGD were not able to afford the cost of purchasing soap due to their poverty.
- Explore innovative ways of changing attitudes and practices relating to use of ash/ soap during critical times for hand washing since adoption of use of soap/ ash during hand washing was just too low to be acceptable. Similarly, the setting up and maintenance of hand washing locations with soap and water at homesteads needs more aggressive campaigns as the evaluation received more excuses for the absence of hand washing locations (tip taps) than evidence of their presence at the homesteads visited for hygiene inspection reasons.
- Emphasis need to be placed on key hygiene behaviours such as hand washing with soap at appropriate times, safe disposal of faeces and use of latrines, safe weaning food preparation and safe water handling and storage, this issues will contribute and reduce prevalent of COVID 19 outbreak, and other water related diseases. Hygiene and health education campaigns need to be held and integrated in different parts of the WASH program coverage area
- Intervention in rehabilitating or improving of water sources without hardware support to latrines construction or comprehensive software component such as CLTs/CATs approached as integrated process will leaves room for the environmental hazard of open defecation to undo the outcomes and impact of the intervention, since there are huge gaps between provision of safe drinking water and sanitation activities at all levels, they should be treated as one packages, this issues clearly emerge from our observation and evaluation

process in East Darfur where they did not focus more in sanitation issues with the set of their plan intervention which need more focus since the challenge of sustainability will not be solved unless and until the health system is strengthened to provide ongoing monitoring and promotion at household level , to scale up CLTs /CATs – at present very little is being done by government outside of donor funded projects. Thus, future programs need to support the installation of community-based sanitation facilities especially in market areas in addition to the software activities (i.e. sanitation awareness activities).

- Within the WASH sector, Engineers and hygiene promoters must work together to ensure that the maximum benefit from the intervention is achieved. Hygiene promoters must inform engineers of community feedback and engineers must be prepared to clarify and use this feedback to inform the design and proper siting of facilities, such as latrines which collapse during the rainy season due to incorrect siting and proper protection material used, this issues need to be shared with community with engineering sense to promote this activities and increase coverage and benefit to entire communities.
- Communities' practice regarding solid waste disposal in the targeted areas is not to the expected level. This might partly be attributed to lack of sanitation facilities. Thus, future programs need to support the installation of community-based sanitation facilities in addition to the software activities (i.e. sanitation awareness activities) especially in East Darfur where this issue has not well addressed with WASH approached.
- Education service at basic schools is very poor in the two states, in this regard a lot of work needs to be done to improve the school environment to increase the level of enrolment and reduce the high dropout. This can be through hard work an intervention such as improving WASH services and soft works such as establishing of school clubs, training of teaches and forming and training of parents and teacher's associations as the best agent of changed.
- It will be good if CIS realise of the importance of co-ordination between sectors WASH and Health to implement their activities together to achieve better impact on WASH and Health especially on the incidence of diarrhea, malnutrition, Immunizable diseases as well as other water and sanitation related diseases such as acute watery diarrheal, cholera, this cooperation will have contributed positively in better resources mobilization and utilizations.
- From evaluation KII interviews, WASH CIS manger report and environmental health indicator (Number of surveyed HHs who demonstrated proper disposal of solid waste / Total sampled HHs calculated) ,the cumulative targeted was set 80% , South Darfur score reached the targeted limit (80.7) ,but east Darfur reached 54.1 because some activites not implemented.
- From evaluation KII interviews, WASH CIS mangers report and Sanitation Infrastructure indicator (Men, women, boys and girls who reported using toilet to defecate the last time/ total sampled people as percentage), the two states WSAH team able to mobilize the community and reach the set target ,which record 73.9 % and 69.2% for east and South Darfur respectively out of setting target 75% which is good progress.
- From evaluation KII interviews, WASH CIS mangers report and hygiene promotion indicator (Number of surveyed participants aware of 3 of the 5 critical times of wash hands (After using latrine, before preparation food, after child defecation, after contact with animals, after work) out of the total sampled people) the two state did a remarkable progress in which they score 96.4 % and 91 % respectively out of 80% which indicate that they similarly score a good rate for their good mobilization and sensitization of targeted communities. In areas of thee second indicator (Number of HHs surveyed with no evidence of feces in the living area/total sampled HHs calculated as percentage) , the progress not a

was found 69.2 % and 73.9 % for the East and South Darfur ,nearly they reached the target 80% ,since some activities not implemented in East Darfur.

## 9. Health and Nutrition

- The support provided by CIS to health facilities including the rehabilitation of health facilities centers, training of health personnel (CMAM), and community awareness sessions have contributed positively of improving reproductive health service. Noticeable change was observed in terms of visiting health facilities for ANC, PNC, and vaccination services. Furthermore, the awareness raising sessions in Gender-Based Violence has contributed to the decrement of the incidence of GBV related cases in the area.
- Health systems are weak in all of the targeted areas in South and East Darfur ; Weak HMIS, acute shortage of drugs and equipment, poor infrastructure, loosely structured and technically weak health workforce, inadequate range and coverage of essential health services are largely the result of weak governance, lack of commitment, and inadequate health financing, so this intervention make big changes with the community life ,this well not be sustain unless health and Nutrition government sector take lead in this regard especially due to exit strategy that my cause if certain components are left unfunded, government wit community should seek additional opportunities ,so that the project needs to come up with a clear exit strategy ,that ensures the gains recorded so far would not be eroded over time.
- According to the interview with inline authorities in Ministry of Health we observe that there is a tendency to insist on more involvement and a higher profile, but in practice to take a back seat arguing a lack of resources especially in logistic. This was observed during the evaluation. A clearer definition of respective responsibilities, documented in joint work plans, with effective monitoring and evaluation, could help overcome this difficulty in the coming future program.
- Emphasize the importance of enabling health practices and ensure that communities are aware that Nutrition, Health and Hygiene Promotion is not just about passing messages but rather enhancing appropriate behavior change which will takes time and continuous process to be reached, more effort need to be done in this regards. Assessment of beneficiary household profile need to be encouraged to understand the key determinants of malnutrition including socioeconomic information, access to health care, food aid and safe-water, child care practices, sources of food, income, and coping strategies
- The important of strengthen in-service training for health workers, setting minimum monitoring standards that guarantee quality assurance within stipulated performance thresholds. This should include regular joint analysis, between the staff of the PHC and referral services, of referrals and facility based mortality should be encouraged.
- CMAM approach should be integrated into existing health care structures and services, with in-service training of health workers and regular supervision and more effort to be done for CMAM projects to be continued supported, as well as efforts towards eventual integration into government health systems and budgets and it will add more values in community awareness and contributed to reduce negative impact due to health and nutrition risk among children's and mothers.

- Promotion of integrated programming designed around multi- and cross-sectoral analysis need to be prioritized where conditions permit. Piloting an approach that provides health, nutrition services, water and sanitation and food security with the ultimate aim of reducing acute malnutrition through holistic programming should be encouraged.
- Since social behavior change is a product of sustained/persistent sensitization/messaging as well as adoption/uptake of desired practices, there is need to work collaboratively with community volunteers, community members and other opinion leaders to support the continuous messaging on importance of appropriate Maternal Infant and Young Child Nutrition practices as well as WASH using appropriate IEC materials. This would ensure continued accessibility to safe drinking water, better nutrition, improved hygiene practices and sanitation facilities at household level.
- Look for alternative forms of assistance which leads towards child food secured households. CIS and government counterparts to plan for detailed study on child food security situation and apply target-based approach to minimize food storages and assist in proper way in handling and storage especially during the rainy season where some areas cannot be reached in time. On the other hand shortage of power act as big constrains for child food preservation ,solar cooling system need to be introduced in this regards along the line of rehabilitation of health facilities mechanism.
- Finally according to the field assessment results and the project's available documentation, the project's performance is demonstrated to be meeting expectations; achieving the intended outputs and outcomes and attaining an overall good quality of the services delivered. However, the monitoring system certainly needs to improve in the two states, to improve, collecting evidence-based data when measuring the indicators' progress.
- From evaluation KII interviews, Heath and Nutrition CIS mangers report and Health and Nutrition indicators In ,(Health Systems and Clinical Support , Communicable Diseases , Reproductive Health , Community Health, Pharmaceuticals and Other Medical Commodities , Management of Acute Malnutrition) the two teams at East and South Darfur did an excellent job and reaching the set target ,their work and report well organize and community happy about their approached and participation modalities.

## 10 Annexes:

### Annex 1: Updated log frame

Indicator	Indicator definition	Evaluation value	Cumulative target	End line East Darfur	End line South Darfur
<i>Include both OFDA and custom indicators.</i>	<i>How do you define key or technical terms in this indicator?</i>	<i>What was the numerical value of this indicator before the project started?</i>	<i>What will be the total value of this indicator by the end of this project?</i>		
<b>Sector1: WASH</b>					
<b>SOI:</b> Provide safe and clean water supply, adequate sanitation facilities and hygiene promotion activities for emergency affected IDPs, returnees and affected host communities in South and East Darfur.					
<b>Sub-sector: 1.1. Water Supply Infrastructure</b>					
% of water points that are clean and protected from contamination	Number of water points where measures for protection measures and cleanness are applied/ number of water points supported calculated as percentage	<b>TBD</b>	<b>80%</b>	<b>85%</b>	<b>90%</b>
Average liters/person/day collected from all sources for drinking, cooking and hygiene	average people whom receive at least 14 l/d/p		<b>14 l/d/p</b>	<b>20 l/d/p</b>	<b>18 l/c/d</b>
Percent of households targeted by WASH program that are collecting all water for drinking, cooking, and hygiene from improved water sources	HHs reported having access to collect all water needed from the improved water sources/Total sampled HHs as percentage		<b>80%</b>	<b>90%</b>	<b>85%</b>
<b>Sub-Sector 1.2: Sanitation Infrastructure</b>					
Proportion of men, women, boys and girls who last defecated in a toilet (or whose feces was	Men, women, boys and girls who reported using toilet to defecate the last time/ total sampled people as percentage.		<b>75%</b>	<b>73.9 %</b>	<b>69.2%</b>

last disposed of in a safe manner)					
<b>Sub-Sector 1.3: Environmental Health</b>					
Percent of households targeted by the WASH promotion program that are properly disposing of solid waste	Number of surveyed HHs who demonstrated proper disposal of solid waste / Total sampled HHs calculated as percentage		<b>80%</b>	54.1%	80.7%
<b>Sub-Sector 1.4: Hygiene Promotion</b>					
Percent of people targeted by the hygiene promotion program who know at least three (3) of the five (5) critical times to wash hands	Number of surveyed participants aware of 3 of the 5 critical times of wash hands (After using latrine, before preparation food, after child defecation, after contact with animals, after work) out of the total sampled people.		<b>90%</b>	<b>96.4 %</b>	<b>91.8 %</b>
Percent of households targeted by the hygiene promotion program with no evidence of feces in the living area	Number of HHs surveyed with no evidence of feces in the living area/total sampled HHs calculated as percentage.		<b>80%</b>	<b>69.2 %</b>	<b>73.9 %</b>
<b>Sector 2: Health</b>					
<b>SO2:</b> Provide integrated and quality primary and reproductive healthcare services to reduce morbidity and mortality of the affected women, girls, men and boys among the targeted communities.					
<b>Sub-sector:2.1. Health Systems and Clinical Support</b>					
Percentage of total weekly surveillance reports submitted on time by health facilities	Number of timely surveillance reports submitted to CIS Offices/Total number of expected surveillance reports to be received as percentage		<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Sub-Sector 2.2: Communicable Diseases</b>					
Case fatality rates for communicable diseases	Number of death cases due to specific disease (diarrhea, ARI, measles) / Number of the diagnosed cases of the specific disease (target Diarrhea CFR: ≤1% ARI CFR: <10% Measles		<b>Diarrhea CFR: ≤1%, ARI CFR: &lt;10%, Measles CFR: ≤5%</b>	<b>Diarrhea CFR: 0%, ARI CFR: 0%, Measles CFR: 0%</b>	<b>Diarrhea CFR: 0%, ARI CFR: 0%, Measles CFR: 0%</b>

	CFR: ≤5%)				
<b>Sub-Sector 2.3: Reproductive Health</b>					
Number and percentage of pregnant women who have attended at least two comprehensive antenatal clinics	Number of pregnant women who have attended at least two ANC visits at the PHCC / Number of pregnant women in the catchment areas (Approximately 5% of total population) presented as number and percentage		<b>6816 women (85%)</b>	47.7%	39.3%
Number and percentage of newborns that received postnatal care within three days delivery	Number of delivered women who received at least one PNC visits by midwives within 3 days after delivery / Number of delivered women in the target area (Approximately 5% of total population) presented as number and percentage		<b>1812 women 85%</b>	83.5%	83.2%
<b>Sub-Sector 2.4: Community Health</b>					
Number and percentage of CHWs conducting public health surveillance	Number of CHWs engaged in public health surveillance / Number of trained CHWs (they will be declared as engaged if they are submitting regular reports on childhood diseases and referral to HF)		<b>32 (16 female, 16 male)</b>  <b>100%</b>	<b>100 %</b>	<b>100 %</b>
Number and percentage of community members who can recall target health education messages	Number of community members recalled target health education messages (Sample will be selected from the people who have received the messages) percentage calculated as follows - Number of community members who managed to recall target health messages/Total sampled CHWs		<b>23,6026 (120373 female, 115653 male)</b>  <b>70%</b>	<b>89.3 %</b>	<b>66.7 %</b>

Percentage of mothers with children under-five who can identify three or more health danger signs that needs urgent referral of the children to the nearest health facility.	Number of women surveyed who identified three(3) or more health danger signs/ number of women survey calculated as percentage	0	75%	87.5 %	73.7 %
<b>Sub-Sector 2.5: Pharmaceuticals and Other Medical Commodities</b>					
<b>Sector3: Nutrition</b>					
<i>SO3: Improved nutritional response to at risk and malnourished less than five years' children and pregnant and lactating women including preventive measures to avoid relapse and unnecessary suffering.</i>					
<b>Sub-sector: 3.1. Infant and Young Child Feeding in Emergencies</b>					
Proportion of infants 0-5 months of age who are fed exclusively with breast milk	Number of beneficiaries (infants) that are exclusively breastfed/ Total number of sampled children 0-5.9 months		75%	83.3%	92%
Proportion of children 6-23 months of age who receive foods from 4 or more food groups	Number of children 6 – 23 month received food daily in 4 foods groups during the previous day of assessment/ Total sampled children between 6 – 23 month sampled		75%	32.8 %	43.4 %
Percentage of women, 15-49 years of age, who consume Five or more food groups on their daily food regime.	Number of women 15-49 of age who reported consuming five or more food groups on their daily food regime/ number of women on the age sampled calculated as percentage.	0%	75%	14.4 %	45.3 %
<b>Sub-sector: 3.2. Management of Acute Malnutrition</b>					

<p>Number of people admitted, rates of recovery, default, death, relapse, and average length of stay for people admitted to Management of Acute Malnutrition sites</p>	<p><b>Admission:</b> Severely malnourished children without medical complications and moderate malnourished admitted and followed up through the OTP/SFP treatment, according to protocol, refer enrolled children to SC or SFP as appropriate;  <b>Default:</b> Number of children admitted for SAM absent from OTP for 3 consecutive weeks/Number of admitted children (OTP is every week) rate less than 15%  <b>CURE :</b> Cured MUAC &gt;115mm Clinically well No edema for two consecutive visits (if admitted with oedema)  <b>DEATH:</b> SAM cases Died during time registered in OTP  <b>Average length of stay:</b> Average number of days spent at OTP/SFP before discharge.</p>		<p><b>Admission:</b> 13402 ( 6567 boys, 6845 girls)</p> <p><b>Rates of default (&lt;15%), death (&lt;10%),</b></p> <p><b>Cure (&gt;75%), length of stay (&lt;60 days)</b></p>	<p><b>Admission:</b> 1366</p> <p><b>Rates of default 4.1%, death (0%),</b></p> <p><b>Cure (95.5%), length of stay (&lt;60 days)</b></p>	<p><b>Rates of default 15%, death (0%),</b></p> <p><b>Cure (100%), length of stay (&lt;60 days)</b></p>
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**Annex 2: WASH targeted / achievement (East Darfur)**

No	Activity Discretion	Achievement	Remark by WASH officer Ed Diaen office	%
1	Gender in WASH training for 25 personnel	not done	It delay first due to COVID-19, then the availability of the facilitator at ED become the challenge, many consultation was done in SD but the time not enabling us.	0
2	Visibility Costs	done	1200 PCE of the IEC material with deferent hygiene message was printed and distributed to 4 communities	100
3	Local Partner Cost	done partially	The cost cover the partner rung cost	0

4	Motorized water yards spare parts for Assalaya and Bahr al Arab localities State Water Corporation for community based operation and maintenance work	done	this spar part and other fitting provided and donated to SWC in two localities	100
5	Train 20 state and locality levels WES and SWC staffs on ground water and water quality monitoring	not done	It delay first due to COVID-19, then the availability of the facilitator at ED become the challenge, many consultation was done in SD but the time not enabling us.	0
6	Conduct ground water monitoring in Assalaya and Bahr al Arab localities targeting 20 boreholes on monthly basis (provision of deep meter and DSA)	it done partially	it done in one locality in Bahar Alarab and many areas not access due to runny season and the same reason for Assalia locality also	50
7	Form and train 60 community hygiene promoters in Assalaya and Bahr al Arab localities focusing on addressing key sanitation and hygiene practices and social mobilization.	done	it done by train 55 members in Elwazazeen, Elatmour, in Assalia locality and Keyaak Bara, Sarhan in Bahar Alarab.	92
8	Conduct 72 community dialogue and social mobilization on improving communities health and wellbeing through proper WASH practices,	done	By providing in-kind incentive for train CHP, and also provision of cleaning tools and distributed to this 4 community. More over 55 campaign was done by disseminating hygiene message and community mobilization on clean-up campaign	76

Reference: WASH project manger

### Annex 3: Health and Nutrition targeted / achievement (East Darfur)

#	target training	Target Staff	location	Achieved	%
1	SAM ( Severely Acute malnutrition with medical complication	20 Nurses, Doctors and Nutrition Assistant	stabilization center	done	100%
2	CMAM training Nutrition Assistant at Nutrition Center	40 Nutrition Assistant	Nutrition centers	done	100%
3	Community engagement on CMAM (community management of Acute Malnutrition).	100 Community Nutrition Volunteers train on	Nutrition center and community	done	100%
4	infant young Child feeding	100 Mother support groups training	Nutrition center and community	done	100%
5	Community health committee	40 community leaders	community /health facilities	done	99%

6	2 training on EMONC ( emergency management of Obstetric Neonatal Care	20 midwife	health facilities	Achieve one	50%
7	Drugs management	16 medical staff ( medical Assistant, Nurses and drugs and pharmacy Assistant	health facilities	done	98%
8	2 training on GBV ( gender base volante ) including prevention, referrals and psychological	36 community leaders	community	Achieved one	50%
9	RCCE ( Risk Communication and community Engagement)	200 out reach	community	done	100%
10	Early Warning and Reporting (EWAR)	36	community	done	100%
11	First Aid and Psychosocial support (PSS)	30	community	done	80%

Reference: Health and Nutrition project manger

#### Annex 2: WASH targeted / achievement (South Darfur

#	Program Activities	Unit	Plan	Achiev.	%	Benefi.	Remark
1	Operation and Maintenance of 20 motorized water pumping schemes including 15 solar power-driven hybrid systems (4 in Gereida, 6 in Kalma and 5 in Kass) and 5 diesel powered systems (1 in Alsalam, 2 in Gereida, 1 in Kalam and 1 in Kass)	system	20	20	100	213038	
2	Purchasing Oxfam tank liner (with repair kit) and repairing 10 water tanks (4 in Kalma,4 in Gerida and 2 in Kass)	tanks	10	9	90	213038	Due to the market price not meet the btargets
3	Routine 29 hand pump repairs (14 in Kalma and 15 in Kass)	hand pump	29	29	100	14501	
4	Convert two fuel powered water system to hybrid solar power driven system in Gereida .	system	2	2	100	25000	
5	Upgrade of one HP to solar mini water yard in Kass locality (Topafito village)	mini water yard	1	1	100	16000	
6	Improving water quality and ground water monitoring of the targeted motorized water systems	month	12	12	100	213038	

7	Continue supporting the Alsalam and Gereida IDP camps voucher based water distribution system - Vouchers' amounts.	Month	12	12	100	22050	
8	Provision of 700 household (HHs) latrines	latrines	700	513	73	3078	Due to the market price not meet the targets
9	Conduct refresher training for an existing 90 community hygiene promoters in Alsalam, Kalma, Kass and Gereida focusing on community ownership and sustainability. This training will include an element of equitable gender roles related to WASH.	Trainin g	4	4	100	91	
10	Conduct WASH committee (WUC) training for 7 committees ( 4 existing for IDP camp, 2 in Kass rural area )	Trainin g	7	7	100	62	
11	Conduct 96 hygiene promotion and cleaning campaigns, monthly incentive (\$20/person/month * 90 persons * 12 months)	Campai gns	96	120	125	213038	
12	Purchase cleaning tools for cleaning campaigns	set	200	200	100	213038	
13	Print and distribute gender-sensitive IEC materials ( (communication materials production for gender and protection in WASH flyers, posters, information boards)	PCE	500	650	130	60513	
14	Set up a quarterly community feedback and consultation meetings in Alsalam, Kalma, Gereida and Kass to review the action and address project related issues (7 meetings per quarter)	Q- Meeting	4	3	75	32091	

Reference: WASH project manger

**Annex 5: Health and Nutrition South Darfur targeted / achievement ( South Darfur)**

#	target training	Target Staff	location	Achieved	%
1	SAM ( Severely Acute malnutrition with medical complication	20 Nurses, Doctors and Nutrition Assistant	stabilization center	done	100%
2	CMAM training Nutrition Assistant at Nutrition Center	40 Nutrition Assistant	Nutrition centers	done	100%
3	Community engagement on CMAM (community management of Acute Malnutrition).	100 Community Nutrition Volunteers train on	Nutrition center and community	done	100%
4	infant young Child feeding	100 Mother support groups training	Nutrition center and community	done	100%
5	community health committee	40 community leaders	community /health facilities	done	99%
6	2 training on EMONC ( emergency management of Obstetric Neonatal Care	20 midwife	health facilities	Achieve one	50%
7	Drugs management	16 medical staff ( medical Assistant, Nurses and drugs and pharmacy Assistant	health facilities	done	98%
8	2 training on GBV ( gender base violent ) including prevention, referrals and psychological	36 community leaders	community	Achieved one	50%
9	RCCE ( Risk Communication and community Engagement)	200 out reach	community	done	100%
10	Early Warning and Reporting (EWAR)	36	community	done	100%
11	First Aid and Psychosocial support (PSS)	30	community	done	80%
12	Rehabilitation and maintenance of 8 health facilities	4		done	50%

Reference: Health and Nutrition project manger

**Annex 6: Villages surveyed by locality**

Villages	Locality of the study						Total
	Beloeil	Kass	Bahr Alarab	Assalaya	Abu Karinka	Al Salam	
Kalma	41	0	0	0	0	0	41
Al Salam	0	0	0	0	0	56	56
Kass	0	47	0	0	0	0	47
Topfeto	0	13	0	0	0	0	13
Gimeza	0	12	0	0	0	0	12
Sarhan	0	0	20	0	0	0	20
Keyaak Bara	0	0	5	0	0	0	5
Abu Matarig	0	0	72	0	0	0	72
Al wazazeen	0	0	0	6	0	0	6
Sunta	0	0	0	77	0	0	77
Jad Al seed	0	0	0	0	50	0	50
<b>Total</b>	41	72	97	83	50	56	399

**Annex :7 The surveyed household members distributed by sex by age groups by state**

State of the study	No. of male members at 0-5 year	No. of female members at 0-5 year	No. of male members at 6-18 year	No. of female members at 6-18 year	No. of male members at 19-49 year	No. of female members at 19-49 year	No. of male members at >=50 year	No. of female members at >=50 year	Total
East Darfur	127.00	150.00	225.00	233.00	144.00	157.00	25.00	22.00	<b>1083.00</b>
South Darfur	152.00	92.00	243.00	244.00	257.00	291.00	50.00	51.00	<b>1380.00</b>
<b>Total</b>	279.00	242.00	468.00	477.00	401.00	448.00	75.00	73.00	<b>2463.00</b>

Annex :8 Mothers of the survey households received curing after birth

Description		State of the study		Total	
		South Darfur	East Darfur		
Yes	No.	21	44	65	
	%	77.8%	74.6%	75.6%	
No	No.	6	15	21	
	%	22.2%	25.4%	24.4%	
		No.	27	59	86
		%	100.0%	100.0%	100.0%

Annex :9 Who provided assistance to women after giving birth

Description		State of the study		Total	
		South Darfur	East Darfur		
Doctor at home	No.	2	1	3	
	%	8.0%	2.2%	4.3%	
Trained midwife at home	No.	7	26	33	
	%	28.0%	57.8%	47.1%	
Assistant midwife at home	No.	0	3	3	
	%	0.0%	6.7%	4.3%	
Doctor at HC	No.	4	1	5	
	%	16.0%	2.2%	7.1%	
Trained midwife at HC	No.	12	14	26	
	%	48.0%	31.1%	37.1%	
		No.	25	45	70
		%	100.0%	100.0%	100.0%

Annex :10 % of food being taken by children at (6-24) month yesterday

Description	South Darfur	%	East Darfur	%	Total	%
Milk	42	72%	60	100%	102	86%
Tea	14	24%	30	50%	44.00	37%
Grain	30	52%	51	85%	81.00	69%
Vegetable	12	21%	6	10%	18.00	15%
Eggs	4	7%	7	12%	11.00	9%

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Groundnut	23	40%	32	53%	55.00	47%
Fat	2	3%	16	27%	18.00	15%
Fruits	4	7%	0	0%	4.00	3%
Meat	4	7%	19	32%	23.00	21%