

PD - ABF - 007
LEN 80174

**SAVE THE CHILDREN
SUDAN FIELD OFFICE
CHILD SURVIVAL 5
FINAL EVALUATION REPORT**

**Agency for International Development
Grant # AID-CTR-OROO-A-00-9149-00
September 1, 1989 - November 30, 1992**

October 1992

**Save the Children
54 Wilton Road
Westport, CT 06880
(203) 221-4000**

TABLE OF CONTENTS

	page
Project Summary Description	1
Project Sustainability Report	5
Knowledge and Practice Survey Report	28
1992/93 Schedule and Budget	34

APPENDICES

Appendix A:	Knowledge & Practice Questionnaire (English) Knowledge & Practice Questionnaire (Arabic)
Appendix B:	Training Agenda
Appendix C:	List of Participants

CHILD SURVIVAL PROJECT SUMMARY DESCRIPTION

Since October of 1986, Save the Children has implemented a Child Survival project in the Showak subdistrict of Eastern Sudan. The area consists of dry, barren plains along the Atbara River with an average annual rainfall of about 400mm. In the Showak area there are a total of 34 villages and 8 nomadic summer settlements. The total population for both nomadic and settled people is 24,373 (SC enrollment data). The economy of the settled villages is based on cultivation. The project area is isolated and deprived of public health services except for two nurses, one medical assistant and one community health worker.

Also, project activities are located in rural areas of Um Ruwaba District of Sudan, North Kordofan Province, Kordofan Region. The project will cover four of the district's rural councils - Um Ruwaba, Wad Ashana, Um Dam, and Shirkela*. The total population of the District is estimated to be 453,240. When excluding Er Rahad Rural Council and Rahad Town the population is projected to be 341,987 (based on projections from the 1983 Sudan Census). Immunization and ORT will be implemented throughout the four rural councils. Other activities will focus on 74 target villages grouped in five high impact project areas (HIPAs). SC began work in Um Ruwaba in July 1985 because of the severe level of need evident during the drought. As soon as possible SC began rehabilitation and development activities, starting with support of the government EPI programs in the fall of 1985.

The principal causes of infant and child mortality are diarrheal diseases associated with malnutrition. Malaria is the leading cause of anemia. Malnutrition contributes to an increased risk of death due to infectious diseases among young children, particularly those immuno-preventable ones such as measles and whooping cough.

Achieving sustainability is central to the focus of the health project. Therefore, there is an increased emphasis on the health committees - particularly use of the information system, an evaluation of what specific activities might not be sustainable with a decreased emphasis on those, and more emphasis on supporting the Ministry of Health in taking increasing responsibility for the preventive health activities.

Specifically, the proposal set goals of increased coverage rates and improved level of services. In writing the DIP it was felt that consolidating services at present levels with goals of increased community participation in and responsibility for the activities was more appropriate. This orientation led to the increased focus on activities in the HIP areas because of the need for stronger community/health committee development. It also meant that actual growth monitoring and the establishment of ORT demonstration centers would be de-emphasized in favor of more work with women at the household level and the community health agents. Health education and behavior change that they could implement will be emphasized rather than those interventions that take more skill and motivation. The CDD training of women's groups at the household level has been very successful, and we plan to develop and convey nutrition messages/behaviors using a similar structure.

*Rahad Rural Council was until recently being served by another agency. SC is willing to work there if need be.

Project Goal: To reduce infant and child mortality and morbidity caused by immunopreventable diseases, diarrheal diseases, and nutritional deficiencies. To accomplish this in a manner which achieves sustainability and allows for development of replicable models for preventive health care - for both settled and nomadic populations.

The initial step in the implementation and monitoring of project progress was the enrollment of all the settled families in the impact area. Family enrollment was conducted by trained village volunteers using enrollment rosters from which one can identify family number, size and identification information for each individual. This information is checked and updated quarterly and all data has been entered into a computer system for easy analysis. Reports on births, deaths, pregnancies and migration are being collected. From the family enrollment rosters, simple rosters are extracted to be used for targeting high risk people (children, malnourished children, pregnant women) and for monitoring and follow up of interventions. All participants are motivated through direct household contact and modelling of behaviors. Fellow villagers and health committees are also involved in encouraging participation.

The project staff is currently executing all of the field activities in 34 rural villages for the immunization program. Measles, BCG, DPT, polio, and tetanus toxoid vaccinations are provided in a campaign basis - 6 times/year. 48 sites have been selected according to different ethnic groups in the impact area. They are usually covered within 12 days. Daily reporting sheets are submitted to EPI. The MOH is committed to providing a reliable source of vaccines, and SC will be working with villages to take on their own vaccine transport. The health information system provides all the necessary information for monitoring immunization activities. The community trainers will be working with the health committees to increase their responsibility for the monitoring.

The project, consistent with MOH policy, promotes the use of ORS sachets and home available fluids as soon as diarrhea starts. This is being achieved through informal family training by developing mothers' awareness. Referral of prolonged cases is one of the messages given, as is the continued use of food and breast feeding both during and after diarrhea. ORS sachets are being provided free on demand by the MOH at the village level. SC distributes them through the health workers, sheikhs, village health committee members, and selected volunteers. 10,000 sachets were distributed during the last year by the project staff through these outlets.

There seems to be a community willingness to pay for ORS, although the MOH is hesitant to institute such a policy - even to cover transportation costs. The possibility of distributing it through the revolving fund with a slight charge will continue to be explored. Staff believes such a charge would improve the appropriateness of its use.

Project strategy for improving nutritional status is through informal education and nutrition demonstrations using locally available foods. Mothers' ignorance regarding breast feeding and weaning practices is found to be a major cause of malnutrition in children age 6-35 months. Lack of food and food hygiene are also contributing factors. Actual growth monitoring for falterers will be done by the health workers, but trainers and health committees will be involved in the follow up.

While the growth monitoring will no longer be a primary focus of the nutrition program, as long as trainers are working in the villages it will be used as an evaluation tool. Overall malnutrition rate will be used as an indicator.

The mothers will be trained through individual household contacts, women's groups, and nutrition demonstrations. Messages regarding weaning foods, introduction of supplementary foods, food hygiene, and feeding during diarrheal episodes are the main messages to be conveyed. These were determined as a result of the baseline survey done in 1986. Actual practices and behaviors will be further assessed in focus groups in order to refine the nutritional messages to be conveyed.

The project has recently started providing Vitamin A supplements to all children under 3 and to lactating mothers -- 200,000IU for children age 12-36 months, 100,000IU for children age 6-12 months, and 200,000IU for lactating mothers. These are provided every 6 months. The project aims to provide supplemental vitamin A twice a year to 60% of children under 3, and to 80% of breast-feeding mothers within the first 3 months of delivery. Records of vitamin A supplementation are kept on the EPI cards, in the information system, and in the registration books.

It has been too difficult to implement child spacing up to this point due to the sensitivity to this issue. However, with the SC trainers having achieved a level of appreciation and trust within the villages in which they are working, they are now going to begin with a very conservative program. They will encourage healthy children that will be adequately provided for through child spacing. Referral points will be identified for distribution of supplies. This will be done through the same household contacts and women's groups as is currently being done for CDD and nutrition. Agricultural extensionists (men) will be trained to begin bringing child spacing messages to the men.

Since malaria is endemic and there is a definite shortage of medical care or medicine, SC has instituted a chloroquine revolving fund to address the problem. This fund is currently in place in the 4 villages where there are MOH workers. However, in the coming year health committees will be involved with the selection and monitoring of "chloroquine agents" in order that the fund can also be implemented in the remaining villages. A reliable supply for replenishment needs to be maintained, and training in the business aspects such that there are always adequate replacement funds in spite of inflation needs to be carried out.

The project health information system was started with the first stage of the project in conjunction with a baseline survey. All families in the impact area were enrolled. It has since been updated quarterly to assure the accuracy of the records. These records form the basis for all interventions and evaluation. Rosters are used for assessing activity and follow up needs. The information collected through rosters is used to calculate coverage and to determine the rate of target group participation in the various interventions.

The resources used for collecting the information are home-based records of immunization, growth monitoring and home visit cards. Reports of pregnancies, births, deaths, and intervention activities are collected through home visits. Monthly supervisory reports are done for randomly selected households. Quarterly progress assessment is made based on computer printouts of the information system, and fed back to the community. Summary reports with plans are prepared quarterly for the MOH, home office, and donors.

Community trainers have been trained in information collection and its use for planning their activities although their utilization of this information will be expanded in the upcoming project. The 12 MOH hired health workers will be trained in the use of the information system as will 64 village health committee members. The challenge in the

next three years is to make the communities responsible for and appreciate the need for their own information in order to improve their health.

Village health committees have been established in each of the villages in which SC is working. The project is beginning an intensive committee education program to share the information with them and to make them more responsible in the decision making and monitoring process. They will be involved with the implementation process as well as the need identification. It is hoped that this will lead to more ownership of the programs. Such ownership and support will be reflected by the extent to which communities carry out the activities they have agreed to or the programs they value.

Community health trainers who live in the communities and who have gained a level of trust also provide access to information about the community priorities - particularly those of women who are not represented on the committees. As they work with village committees and with the health workers in the communities to implement their own programs, sustainability and a feeling of self reliance develop.

SC has worked closely with the MOH at all levels. Centrally, people in EPI, primary health care, and CDD are well aware of what we are doing. They are supportive of SC's work and particularly interested in the use of the information system. SC has also worked closely with a representative of the local AID mission health unit here in the preparation of the DIP. He is well connected with the MOH (having worked for them for 18 years), has taught community medicine in the Master's program, and was involved with the evaluation. His perspective and understanding of the health system in Sudan have been/are invaluable.

SC exchanges information with other NGO's and UNHCR who are also working in the area. However, they mostly work with refugees.

The chloroquine revolving fund has proved to be an intervention greatly appreciated by the rural population. It indicates villagers are willing to pay for medicines if they are available.

The system of village health committees and MOH appointed community health workers form the basis for long term sustainability of the program. The training and support of village health committees provides the mechanism for communities to take responsibility for and to maintain their own health programs. Even when this project funding runs out, SC will still be working in the area so the possibility of longer term support for the role of these committees is there.

The preventive role of the community health worker will be strongly emphasized during their training. They will come from communities in which SC is working and will be aware of their responsibilities in these areas from the outset. SC will also be working with their supervisor to support their role as teacher and manager in the program. Eventually, the preventative and educational activities should be carried out by the health workers with the support of the health committees.

**CHILD SURVIVAL V FINAL EVALUATION (FY92)
KNOWLEDGE AND PRACTICE SURVEY**

**SAVE THE CHILDREN - SUDAN
August - September 1992**

**Dr. Ahmed Zayan, Primary Health Care Coordinator SCF/HQ
Mrs. Katherine Sunday Awabe, Health Advisor, SCF/Khartoum
Mr. Adam Babiker PHC department, MOH/Khartoum
Dr. Mohamed Kamal, Manager Drought Mitigation Project
SCF/Um Ruwaba**

EXECUTIVE SUMMARY

In the months of August and September 1992, Save The Children carried out a Knowledge and Practice final survey in Um Ruwaba and Showak districts. The survey followed the WHO model of 30 clusters of mothers with children under two years of age. A total of 246 mothers were interviewed. The data entry and analysis were done in EPIINFO 5.1.

The survey found that almost all mothers breast-fed their children for almost two years. 31.3% of the mothers interviewed knew that complementary feeding should start beyond four to six months.

For growth monitoring intervention, 51.1% of the children with growth monitoring cards were weighed at least once in the last four months.

For malaria intervention, 70.6% of the mothers whose children had fever in the last two weeks took them to the general hospital/health center or to the village based chloroquine agent.

For diarrhea, 30% of the mothers whose children had diarrhea in the last two weeks gave ORS packets. 27.6% of all the mothers in the sample declared that they give their child more to drink than usual in case of diarrhea and 46.7% take the child to the hospital or the health center.

In the immunization intervention, the fully immunized rate (12-23 months of age) is 35.5%, with a dropout rate (DPT1- DPT3/DPT1) of 25.2.

31.4% of the mothers interviewed knew that TT vaccination protects the newborn and the mother against tetanus. 76.2% of the mothers with vaccination cards received at least two TT vaccinations.

In the maternal intervention, 50.6% of the mothers sought prenatal care during the first trimester. The Contraceptive Prevalence Rate is 3.25%. 46.7% of the mothers declared they were assisted during their delivery by a trained health worker.

The overall results of the survey are higher than the national rates, wherever it was possible to compare.

INTRODUCTION

A. Background Information

The Republic of Sudan is located in Northern Africa. It has a population of 26 million.

Save the Children is working with communities and government staff to develop working models for Child Survival Programs that survive the tough natural and economic conditions in rural Sudan. SCF began operation by helping accelerate the EPI program in drought stricken, rural Kordofan in the fall of 1985. In October 1986 SCF initiated a full Child Survival program with AID's support. This was followed by the current Child Survival 5 grant, which started on 12/19/89. The program has helped about 550,000 people in the Eastern and Kordofan Regions.

SC supports simple primary health care technologies and trains families and communities in how to gain control over their health through practicing basic preventive health measures.

SC supports the following key interventions:

- Control of Diarrheal Diseases
- Immunization of children and mothers
- Nutrition education/growth monitoring/Vitamin A
- Malaria prophylaxis and treatment
- Traditional birth attendant training
- Child spacing
- School health education

SC builds sustainability by combining the following strategies:

Communities trained and organized to demand improved health practices from themselves (peer pressure) and from the government (political pressure). These communities learn to use a family enrollment/health information system to identify and follow up problems at the village level and to track their progress over time and versus other villages;

Cost effective interventions with local cost recovery for recurring costs, i.e., local funding of vaccine transport, full payment for Chloroquine tablets through a village revolving fund;

Supportive supervision by all levels of the Ministry of Health, particularly central departments dedicated to the key Child Survival interventions and the district medical officer.

The main goal of the project is to reduce child mortality and morbidity levels in a sustainable manner. Through this process, the project aimed to develop replicable models which can be utilized in the Sudan and elsewhere. SCF feels that this project is particularly important as it provided an opportunity to develop effective project activities among nomadic populations--where needs are great and viable development models are few.

B. Intervention Area

The project was implemented in two areas: (1) Showak Sub-district, North Gedaref District, Kassala Province, Eastern State, and (2) Um Ruwaba District, North Kordofan Province, Kordofan State.

Project activities in Showak were implemented in two rural areas. They consist of a dry, barren plane along the Atbara river, with an average rainfall of about 400mm per year. The settled population and nomads in the area totaled about 17,759, living in 33 villages.

Project activities in Um Ruwaba covered four of the district's rural councils. Immunization, ORT and vitamin A activities are implemented throughout the four rural councils. Other activities focused on 74 villages in five high impact areas. The population of the 74 villages is 47,785.

C. Purpose of the Knowledge & Practice Survey

The purpose of the SC/Sudan survey is to provide a final assessment in the intervention area of the knowledge and practice regarding nutrition, malaria, diarrhea diseases control, immunization, maternal care, child spacing, and water and sanitation interventions.

The following information will be provided by the CS V final survey: Coverage rates of children (12-23 months) with BCG, DPT, OPV, and measles vaccine (verified by looking at immunization card), and coverage rate with tetanus toxoid for mothers of children under two (verified by looking at the maternal health card or other documents witnessing the completed vaccination).

The K&P survey will also provide information on mothers' knowledge and practices about the management of diarrheal episodes, immunization, water and sanitation, malaria, maternal health, and birth spacing.

D. Schedule of the Survey

- August 26:** Orientation and finalization of survey
Preparation tasks with FO staff
- August 27:** Review survey questionnaire, finalization
and duplication
- August 28:** Training of supervisors & travel to
Um Ruwaba and Showak
- August 29:** Training of interviewers
- August 30:** Pilot test of questionnaire
Review results of pilot test
- August 31:** Data Collection
- September 1:** Data collection, and entry
- September 2:** Data collection and entry
- September 3:** Data entry
- September 4:** Travel back to Khartoum
- September 5/6:** Data analysis (frequencies and some tables)
Feedback to project staff.
Draft report

METHODOLOGY

A. Questionnaire

The final format for the questionnaire is appendices A and B. It was finalized after extensive discussions with the FO staff and the evaluation team. The aim was to ensure that the questions are tailored to the project's objectives and indicators.

The questionnaire was administered to mothers 15-49 years with a child under 24 months of age. It was first designed by SC HQ/Health Unit based on a standardized questionnaire previously developed by the PVO Child Survival Support project (CSSP), and the objectives of the SC CSV project in Sudan.

The questionnaire includes 43 questions.

Questions 1-2:	Identification
Questions 3-8:	Breast-feeding, nutrition, weaning, and Vitamin A
Questions 9-14:	Child and mother immunization,
Question 15:	Growth monitoring,
Questions 16-25:	Knowledge and practice regarding management of diarrheal disease
Questions 26-35:	Maternal health and child spacing
Questions 36-40:	Water and Sanitation
Questions 41-43:	Malaria knowledge and practice

The questionnaire was written first in English then translated. Further revisions were made in Arabic.

B. Determination of the sample size

The project area consists of two clusters of villages. One is located in the district of Um Ruwaba, and the other in Showak. The total population is 65,577 approximately; of them 47,785 live in Um Ruwaba in 74 villages, and 17,759 lives in Showak in 33 villages. Hence, the total number of villages in the project area is 107.

For the determination of the sample size, the following formula was used:

$$n = z^2 pq/d^2$$

where n = the sample size; z = statistical certainty chosen;
p = coverage rate or level of knowledge; q = (1-p); and d = degree of precision.

The sample size was determined in the following way. The degree of precision (d) was set at 0.1 and the p at 0.5. The resulting minimum sample size was 96. This sample was doubled to compensate for the potential bias of the cluster method. It was finally set at 240 to account for possible non-respondents.

95% confidence limits were calculated for some of rates according to the following formula:

$$p \pm z \sqrt{p \cdot q / n}$$

C. Selection of Sample

The sampling method used was a cluster scheme based on "probability proportionate to size", taking a village as a cluster. The FO had compiled a list of villages of the intervention area with their corresponding population. The sampling interval was calculated by dividing the total population by 30.

$$(47,785 + 17,759) / 30 = 2,186$$

A random number provided the starting point to choose the 30 clusters. The number had to be composed of 4 digits, and smaller than the sampling interval (2,186). 22 villages from Um Ruwaba, and 8 from Showak were identified. The list of those villages is on page 8 and 9.

Eight mothers were interviewed in each cluster. The eight mothers for each cluster were located using the following procedure. Once in the village, the supervisor selected the furthest northeastern house as the first house. Two directions were then identified using a spinning bottle. The second, and third houses will be the nearest in each direction. Subsequent households were the nearest to the previous ones on the same designated two directions.

In the house, the interviewer will first ask about the youngest child and interview his mother if the child is less than 24 months old, and the mother is between 15 to 49 years old. If the mother is not available, the interviewer will give her an appointment for the same day. If she will not come back in the same day, the interviewer skipped the house for the next nearest. If no children under 2 are living in a selected house, the interviewer will go to the next house. If the interviewer cannot get 8 interviews in a village, he/she can complete the cluster in the nearest village.

THE SURVEY

A. Training

The final evaluation team finalized the training schedule in Khartoum. Discussions focused on a review of the training curriculum. Team leaders for each impact area, the PHC coordinator for the FO and the health program manager conducted the training of the interviewers. Training of the supervisors was completed in Khartoum by the HO PHC coordinator. The training schedule (appendix C) lasted three days; 1 for supervisors, 1 for interviewers, and 1 for pilot testing of the questionnaire. The pilot test was done in villages not participating in the survey. Each interviewer and supervisor conducted 3 interviews. This was followed by a discussion to further tailor the way the questionnaire was administered.

The training covered the following topics: the purpose of the survey, the sample size, the questionnaire (rationale for each question), and the data analysis. Discussions and role play were the main training methods. The training and the administration of the questionnaire were conducted in Arabic and English.

B. The Interviews

The interviews lasted two days except for one area in Um Ruwaba (Sidra) that took 4 days. Sidra was inaccessible by car. The interviewing team had to take a raft, and camels, to reach it. There were 16 interviewers and 8 supervisors with a ratio of 1 supervisor to two interviewers. The interviewers were health workers from SC and other local NGO. The supervisors were health professionals or senior staff from the MOH, the CDD program, and SC.

The tasks of the supervisors were the following:

1. Determination of the starting point of each cluster,
2. Verification of the questionnaire in the field,
3. Observation of at least an interview per interviewer per day.

Since the interviewers are SC health workers who are in charge of villages in the intervention area, they were sent to the villages where they did not work to minimize any kind of bias.

C. Method of Data Analysis

The data entry was carried out by secretaries and some of the evaluation team participants on five microcomputers. The data analysis, using EPIINFO 5.1, will be conducted by the survey trainer. The data tabulation generated frequency distributions and cross-tabulations. The survey trainer used every possible opportunity to transfer as much knowledge about the survey methodology as possible, including sampling and the collection and analysis of the data, to FO staff.

SURVEY RESULTS

A. Results of the K & P Survey

Child Survival Project Knowledge & Practice Questionnaire Results Save The Children - Sudan

All questions were addressed to mothers (15-49 years old) with a child under two.

Interview period from 8/30/92 to 9/2/92

Supervisors and interviewers name: Annex

Impact areas: 1. Um Ruwaba 2. Showak

Villages:

Um Ruwaba

1. Abou Karin Seliman
2. Abou Karin El Doky
3. El Kamboya
4. Al Damoussi
5. Om Begini
6. Al Kamboure El Rakhi
7. Zidan
8. Bit Gouda
9. El harfa beni Omran
10. Om Ash El Souk
11. Om Ash Gerigima
12. Kandoukourou
13. Kemla
14. Awlad Dalboum
15. Om Dameer
16. Tamaleka
17. Makhezina
18. Om Barakat
19. Tandara El Souk
20. Tandara Bade
21. Habena
22. Om Genah

- Showak
23. El Bashri
 24. Maribiya
 25. Haggat El Beid
 26. Shout
 27. Sherif hassab Alla
 28. Hameet
 29. El Gabaraat
 30. Maktah El Souk
- Um Ruwaba
(Alternatives)
31. Abou Galba El Kabir
 32. El Obeid Faragat
 33. El obeid Akarma
 34. El Assal
 35. El Kobour El Hadi
 36. El Bahria
 37. Dar El salam

1. Mothers age groups (interval of 5 years)

15-20	15.45%
21-25	33.33%
26-30	26.02%
31-35	17.01%
36-40	6.50%
41-45	1.63%
46-49	0.00%

2. Children age groups (interval of 3 months)

0-3	59	24.0%
4-6	40	16.3%
7-9	33	13.4%
10-12	28	11.4%
13-15	19	7.7%
16-18	36	14.6%
19-21	21	8.5%
22-24	10	4.1%

Breastfeeding/Nutrition

3. Are you breast-feeding (name of child)?

1. yes 88.6%
2. no 11.4%

	0-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
Yes	96.6	100.0	93.9	92.9	94.7	80.6	47.6	70.0
No	3.4		6.1	7.1	5.3	19.4	52.4	30.0

4. Have you ever breast-fed (name of child)?

1. yes 89.7%
2. no 10.3%

5.	a.	Are you giving (name of child) water (or herbal teas)?							
		0-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
Yes		9.7	82.5	100.0	92.9	94.7	94.4	85.7	40.0
No		20.3	17.5		7.1	5.3	5.6	14.3	60.0
	b.	Are you giving (name of child) bottle milk?							
		0-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
Yes		23.7	27.5	24.2	21.4	15.8	11.1	19.0	100.0
No		76.3	72.5	75.8	78.6	84.2	88.9	81.0	
	c.	Are you giving (name of child) semisolid foods such as gruels, porridge or semolina?							
		0-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
Yes		22.0	52.5	66.7	82.1	100.0	94.4	85.7	60.0
No		78.0	47.5	33.3	17.9		5.6	14.3	40.0
	d.	Are you giving (name of child) fruits or juices?							
		0-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
Yes		18.6	45.0	69.7	78.6	63.2	80.6	81.0	60.0
No		81.4	55.0	30.3	21.4	36.8	19.4	19.0	40.0
	e.	Are you giving (name of child) squash, mango or papaya?							
		0-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
Yes		16.9	32.5	54.5	60.7	73.7	80.6	71.4	60.0
No		83.1	67.5	45.5	39.3	26.3	19.4	28.64	40.0
	f.	Are you giving (name of child) leafy green vegetables?							
		0-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
Yes		8.5	27.5	51.5	57.1	84.2	72.2	81.0	80.1
No		91.5	72.5	48.5	42.9	15.8	27.8	19.0	20.0
	g.	Are you giving (name of child) meat or fish?							
		0-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
Yes		18.6	60.0	87.9	96.4	94.7	97.2	95.2	90.0
No		81.4	40.0	12.1	3.6	5.3	2.8	4.8	10.0
	h.	Are you giving (name of child) lentils, peanuts, or beans?							
		0-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
Yes		18.6	50.0	90.9	96.4	100.0	88.9	100.0	100.0
No		81.4	50.0	9.1	3.6		11.1		

i. Are you giving (name of child) eggs or yogurt?

	0-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
Yes	18.6	52.5	78.8	89.3	78.9	80.6	85.7	90.0
No	81.4	47.5	21.2	10.7	21.1	19.4	14.3	10.0

j. Are you adding honey or sugar to (name of child)'s meals?

	0-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
Yes	35.6	72.5	90.9	100.0	100.0	94.4	95.2	90.0
No	64.4	27.5	9.1			5.6	4.8	10.0

k. Are you adding fat (lard) or oil to (name of child)'s meals?

	0-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
Yes	23.7	67.5	93.9	100.0	94.7	83.9	100.0	80.0
No	76.3	32.5	6.1		5.3	11.1		20.0

l. Are you adding iodized salt (local name) to (name of child)'s meals?

	0-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
Yes	28.8	72.5	93.9	100.0	94.7	97.2	100.0	100.0
No	71.2	27.5	6.1		5.3	2.8		

m. Are you adding leafy green vegetables, such as spinach, to (name of child)'s food?

	0-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
Yes	13.6	42.5	66.7	85.7	84.2	77.8	100.0	80.0
No	86.4	57.5	33.3	14.3	15.8	22.2		20.0

6. When should a mother start adding foods to breastfeeding?

1. start adding between 4 and 6 months	21.1%
2. start adding earlier than 4 months	65.0%
3. start adding 6 months or later	10.2%
4. doesn't know	3.7%

7. What should those additional foods to breastfeeding be? (multiple answers possible; record all answers)

a. give food rich in Carbohydrate	82.1%
b. give food rich in Protein	44.7%
c. give food rich in Vitamin A	5.3%
d. other (specify)	39.4%

8. Which foods contain vitamin A to prevent "night blindness"?

a. doesn't know or other	26.8%
b. green leafy vegetables	26.8%
c. yellow type fruits	8.5%
d. meat/fish	40.2%
e. breast milk	27.2%
f. egg yolks	17.9%

Immunizations

9. Has (name of child) ever received any immunizations?
- | | |
|-------------------------|-------|
| 1. yes | 67.9% |
| 2. no & 3. doesn't know | 32.1% |
10. At what age should (name of child) receive measles vaccine?
- | | |
|------------------|-------|
| 1. 1 months | 1.2% |
| 2. 2 months | 0.8% |
| 3. 3 months | 4.9% |
| 4. 4 months | 1.6% |
| 5. 5 months | 2.0% |
| 6. 6 months | 2.4% |
| 7. 7 months | 5.7% |
| 8. 8 months | 1.6% |
| 9. 9 months | 32.1% |
| 10. 10 months | 1.6% |
| 11. 11 months | 0.4% |
| 12. 12 months | 2.4% |
| 13. doesn't know | 39.8% |
| 14. Other | 3.4% |
11. Can you tell me the main reason why pregnant women need to be vaccinated with tetanus toxoid vaccine?
- | | |
|---------------------------------------|-------|
| 1. to protect both mother/newborn | 31.4% |
| 2. to protect <u>only</u> the woman | 31.4% |
| 3. to protect <u>only</u> the newborn | 5.7% |
| 4. doesn't know or other | 31.4% |
12. How many tetanus toxoid injections does a pregnant woman need to protect the newborn infant from tetanus?
- | | |
|------------------|-------|
| 1. one | 16.7% |
| 2. two | 31.3% |
| 3. more than two | 38.6% |
| 4. none | 1.6% |
| 5. doesn't know | 11.8% |
13. Do you have an immunization card for (name of child)?
- | | |
|------------------|-------|
| 1. yes | 55.3% |
| 2. lost it | 11.0% |
| 3. never had one | 33.7% |
14. Look at the vaccination card and record the dates of all the immunizations in the space below
- | | | | | | | |
|-----|-------|----------|----------|---------|-------|---------|
| BCG | 74.2% | (100.0%) | DPT | 1st | 72.0% | (97.2%) |
| | | | | 2nd | 61.3% | (83.1%) |
| | | | | 3rd | 53.8% | (73.2%) |
| OPV | 1st | 74.2% | (100.0%) | | | |
| | 2nd | 65.6% | (88.7%) | | | |
| | 3rd | 60.2% | (81.7%) | MEASLES | 38.7% | (50.7%) |

Drop out rates	25.2%	(24.7%)
Fully immunized	35.5%	

() are the %s among only the children who have immunization cards

Growth Monitoring

15. Look at the growth monitoring card of the child, and record whether the child been weighted in the last four months?

1. yes	51.1%
2. no	48.9%

Diarrheal Diseases

16. Has (name of child) had diarrhea during last two weeks?

1. yes	44.3%
2. no	54.1%
3. doesn't know	1.6%

17. During (name of child)'s diarrhea did you breast-feed (read the choices to the mother).

1. more than usual?	15.6%
2. same as usual?	54.1%
3. less than usual?	18.3%
4. stopped completely?	3.7%
5. child does not breastfeed	8.3%

18. Did you provide (name of child) with fluids other than breast milk (read the choices to the mother)

1. more than usual?	24.8%
2. same as usual?	30.3%
3. less than usual?	20.2%
4. stopped completely?	3.7%
5. exclusive breastfeeding	21.1%

19. Did you provide (name of child) with solid/semisolid foods (read the choices to the mother)

1. more than usual?	5.5%
2. same as usual?	20.9%
3. less than usual?	36.4%
4. stopped completely?	15.5%
5. exclusive breastfeeding	21.8%

20. When (name of child) had diarrhea, what treatments, if any, did you use?

a. nothing	15.5%
b. ORS sachet	30.0%
c. sugar-salt solution	4.5%
d. cereal based ORT	13.6%
e. infusions or other fluids	1.8%

- | | | |
|--|------------------------------------------|-------|
| | f. anti-diarrhea medicine or antibiotics | 32.7% |
| | g. other specify | 29.1% |
21. When (name of child) had diarrhea, did you seek advice or treatment for the diarrhea?
- | | | |
|----|-----|-------|
| 1. | yes | 50.0% |
| 2. | no | 50.0% |
22. From whom did you seek advice or treatment for the diarrhea of (name of child)?
- | | | |
|----|-----------------------------|-------|
| a. | general hospital | 16.7% |
| b. | health center/clinic/post | 29.1% |
| c. | private clinic/doctor | 1.8% |
| d. | pharmacy | 5.5% |
| e. | Community trainer | 30.9% |
| f. | traditional healer | 3.6% |
| g. | traditional birth attendant | 1.8% |
| h. | relatives & friends | 5.5% |
| i. | other (specify) | 5.5% |
| j. | village health worker | 5.5% |
23. What signs/symptoms would cause you to seek advice or treatment for (name of the child)'s diarrhea? (multiple answers possible; record all answers)
- | | | |
|----|--------------------------------------------------------------|-------|
| a. | doesn't know | 13.8% |
| b. | vomiting | 19.5% |
| c. | fever | 31.7% |
| d. | dry mouth, sunken eyes, decreased urine output (dehydration) | 12.6% |
| e. | diarrhea of prolonged duration (at least 14 days) | 22.4% |
| f. | blood in stool | 3.3% |
| g. | loss of appetite | 7.7% |
| h. | weakness or tiredness | 22.8% |
| i. | other (specify) | 24.0% |
24. What important actions you should take if (name of child) has diarrhea?
- | | | |
|----|----------------------------------------|-------|
| a. | doesn't know | 7.3% |
| b. | take child to hospital/health center | 46.7% |
| c. | give child more to drink than usual | 27.6% |
| d. | give child smaller more frequent feeds | 4.5% |
| e. | withhold fluids | 0.4% |
| f. | withhold foods | 1.2% |
| g. | other (specify) | 37.4% |
25. What are important actions a mother should take when a child is recovering from diarrhea?
- | | | |
|----|--------------------------------------------|-------|
| a. | doesn't know | 5.7% |
| b. | give the child smaller more frequent feeds | 33.1% |
| c. | give the child more foods than usual | 17.1% |
| d. | give foods with high caloric content | 28.6% |
| e. | other (specify) | 30.6% |

Maternal Care

26. Do you have a maternal vaccination health card?
- | | |
|------------|-------|
| 1. yes | 17.1% |
| 2. lost it | 24.0% |
| 3. no | 58.9% |
27. Look at the maternal vaccination/prenatal card and record the number of TT vaccinations:
- | | |
|----------------|-------|
| 1. one | 21.4% |
| 2. two or more | 76.2% |
| 3. none | 2.4% |
28. How soon after a woman knows she is pregnant should she see a health professional (physician, nurse, midwife)?
- | | |
|------------------------------------|-------|
| 1. first trimester, 1-3 months | 50.6% |
| 2. middle of pregnancy, 4-6 months | 32.5% |
| 3. last trimester, 7-9 months | 6.6% |
| 4. no need to see health worker | 3.7% |
| 5. doesn't know | 6.6% |
29. What foods are good for a pregnant woman to eat to prevent pregnancy anemia?
- | | |
|---------------------------------------------|-------|
| a. doesn't know | 12.2% |
| b. proteins rich in iron (eggs, fish, meat) | 69.9% |
| c. leafy green vegetables, rich in iron | 36.6% |
| d. other4 | 8.4% |
30. When you were pregnant with (name of child) did you visit any health site (dispensary/health center, aid post) for pregnancy/prenatal care?
- | | |
|--------|-----|
| 1. yes | 74% |
| 2. no | 26% |
31. At delivery of (name of child), who tied and cut the cord?
- | | |
|------------------------------------------------------|-------|
| 1. yourself | .8% |
| 2. family member | 2.8% |
| 3. traditional birth attendant | 47.2% |
| 4. health professional (physician, nurse or midwife) | 46.7% |
| 5. other (specify) | 2.0% |
| 6. doesn't know | 0.4% |
32. Are you pregnant now?
- | | |
|--------|-------|
| 1. yes | 9.3% |
| 2. no | 90.7% |

33. Do you want to have another child in the next two years?
- | | |
|-----------------|-------|
| 1. yes | 29.5% |
| 2. no | 47.3% |
| 3. doesn't know | 23.2% |
34. Are you currently using any method to avoid/postpone getting pregnant?
- | | |
|--------|-------|
| 1. yes | 5.1% |
| 2. no | 94.9% |
35. What is the main method you or your husband are using now to avoid/postpone getting pregnant?
- | | |
|-----------------------------|-------|
| 1. tubal ligation/vasectomy | 0.0% |
| 2. injections | 20.0% |
| 3. pill | 20.0% |
| 4. IUD | 0.0% |
| 5. barrier method/diaphragm | 0.0% |
| 6. condom | 0.0% |
| 7. foam/gel | 0.0% |
| 8. exclusive breast-feeding | 20.0% |
| 9. abstinence | 0.0% |
| 10. rhythm | 40.0% |
| 11. other | 0.0% |

Water/Sanitation

36. What is the major source of drinking water in your household?
- | | |
|--------------------|-------|
| 1. unimproved well | 15.9% |
| 2. improved well | 30.2% |
| 3. pipe | 0.8% |
| 4. pump | 4.9% |
| 5. river | 11.8% |
| 6. spring | 6.1% |
| 7. rain water | 29.8% |
| 8. other (specify) | 0.4% |
37. Do you treat water before use in drinking?
- | | |
|-----------------|-------|
| 1. yes | 10.6% |
| 2. sometimes | 3.3% |
| 3. no | 83.3% |
| 4. doesn't know | 2.8% |
38. How do you treat water before use in drinking?
- | | |
|--------------------|-------|
| 1. boil water | 7.1% |
| 2. other (specify) | 92.9% |
39. Where do you store drinking water in your house? (multiple answers possible; record all answers)
- | | |
|---------------------------------------|-------|
| a. storage in a close water jar (Zir) | 81.7% |
| b. storage in a can (open) | 1.2% |
| c. storage in a Jerken | 45.5% |
| d. storage in a water jar (Kerba) | 5.7% |
| e. other (specify) | 5.3% |

40. What kind of toilet facility does your household have ?
- | | |
|---------------------|-------|
| 1. improved latrine | 0.0% |
| 2. pit | 9.0% |
| 3. none | 88.2% |
| 4. other (specify) | 2.9% |

Malaria

41. What can you do to prevent your child from getting malaria? (multiple answers possible; record each answer)
- | | |
|--------------------------------------|-------|
| a. do nothing | 35.9% |
| b. give chloroquine in case of fever | 6.9% |
| c. mosquito net | 33.7% |
| d. destruction of breeding grounds | 2.0% |
| e. other (specify) | 28.5% |
42. Did (name of the child) have malaria in the last two weeks?
- | | |
|----------------|-------|
| 1. yes | 20.7% |
| 2. no | 78.9% |
| 3. do not know | 0.4% |
43. When (name of the child) had malaria, from whom did you seek advice or treatment? (multiple answers possible; record each answer)
- | | |
|---------------------------------------------------------|-------|
| a. take the child to the general hospital/health center | 56.9% |
| b. give the child to Chloroquine agent | 13.7% |
| c. other (specify) | 7.8% |
| d. do not know | |

B. Summary of the K & P Survey

Age Distribution

In Sudan's rural areas, it is difficult to determine the exact age of many individuals. Save the Children in Sudan maintains a complete enrollment family registration system that includes vital events data such as birth, death, and migration. It also includes data on immunization, growth monitoring, training of mothers on ORT use, pregnancy, prenatal services, and family planning. To conform with the guidelines of the standardized survey, the evaluation team was not able to use that system. If there is no official document showing the age of the child or the mother, the interviewers were trained to: a) determine whether the child is past first or second birthday, and b) using a local calendar (harvesting period, local holidays, etc.), to determine the month and the day of birth.

The following is the age distribution of the population interviewed.

I. Children's age groups (interval of 3 months)

AGE		Freq	Percent	Cum. Percent
0-3	months	59	24.0%	24.0%
4-6	months	40	16.3%	40.3%
7-9	months	33	13.4%	53.7%
10-12	months	28	11.4%	65.1%
13-15	months	19	7.7%	72.8%
16-18	months	36	14.6%	87.4%
19-21	months	21	8.5%	95.9%
22-24	months	10	4.1%	100.0%
Total		246	100.0%	100.0%

There were 160 (65.1%) children under 12 months

II. Women's age groups (interval of 5 years)

AGE		Freq	Percent	Cum. Percent
15-20	Years	38	15.4%	15.4%
21-25	Years	82	33.3%	48.8%
26-30	Years	64	26.0%	74.8%
31-35	Years	42	17.0%	91.9%
36-40	Years	16	6.5%	98.4%
41-45	Years	4	1.6%	100.0%
46-49	Years	0	0.0%	100.0%
Total		246	100.0%	100.0%

Note: 91.9% of the mothers were between the ages of 15 and 35.

Breastfeeding/Nutrition

96.6% of the mothers interviewed declared that they breastfed their children. In the age group 7-9 months 87.9%, 90.9% and 90.9% of the mothers declared that they give food rich in animal protein, vegetable protein, and dairy products respectively. 93.9% of the mothers knew that they should add oil to the porridge. 31.3% of mothers knew that they should give food in addition to breastmilk beyond four to six months; of these 10.2% said they start adding food six months or later. 82.1% said that supplementary feeding should be rich in carbohydrates, and 44.7% rich in protein. 73.2% were able to list one food rich in vitamin A.

Immunization

32.1% of the mothers knew that nine months is the correct age to vaccinate the child against measles. 31.4% of the mothers knew that the main reason for a pregnant woman to be immunized with tetanus toxoid vaccine is to protect the mother and the newborn against tetanus. Almost 69.9% of the mothers said two or more tetanus toxoid injections are needed to protect the mother and the newborn from tetanus; 38.6% said more than two tetanus toxoid injections, and 31.3 of the mothers said two tetanus injections.

Among all the children 12-23 months old, 74.2%, 72.0%, 61.3%, 53.8%, 38.7% were immunized with BCG, DPT1, DPT2, DPT3, and measles respectively, according to the immunization card. Among the ones with immunization cards, 100%, 97.2%, 83.1%, 73.2%, and 50.7% were immunized with BCG, DPT1, DPT2, DPT3, and measles. 35.5% of all the children 12-23 months old the same children were fully immunized. 0% among the ones with immunization cards. The dropout rate (DPT1-DPT3/DRP1) is 25.2%.

Growth Monitoring

55.3% of the children had a growth monitoring card. Among these children 51.1% were weighed at least once in the last three months.

Diarrheal Diseases

44.3% of the children had diarrhea in the two weeks preceding the survey. Respectively 69.7%, 55.1%, 26.4% of the mothers whose children had diarrhea in the last two weeks declared they breastfed their child same or more than usual, gave same or more fluid than usual, gave same or more food than usual. Only 3.7% of the mothers stopped giving breastmilk and/or fluids and 15.5% stopped giving food during diarrhea. 84.5% of the mothers gave some form of treatment to their child. 1.8% gave infusion or other fluids, 4.5% gave sugar salt solution, 13.6% gave cereal based ORT, 30.0% used ORS packages, and 32.7% gave anti diarrheal medicine or antibiotics. This reflects government policy stating that only ORS packages can be promoted and used in the treatment of diarrhea. 50% of the women sought advice or treatment for the diarrhea; 47.6% at the health center, 30.9% from the village health worker; 3.6% at the traditional healer, 1.8% at the traditional birth attendant, and 5.5% at parents and friends.

Concerning the knowledge of diarrhea symptoms 13.8% of the mothers did not know any of them; 12.6% knew dry mouth, sunken eyes, decreased urine as important symptoms of children's dehydration, 7.7% loss of appetite, 19.5% vomiting, 22.4% diarrhea of prolonged duration, 22.8% weakness or tiredness, and 31.7% fever.

As for knowledge regarding important actions a mother should take if the child has diarrhea, 7.3% did not know. 4.5% knew to give the child smaller, more frequent feeds, 27.6% would give the child more to drink than usual, 46.7% would take the child to the hospital/health center, and 37.4% would take other actions. As for the action to take when a child is recovering from diarrhea, 17.1% of the mothers declared they would give more foods than usual, and 33.1% would give the child smaller more frequent feeds.

Maternal Care

17.1% of the mothers had a vaccination card, and 24% had one but lost it. Of the mothers with a vaccination card, 76.2% had two or more TT vaccinations.

89.7% of the mothers interviewed knew that they should see a health worker during their pregnancy. 50.6% said the first visit should be during the first trimester and 32.5% during the second trimester. 69.9% of the mothers declared that a pregnant woman should eat food rich in iron and protein (eggs, fish, meat). 36.6% of the mothers knew that a pregnant woman should eat leafy green vegetables. 46.7% of the women declared they were assisted by a health professional including trained traditional birth attendant during their delivery. 46.7% were assisted by the village birth attendant.

Concerning family planning, 47.3% of the mothers interviewed (excluding the pregnant women) declared they did not want a child in the next two years. Among these women 5.1% are using a contraceptive method. Breastfeeding and safe periods are the most common methods used. Contraceptive prevalence rate is 3.25%.

Water and Sanitation

29.8% of the population use rain water as the main source of drinking water; 30.2% use improved wells, 15.9% use unimproved wells, and 11.8% use the river. 10.6% treat water before use, and 81.7% store water in closed containers. 9% use the pit as the main toilet facilities.

Malaria

20.7% of the children had fever in the last two weeks. 13.7% took the child to the chloroquine agent, and 56.9% went to the general hospital/health center.

Among all the mothers in the sample, 35.9% would not take any action when their child has fever. 6.9% declared that they would use Chloroquine, and 33.7% use mosquito net.

C. Comparison of Final Survey Results with National Results

It is very interesting to compare the overall results of the survey in both impact areas to the national rates, where possible.

The national percentages for immunization are lower than for SC impact areas: the BCG is 65.76% nationally, 74.2% in SC areas; DPT1 - 67.05% nationally, 72% in SC areas; DPT2 - 63.57% nationally, 61.03% in SC impact areas; DPT3 - 62.47% nationally, 53.8% in SC impact areas. Those figures, however, were derived from the mass immunization campaign that was conducted in 1989-1991. Project staff expect that current coverage rates are much lower.

Concerning TT vaccination, 13.8% of the women nationally received 2 TT vaccinations, whereas in SC areas 76.2% of the women received more two TT vaccinations.

**SAVE THE CHILDREN FEDERATION/USA
SUDAN FIELD OFFICE
CHILD SURVIVAL V END OF PROJECT SUSTAINABILITY REPORT**

Introduction

SC started work in two rural areas of Sudan in 1985: Showak Rural Council in Gedaref Province, Eastern State and Um Ruwaba Province in Kordofan State. Both areas are in marginal climatic and agricultural zones severely affected by recurrent droughts and other natural as well as man-made disasters (civil war), including refugee influx from four of its eight neighboring countries. These adverse conditions have perpetuated the country's economic and political instability. In the impact areas these conditions have been worsened by the lack of basic development interventions and human amenities, creating a very high demand for these services.

Responding to Sudan Government's call to help alleviate human suffering from the impact of the above mentioned conditions, SC started with curative health among Eritrean Refugees in two settlements in Showak and emergency food distribution among drought victims in Um Ruwaba province. Soon after curbing the emergency situation, work shifted to rehabilitation and longer term development activities in both areas, expanding to 34 Sudanese villages in Showak and consolidating activities in 74 villages in Um Ruwaba with the exception of immunization activities, which continued to cover the whole province. In subsequent years, work has continued to shift emphasis between relief, rehabilitation and development according to the impact area's particular climatic and other conditions during the year.

Primary Health Care has been a basic component of all SC/Sudan's programs and was among the first long-term development activities to be established in both impact areas with funds from two USAID grants: CSII and CSV. The CSII grant lasted from August 1986 to July 1989, while the CSV grant lasted from December 1989 to August 1992. It is worth mentioning that the CSV grant basically continued the project stated under the CSII grant with some minor changes in project design.

SC/Sudan's approach in implementing the CS projects is community based, with the goal of promoting the survival and development of children and women by improving their health and nutritional status in a manner that can be sustained and replicated. This report presents the answers to the questions on SC/Sudan's efforts to promote sustainability of effective child survival interventions. In order to provide a logical sequence, the questions have been rearranged to follow the pattern A, C, F, B, G, I, D, H, J, E, K.

A. Sustainability Status

A1. AID funding for Child Survival activities in Sudan ends at two stages. The first stage is when SC is phasing over most of its successful CS interventions to the communities and MOH personnel. The second is when SC is planning to and has started replicating some of these interventions in new villages in the same impact areas. It is worth mentioning that AID funding for the CS activities has acquired a no-cost

extension for 3 months from August 31 to November 30, 1992. A funding proposal has been completed to continue this expansion.

A2. SC does not plan to cease CS activities. Rather, as mentioned above, the plan is to expand to new areas while continuing the gradual phaseover and monitoring in the present areas of operation.

A3. Most major project responsibilities and control were initially carried out by SC CS project staff, with an exception of EPI activities in Um Ruwaba which were carried out by the MOH EPI department with SC providing logistic support and mobilizing communities to participate in immunization sessions. Phaseover to local institutions has been a very gradual process. This has been done through development of local capacity by mobilizing and training members of the community and establishment of VHCs to take increasing responsibility and control over their health program. SC has also focused on strengthening MOH capacity to provide the necessary supervisory, technical and other management support to the VHCs and the whole community based health program. The formation of VHCs and delegation of more responsibility to them through an appropriate educational approach created an increasing sense of confidence among the communities about their capability to address some of their own health problems. With this confidence among communities, SC project staff gradually increased their role as facilitators, that of the communities as implementors and that of the MOH as supervisor and technical supporter. SC is thus gradually and eventually reducing its physical presence in the villages with the hope that most of the effective interventions will ultimately be continued to be implemented by the VHCs and the MOH CHWs who are stationed in the villages.

C. Sustainability Plan

C1. List of project staff interviewed:

C2. Project plan for sustainability involves four different levels: community, local government authorities, state and national levels. SC believes that community involvement is the stepping stone and the pillar for project sustainability. At this level, the project plan consisted of establishment of a VHC in each of the project villages consisting of village leaders or influential members of the community. Women leaders, TBAs and other influential women were to be represented in these communities. These committees were to be trained to take full responsibility over their program in close collaboration with local government authorities and MOH departments.

At the local government authority level, the project plan consisted of fully involving these authorities through meetings and other collaborative activities at all stages of the project implementation. In addition, SC planned to strengthen local MOH capacity through training of CHWs and increasing the use of available health facilities.

At the state level, the project plan was to liaise and work in close collaboration with the state health authorities and to support the implementation of policies of the state government. New project initiatives and plans were to be approved and supported by the state health authorities. The state representative of health (in this case the director general or his representative) was to be fully involved in the planning, implementation and monitoring of project activities. SC was to report regularly to this office on the progress of work and to respond to issues as they are raised by state government.

At the national level, the project plan consisted mainly of liaison and coordination of health activities. Up to date reporting of project activities was to be maintained at this

level. SC was to work hard at this level to encourage policies that favor the PHC community based approach.

C3. Sustainability-promoting activities actually carried out over the lifetime of the project can also be discussed according to the four levels identified above. At the community level, the establishment and training of VHCs was among the first activities to be carried out. In Um Ruwaba, the VHCs have women representatives while in Showak where the community's social structures do not allow for easy mixing, female committees have been established alongside the all-male VHCs.

Through intensive education and training, VHCs are fully involved in the decision-making process, implementation and monitoring of their project in order to develop the sense of ownership. To increase the effectiveness of the VHCs work, community initiative is strengthened through social marketing and other educational approaches to impart knowledge and skills, the community's power base.

SC has also supported the establishment of community based health infrastructure through supporting the training of MOH CHWs to be based in the villages. In Showak, 8 PHC units have been constructed and each of the 8 CHWs stationed in each unit has been provided with a bicycle to ease transportation. The bicycles will be maintained through community contributions. In addition, chloroquine revolving funds have been established in both impact areas and chloroquine agents as well as the other members of the community intensively trained in the treatment of malaria and management of the revolving funds.

A sound health information system that can be used and maintained by the communities as well as MOH and other concerned institutions has been established in Showak and is being replicated in Um Ruwaba for keeping a village level family census and vital events as well as for recording project interventions for planning and monitoring purposes.

At the local government authorities level, SC has worked in close collaboration with and involved various authorities in the various stages of the project implementation. In Showak, the construction of the PHC units has been done with contributions from the rural council authorities, the communities and SC. These authorities, along with relevant government ministry departments in the area, are involved in most decision making processes, implementation and monitoring of project activities. In Um Ruwaba SC has participated in Provincial Steering Committee and Technical Committee meetings. These committees are formed from various departments of Provincial Administration, Ministry of Education, Department of Religious Affairs and all the Ministry of Health Units. SC CS project manager is a member of these committees. The two committees are responsible for planning, implementation and monitoring of CS activities.

At the state level, the state PHC committee meets on a monthly basis to discuss plans and strategies for strengthening PHC activities as well as to resolve problems and constraints hindering progress. All SC health project proposals are scrutinized by the state director of health whose comments and additions are then included in the proposal. The state health authorities in Um Ruwaba and the provincial authorities in Showak have participated fully in monitoring project activities throughout the lifetime of the project. Problems hindering SC project activities are discussed at this level. The EPI cold chain system and medical stores which are well established at this level provide support to the SC project through the provincial authorities.

At the national level, SC has participated in workshops, coordination meetings and other technical committee meetings in order to adjust its program according to policies that are laid down at this level. Reporting of project activities and exchange of information has also been maintained with the relevant departments at the national level.

C4. Most of the sustainability plans have been carried out satisfactorily. The most remarkable of these has been the establishment of strong VHCs who now have the confidence to carry out most CS interventions as soon as SC withdraws. Most of these committees now pick up their own vaccines. Training of CHWs has increased accessibility to health services and provided a government back-up system for the community based health infrastructure. The chloroquine revolving funds are another major success in sustainable control of malaria. Community pharmacies have been established from which the communities replenish their chloroquine stock. Continued replenishment of stock is a sign of the community's willingness to pay for services. Other successful activities include the support given by SC in the establishment of central cold chain, ORT corner, community pharmacy and a midwifery school in UR town, and the training of TBAs in Showak.

An area of concern is the failure to maintain a regular supply of ORS and other medical supplies and lack of a strong supervisory and technical support to CHWs, VHCs and other village level workers due to the general logistic problems facing the whole Sudanese government.

C5. The MOH made the financial commitment to pay the salaries of CHWs working in the impact areas, whose training was supported by SC. All trained CHWs in the area (26 in UR and 8 in Showak) are now employees of the MOH.

C6. The success of the MOH in keeping its commitment can be attributed to SC's effective and successful efforts in implementing activities that the MOH could not at the moment be able to implement or sustain due to the adverse conditions affecting the whole country in general and these impact areas in particular.

F. Ability and Willingness of Counterpart Institutions to Sustain Activities

F1. List of all persons interviewed:

F2. All the CS interventions are within the framework of the PHC department of the MOH. Therefore, activities have been implemented in coordination with the MOH and local authorities, as mentioned above. While SC has played the role of catalyst and facilitator, the communities have increasingly taken over the role of implementor and the MOH has increasingly strengthened its role as supervisor and technical supporter. These linkages have involved financial exchange in the sense that SC has given financial support for the training of CHWs, the MOH has made the financial commitment to pay the salaries of the CHWs, local council authorities (in Showak) and communities have made financial contributions towards the construction of PHC units.

F3. In addition to local community organizations who should play a lead role in sustaining project activities, other institutions, both governmental and non-governmental, are expected to play key roles in the sustainability process. These include the local government administrative authorities, Ministry of Health authorities at the local, state and national levels, other related government departments such as the Ministry of Education, Ministry of Religious Affairs, and local non-governmental organizations such as the Sudanese Red Crescent, the Sudan Council of Churches, etc.

F4. Child Survival activities perceived by MOH personnel and key counterpart institutions as being effective include EPI, the chloroquine revolving fund, diarrheal disease control, health infrastructure building and the community based Health Information System.

F5. Key counterpart personnel trained by SC are the MOH staff who include CHWs, VMWs, and Nurses. These personnel are expected to continue the training and monitoring of the village level PHC workers who include VHCs, health and chloroquine agents, TBAs, mothers and other members of the community after SC withdraws.

B. Estimated Recurrent Costs and Projected Revenue

B1. Key CS activities perceived by project management as most effective include EPI, ORT, Chloroquine Revolving Funds, environmental sanitation and TBA training for maternal health. Although major nutrition and growth promotion activities were de-emphasized during the midterm evaluation of the project in 1991, the growth monitoring activities which have continued since need to be sustained for surveillance.

B2. Expenditures that will continue to be needed for continuing CS activities for at least three years after AID funding ends include the following:

a. Logistical support for EPI services, distribution of medical supplies and for supervision and other management support;

b. Training support for MOH personnel involved in continuing the activities in the area.

B3. Total amount of money needed to sustain project benefits for three years after CS funding ends is estimated as follows:

**Auto operation: \$3600 for one vehicle/year
3 years x 3600 = \$10,800**

**ORS: transportation for 3 years
2000 x 3 = \$6,000**

**Chloroquine tablets:
200 tins/1000 tabs revolving
200 x 20 = \$4,000**

**Office supplies for Govt. of Sudan counterparts:
\$1,000**

B4. Yes, costs estimated according to current market prices.

B5. GOS MOH is designing a sustainable system of transporting supplies either through community involvement or MOH commitment.

B.6 The major costs that cannot be sustained at present are the equipment used by the project, i.e., vehicles and their maintenance.

B.7 Success of activities depends entirely on availability of reliable monitoring system which needs transportation facilities i.e. vehicles during the life span of the project. These vehicles depreciate usually by the end of the project, which deprives the counterparts, who are supposed to carry out the project activities in a sustainable manner, of one of the most important assets. Though the MOH health workers were trained in the CS activities delivery system there is still a feeling that these activities are foreign to them, or are initiatives of the NGO. This feeling needs time to reverse through regular and planned training on PHC activities management. The GOS MOH might not be in a position to meet this for the time being.

G. Project Expenditures

(Finance)

I. Cost Recovery Attempts.

Cost recovery was not part of the CS project.

D. Monitoring and Evaluation of Sustainability

D1. The following indicators have been used to track achievements in the sustainability of outcomes and outputs of the programme.

- No. of VHC's established and functioning
- No. of chloroquine revolving funds established and functioning independently
- No. of community workers trained and capable of training others
- No. of TBA's trained (Showak only) and carrying out hygienic antenatal, delivery and postnatal care activities.
- No. of health units built (in Showak only)
- No. of women and children immunized and
- No. of activities supported and undertaken by community, e.g. EPI vaccine delivery, growth monitoring, sanitation, etc.
- No. of mothers knowledgeable and practicing CS interventions.

D2. The above mentioned indicators show remarkable accomplishments in sustainability.

D3. The qualitative data indicating the change in sustainability potential of the project benefits are:

a. The degree of commitment and willingness of communities to participate in the project activities, including their willingness to pay for services due to the strong demand created for these services.

b. K&P of mothers and other members of the community in CS interventions.

D4. The in-country agencies who worked with SCF on the design, implementation and analysis of the mid term evaluation and this final one are: MOH, both Federal and at the State level, CARE/Sudan, The Sudan Council of Churches (SCC), The Commissioner of Refugees (COR) and USAID/Sudan.

D5. Yes, feedback was received from the technical reviewers of the proposal and DIP in support of the recommendations regarding sustainability. All the recommendations were considered and carried out by SC, although some of this action is still affected by problems beyond the capacity of SC. For example, logistic problems facing the MOH and the whole country in general makes it difficult to maintain ORS and other supplies to the needy areas. For this same reason supervisory and other management support by the MOH and other relevant departments is not easily sustainable at the moment. Of the most outstanding actions taken in EPI was the improved access to the cold chain.

H. Attempts to Increase Efficiency

H1. The following strategies were implemented to reduce costs, increase productivity, and make the project more efficient.

a. In EPI, while SC gave logistic support to the mobile strategy which is more expensive and has high running costs, a lot of emphasis has been placed to strengthen the static strategy which is cheaper and more sustainable at the community level. This was done through mobilizing and raising awareness of communities and creating a high demand for the immunization services. This way, fewer static immunization sites can be established where communities can go to. Encouraging VHC's to pick up their own vaccines has greatly reduced the transportation costs incurred by dropping the vaccines to the immunization centres whether through the mobile or static strategies. In Showak providing CHW's with bicycles to pick up their vaccines is another cost effective way of reducing transportation costs and increasing immunization coverage.

b. The establishment of a sound HIS for monitoring interventions and tracking defaulters for easy follow-up.

c. Training of village level workers and MOH CHW's to carry out most of the interventions in an integrated manner, while reducing SC presence in the area.

d. Reduction of SC Field Staff giving more room to community participation in the service delivery.

H2. The reasons for the success of the above attempts include:

a. Early involvement and participation of communities, local authorities and the MOH in the planning, implementation and monitoring of the project activities.

b. Commitment of the community due to their high awareness and the perceived benefits.

c. The financial and material support of the communities to the CHW's encourages them to stay on jobs.

d. Involvement of the communities in selecting committed CHW, willingness of the MOH to pay their salaries and the participation of the local council authorities in the development of the village level infrastructure are all factors that lead to the feeling of a shared responsibility, which assure continuity.

H3. An important lesson to be learned is that raising the awareness of communities and involving them fully in all the stages of their program development are key aspects in increasing efficiency and assuring sustainability.

J. Household Income Generation

(Not applicable to the CS project).

BUDGET VS. ACTUALS FOR YEAR 4 AND TOTAL EXPENSES TO DATE VS. TOTAL GRANT *

	YEAR 4: EXPENSES VS. PLANNED BUDGET *					PLANNED BUDGET YEAR 5	LIFE OF GRANT: CUMULATIVE TOTAL VS. TOTAL GRANT *						
	EXPENSES YEAR 1	EXPENSES YEAR 2	EXPENSES YEAR 3	EXPENSES 09/30/92	PLANNED BUDGET **		BALANCE	EXPENDED	CUMULATIVE ACTUALS	CUMULATIVE BUDGET**	BALANCE	% OF TOTAL GRANT SPENT	
Procurement	5,110.52	13,421.21	2,965.09	0.00	5,231.18	5,231.18	0.0%	0.00	0.00	21,496.82	26,728.00	5,231.18	80.4%
Supplies***	0.00	0.00	0.00	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.00	0.00	0.0%
Assets***	0.00	895.06	2,002.73	0.00	4,102.21	4,102.21	0.0%	0.00	2,897.79	7,000.00	4,102.21	41.4%	
Consultants	5,110.52	14,316.27	4,967.82	0.00	9,333.39	9,333.39	0.0%	0.00	24,394.61	33,728.00	9,333.39	72.3%	
Sub-Total:	0.00	869.07	4,158.68	0.00	(1,911.75)	(1,911.75)	0.0%	0.00	5,027.75	3,116.00	(1,911.75)	0.0%	
Evaluation													
Other Program Costs													
Personnel	83,311.02	143,036.56	53,434.71	0.00	29,894.71	29,894.71	0.0%	0.00	279,782.29	309,677.00	29,894.71	90.3%	
Travel	15,162.41	16,513.13	5,516.78	0.00	23,367.68	23,367.68	0.0%	0.00	37,192.32	60,560.00	23,367.68	61.4%	
Other	20,105.36	80,825.63	(30,903.85)	0.00	20,007.86	20,007.86	0.0%	0.00	70,027.14	90,035.00	20,007.86	77.8%	
Sub-Total:	118,578.79	240,375.32	28,047.64	0.00	73,270.25	73,270.25	0.0%	0.00	387,001.75	460,272.00	73,270.25	84.1%	
TOTAL	123,689.31	255,560.66	37,174.14	0.00	80,691.89	80,691.89	0.0%	0.00	416,424.11	497,116.00	80,691.89	81.8%	

* Final expenses for Year 3: Year 4 expenses through: 09/30/92

** Revised budget from DIP. Year 4 includes balances from Year 3. No-cost extension thru 11/30/92 approved on 8/18/92. Year 4 budget per FO

*** Assets are individual items \$500 and over. Supplies are individually under \$500 per item.

Year 1 = Sept. 1, 1989 - Aug. 31, 1990

Year 2 = Sept. 1, 1990 - Aug. 31, 1991

Year 3 = Sept. 1, 1991 - Aug. 31, 1992

Year 4 = Sept. 1, 1992 - Aug. 31, 1993

Year 5 = Sept. 1, 1993 - Aug. 31, 1994

LINE ITEM FLEXIBILITY: No flexibility between Procurement, Evaluation and Other.

100% flexibility within each group.

Sudan FO CS V ends as of 11/30/92

IDNUM: _____

**Child Survival Project
Knowledge & Practice Questionnaire
Save The Children - Sudan**

All questions are to be addressed to the mother (women 15-49 years old) with a child under two (less than 24 months old)

Interview date / /91 Reschedule interview (Hour) _____
(dd/mm)

Interviewer name _____

Supervisor _____

Impact area _____

Village _____

1. Name of mother _____ Age in yrs (15-49) _____

2. Name of child _____
Birth date / / Age in months (< 24 mo.) _____
(dd/mm/yy)

Breastfeeding/Nutrition

3. Are you breastfeeding (name of child)?
1. yes [] ---> go to 5
2. no []
4. Have you ever breast-fed (name of child)?
1. yes []
2. no []
5. a. Are you giving (name of child) water (or herbal teas)?
1. yes []
2. no []
3. doesn't know []
- b. Are you giving (name of child) bottle milk?
1. yes []
2. no []
3. doesn't know []
- c. Are you giving (name of child) semisolid foods such as
gruels, porridge or semolina?
1. yes []
2. no []
3. doesn't know []

35

- d. Are you giving (name of child) fruits or juices?
1. yes []
2. no []
3. doesn't know []
- e. Are you giving (name of child) squash, mango or papaya?
1. yes []
2. no []
3. doesn't know []
- f. Are you giving (name of child) leafy green vegetables?
1. yes []
2. no []
3. doesn't know []
- g. Are you giving (name of child) meat or fish?
1. yes []
2. no []
3. doesn't know []
- h. Are you giving (name of child) lentils, peanuts, or beans?
1. yes []
2. no []
3. doesn't know []
- i. Are you giving (name of child) eggs or yogurt?
1. yes []
2. no []
3. doesn't know []
- j. Are you adding honey or sugar to (name of child)'s meals?
1. yes []
2. no []
3. doesn't know []
- k. Are you adding fat (lard) or oil to (name of child)'s meals?
1. yes []
2. no []
3. doesn't know []
- l. Are you adding iodized salt (local name) to (name of child)'s meals?
1. yes []
2. no []
3. doesn't know []
- m. Are you adding leafy green vegetables, such as spinach, to (name of child)'s food?
1. yes []
2. no []
3. doesn't know []

6. When should a mother start adding foods to breastfeeding?
1. start adding between 4 and 6 months []
 2. start adding earlier than 4 months []
 3. start adding 6 months or later []
 4. doesn't know []
7. What should those additional foods to breastfeeding be?
(multiple answers possible; record all answers)
- a. give food rich in Carbohydrate []
 - b. give food rich in iron []
 - c. give food rich in Vitamin A []
 - d. other (specify) _____ []
8. Which foods contain vitamin A to prevent "night blindness"?
(multiple answers possible; record all answers)
- a. doesn't know or other []
 - b. green leafy vegetables []
 - c. yellow type fruits []
 - d. meat/fish []
 - e. breast milk []
 - f. egg yolks []

Immunizations

9. Has (name of child) ever received any immunizations?
1. yes []
 2. no []
 3. doesn't know []
10. At what age should (name of child) receive measles vaccine?
1. specify in months [___/___]
 2. doesn't know [___] (99)
11. Can you tell me the main reason why pregnant women need to be vaccinated with tetanus toxoid vaccine?
1. to protect both mother/newborn against tetanus []
 2. to protect only the woman against tetanus []
 3. to protect only the newborn against tetanus []
 4. doesn't know or other []
12. How many tetanus toxoid injections does a pregnant woman need to protect the newborn infant from tetanus?
1. one []
 2. two []
 3. more than two []
 4. none []
 5. doesn't know []
13. Do you have an immunization card for (name of child)?
1. yes [] (must see card)
 2. lost it [] ---> go to 16
 3. never had one [] ---> go to 16

14. Look at the vaccination card and record the dates of all the immunizations in the space below

(dd/mm/yy)

BCG -- / -- / --

OPV 1st -- / -- / --

 2nd -- / -- / --

 3rd -- / -- / --

DPT 1st -- / -- / --

 2nd -- / -- / --

 3rd -- / -- / --

Measles -- / -- / --

Growth Monitoring

15. Look at the growth monitoring card of the child, and record whether the child been weighted in the last four months?
1. yes []
2. no []

Diarrheal Diseases

16. Has (name of child) had diarrhea during the last two weeks?
1. yes []
2. no [] ---> go to 23
3. doesn't know [] ---> go to 23
17. During (name of child)'s diarrhea did you breast-feed (read the choices to the mother)
1. more than usual? []
2. same as usual? []
3. less than usual? []
4. stopped completely? []
5. child does not breastfeed []
18. Did you provide (name of child) with fluids other than breast milk (read the choices to the mother)
1. more than usual? []
2. same as usual? []
3. less than usual? []
4. stopped completely? []
5. exclusive breastfeeding []
19. Did you provide (name of child) with solid/semisolid foods (read the choices to the mother)
1. more than usual? []
2. same as usual? []
3. less than usual? []
4. stopped completely? []
5. exclusive breastfeeding []

20. When (name of child) had diarrhea, what treatments, if any, did you use? (multiple answers possible; record all answers)
- a. nothing []
 - b. ORS sachet []
 - c. sugar-salt solution []
 - d. cereal based ORT []
 - e. infusions or other fluids []
 - f. anti-diarrhea medicine or antibiotics []
 - g. other specify _____ []
21. When (name of child) had diarrhea, did you seek advice or treatment for the diarrhea?
- 1. yes []
 - 2. no [] ---> go to 23
22. From whom did you seek advice or treatment for the diarrhea of (name of child)? (multiple answers possible; record each answer)
- a. general hospital []
 - b. health center/clinic/post []
 - c. private clinic/doctor []
 - d. pharmacy []
 - e. Community trainer []
 - f. traditional healer []
 - g. traditional birth attendant []
 - h. relatives & friends []
 - i. other (specify) [] _____
 - j. village health worker []
23. What signs/symptoms would cause you to seek advice or treatment for (name of the child)'s diarrhea? (multiple answers possible; record all answers)
- a. doesn't know []
 - b. vomiting []
 - c. fever []
 - d. dry mouth, sunken eyes, decreased urine output (dehydration) []
 - e. diarrhea of prolonged duration (at least 14 days) []
 - f. blood in stool []
 - g. loss of appetite []
 - h. weakness or tiredness []
 - i. other (specify) _____ []
24. What important actions you should take if (name of child) has diarrhea? (multiple answers possible; record all answers)
- a. doesn't know []
 - b. take the child to hospital/health center []
 - c. give the child more to drink than usual []
 - d. give the child smaller more frequent feeds []
 - e. withhold fluids []
 - f. withhold foods []
 - g. other (specify) _____ []

25. What are important actions a mother should take when a child is recovering from diarrhea?
(multiple answers possible; record all answers)
- a. doesn't know []
 - b. give the child smaller more frequent feeds []
 - c. give the child more foods than usual []
 - d. give foods with high caloric content []
 - e. other (specify) _____ []

Maternal Care

26. Do you have a maternal vaccination health card?
- 1. yes [] (must see card)
 - 2. lost it [] ----> go to 28
 - 3. no [] ----> go to 28
27. Look at the maternal vaccination/prenatal card and record the number of TT vaccinations:
- 1. one []
 - 2. two or more []
 - 3. none []
28. How soon after a women knows she is pregnant should she see a health professional (physician, nurse, midwife)?
(probe for months)
- 1. first trimester, 1-3 months []
 - 2. middle of pregnancy, 4-6 months []
 - 3. last trimester, 7-9 months []
 - 4. no need to see health worker []
 - 5. doesn't know []
29. What foods are good for a pregnant woman to eat to prevent pregnancy anemia?
(multiple answers possible; record all answers)
- a. doesn't know []
 - b. proteins rich in iron (eggs, fish, meat) []
 - c. leafy green vegetables, rich in iron []
 - d. other (specify) _____ []
30. When you were pregnant with (name of child) did you visit any health site (dispensary/health center, aid post) for pregnancy/prenatal care?
- 1. yes []
 - 2. no []
31. At delivery of (name of child), who tied and cut the cord?
- 1. yourself []
 - 2. family member []
 - 3. traditional birth attendant []
 - 4. health professional (physician, nurse or midwife) []
 - 5. other (specify) _____ []
 - 6. doesn't know []

4/0

32. Are you pregnant now?
 1. yes ---> go to 36
 2. no
33. Do you want to have another child in the next two years?
 1. yes ---> go to 36
 2. no
 3. doesn't know
34. Are you currently using any method to avoid/postpone getting pregnant?
 1. yes
 2. no ---> go to 36
35. What is the main method you or your husband are using now to avoid/postpone getting pregnant?
 1. tubal ligation/vasectomy
 2. injections
 3. pill
 4. IUD
 5. barrier method/diaphragm
 6. condom
 7. foam/gel
 8. exclusive breast-feeding
 9. abstinence
 10. rhythm
 11. other

Water/Sanitation

36. What is the major source of drinking water in your household?
 1. unimproved well
 2. improved well
 3. pipe
 4. pump
 5. river
 6. spring
 7. rain water
 8. other (specify) _____
37. Do you treat water before use in drinking?
 1. yes
 2. sometimes
 3. no ---> go to 39
 4. doesn't know ---> go to 39
38. How do you treat water before use in drinking?
 1. boil water
 2. other (specify) _____

39. Where do you store drinking water in your house?
(multiple answers possible; record all answers)
- a. storage in a close water jar (Zir) []
 - b. storage in a can (open) []
 - c. storage in a Jerken []
 - d. storage in a water jar (Kerba) []
 - e. other (specify) _____ []
40. What kind of toilet facility does your household have ?
- 1. improved latrine []
 - 2. pit []
 - 3. none []
 - 4. other (specify) _____ []

Malaria

41. What can you do to prevent your child from getting malaria?
(multiple answers possible; record each answer)
- a. do nothing []
 - b. give chloroquine in case of fever []
 - c. mosquito net []
 - d. destruction of breeding grounds []
 - e. other (specify) _____ []
42. Did (nom of the child) have malaria in the last two weeks?
- 1. yes []
 - 2. no [] end of questionnaire
 - 3. do not know [] end of questionnaire
43. When (nom of the child) had malaria, from whom did you seek advice or treatment?
(multiple answers possible; record each answer)
- a. take the child to the general hospital/health center []
 - b. give the child to Chloroquine agent []
 - c. other (specify) _____ []
 - d. do not know _____ []

END OF QUESTIONNAIRE

١٥. لماذا قد يكون أو رغبته في أن تكون... ()
١٦. نعم ()
١٧. لا ()
١٨. ()

١٩. هل تستخدمين أو وسيلة من وسائل الحمل؟

١. نعم ()
٢. لا (تحول السؤال رقم ٣٦) ()

٢٠. ما هي الوسيلة التي تستخدمينها؟

١. الربط ()
٢. حفن ()
٣. حبوب ()
٤. لولب ()
٥. الحاجز ()
٦. كوت ()
٧. المراهم ()
٨. الرضاغة الطبيعية ()
٩. عدم الممارسة ()
١٠. طبيبي (على الطريقة) ()
١١. أخرى ()

الماء وصحة البيئة

٢١. قسم من وزن يتخلى مويه الشراي؟

١. نثر عادية ()
٢. نثر ارتواءية ()
٣. موائير ()
٤. مضخة ()
٥. مياه النهر ()
٦. حمام ()
٧. مياه المظن ()
٨. محلات أخرى (أخرى) ()

٢٢. هل تستخدمين أي المويه غير ما تستخدمينها؟

١. نعم ()
٢. بعض الأحيان ()
٣. لا ()
٤. ما عارفة ()

٢٣. يجب تجنب المويه سيء ما تستخدمينها؟

١. نطش المويه ()
٢. أساء أخرى (أخرى) ()

(منظمة انقاذ الطفولة في السودان)

عل الاسئلة يجب ان توجه للام (بين عمر 10 - ٤٩ سنة)
وهي ام للطفل دون السنة الثانية من العمر (اقل من ٢٤ شهر)

- يوم المصابلة / / ١٩٩٢م
• اسم الباحثة _____
• اسم المشرف _____
• اسم المنطقة _____
• اسم القرية _____

- ١/ اسم الام _____ العمر بالسنوات (٤٩ - ١٥) _____
٢/ اسم الطفل _____
تاريخ الميلاد / / _____
العمر بالاشهر (اقل من ٢٤ شهر) _____
(يوم/شهر/سنة)

الرضاعة الطبيعية والتغذية

- ١/ هل انتي بترصعي (اسم الطفل) ؟
/١ نعم () تحول للسؤال رقم ٥
/٢ لا ()
- ٢/ هل حصل رضعتي (اسم الطفل) ؟
/١ نعم ()
/٢ لا ()
- ٣/ هل بتدي (اسم الطفل) صوبه والا ساي بانسون او ساي طينه ؟
/١ نعم ()
/٢ لا ()
/٣ ما عارفه ()
- ب/ هل بتستعملن البيزة في رضاعة (اسم الطفل) ؟
/١ نعم ()
/٢ لا ()
/٣ ما عارفه ()
- ج/ هل بتدي (اسم الطفل) اكلات زي المديده او النشا او الكاسترد او
البطاطس المسلووه ؟
/١ نعم ()
/٢ لا ()
/٣ ما عارفه ()

- د / هل بتدی (اسم الطفل) فواكه او عصير ؟
 /1 نعم ()
 /2 لا ()
 /3 ما عارفه ()
- هـ / هل بتدی (اسم الطفل) منعه او فرع ؟
 /1 نعم ()
 /2 لا ()
 /3 ما عارفه ()
- و / هل بتدی (اسم الطفل) حضرات زى الحرج والملوحه السلم او الورد ؟
 /1 نعم ()
 /2 لا ()
 /3 ما عارفه ()
- ز / هل بتدی (اسم الطفل) لجمه او سمك ؟
 /1 نعم ()
 /2 لا ()
 /3 ما عارفه ()
- ح / هل بتدی (اسم الطفل) عدس و فول و لوبيا ؟
 /1 نعم ()
 /2 لا ()
 /3 ما عارفه ()
- ط / هل بتدی (اسم الطفل) لبس (حتى الحداد) او مرصه ؟
 /1 نعم ()
 /2 لا ()
 /3 ما عارفه ()
- م / هل بتضيفى غسل و الا سكر لأكلات (اسم الطفل) ؟
 /1 نعم ()
 /2 لا ()
 /3 ما عارفه ()
- ن / هل بتضيفى لاكل (اسم الطفل) زيت او سمن ؟
 /1 نعم ()
 /2 لا ()
 /3 ما عارفه ()
- و / هل بتضيفى لاكل (اسم الطفل) ملح طعام ؟
 /1 نعم ()
 /2 لا ()
 /3 ما عارفه ()
- ی / هل بتضيفى لاكل (اسم الطفل) حضرات زى الخضره او السلم ؟
 /1 نعم ()
 /2 لا ()
 /3 ما عارفه ()

- ١٦
- ١/ قبل اربعة اشهر ()
 ٢/ من ٤-٦ شهور ()
 ٣/ بعد ٦ شهور او اكثر ()
 ٤/ ما عارفه ()

الاكل المستوصف الام للطفل ذي سنو ؟
 (سجل اكثر من اجابة اذا وجدت)

- ١/ رز او الدقيق او الكسرة او السميدة ()
 ٢/ بيض ، اللحم ، الفاصوليا ، الفول ()
 ٣/ خرجير ، الخضرة ، او الرجله ()
 ٤/ شامات ثابته (مع ذكر الصاحه) ()

بتمتكري الاكل البيحي من الفئمت او عس الليل سنو ؟
 (سجل اكثر من اجابة اذا وجدت)

- ١/ ما عارفه ()
 ٢/ الخضروات الورقيه ذي الصبغ ()
 ٣/ السواخه ()
 ٤/ احووم او اسماك ()
 ٥/ البصاعه الطريه ()
 ٦/ صفار البيض ()

التحصين (التطعيم)

هل (اسم الطفل) اتطعم اي تطعيم ؟

- ١/ نعم ()
 ٢/ لا ()
 ٣/ ما عارفه ()

متين معروض تطعمي (اسم الطفل) ضد الحصه ؟

- ١/ حدى بالشهور ()
 ٢/ ما عارفه ()

ممكن توريني ليه نحن بنطعم المراه الحامل ضد التثانوس

- ١/ عشان نعمل وقايه للام والطفل من التثانوس ()
 ٢/ عشان نعمل وقايه للام من التثانوس ()
 ٣/ عشان نعمل وقايه للطفل من التثانوس ()
 ٤/ ما عارفه (او ذكرت اشياء اخرى) ()

خم درعه بناحدها المراه عشان تحمي مولودها من التثانوس ؟

- ١/ واحد ()
 ٢/ اثنين ()
 ٣/ اكثر من اثنين ()
 ٤/ لاشي ()
 ٥/ ما عارفه ()

هل (اسم الطفل) عندو كرت التحصين (التطعيم) ؟

- ١/ نعم (يحب رويه الكرت) ()
 ٢/ بعد الكرت (تحول للسؤال ١٦) ()
 ٣/ لا (تحول للسؤال ١٦) ()

١١ / انظر الى كرت التطعيم تم سجل كل ثوابح التطعيم في الأماكن المطلوبه

	يوم / شهر / سنه	
(السل) BCG	/ /	
الجرعه الاولى OPV	/ /	
الجرعه الثانيه (مصل السل)	/ /	
الجرعه الثالثه	/ /	
الجرعه الاولى (المصل الثلاثي) DPT	/ /	
الجرعه الثانيه	/ /	
الجرعه الثالثه	/ /	
Measles (الحصبة)	/ /	

متابعة النمو

١٢ / انظر الى كرت التطعيم تم سجل البيانات الآتية :
هل تم وزن الطفل خلال الأربعة اشهر الماضيه

١ / نعم ()
٢ / لا ()

الإسهالات

١٢ / هل (اسم الطفل) جاهد إسهال في الأسبوعين الماضيه ؟

١ / نعم ()
٢ / لا (تحول للسؤال ٢٣) ()
٣ / ما عارضه (تحول للسؤال ٢٣) ()

١٢ / أثناء الإسهال بنوع (اسم الطفل) كنتي بترضعيه ؟
(أهرا الخيارات التاليه للام)

١ / أكثر من العادي ()
٢ / زي العادي ()
٣ / أقل من العادي ()
٤ / ومعتني الرضاعة مره واحده ()
٥ / والا أساسا ما هاعد يرضع ()

١٢ / في أثناء الإسهال بنوع (اسم الطفل) هل ادبتهو سواثل غير لبن الام ؟
(أهرا الخيارات التاليه للام)

١ / أكثر من العادي ()
٢ / زي العادي ()
٣ / أقل من العادي ()
٤ / والا كنتي بتوقعي السواثل ()
٥ / ما بتدييهو اي سواثل غير لبن الام ()

١٢ / في أثناء الإسهال بنوع (اسم الطفل) كنتي بتدييهو اكل ؟
(أهرا الخيارات التاليه للام)

١ / أكثر من العادي ()
٢ / زي العادي ()
٣ / أقل من العادي ()
٤ / والا كنتي بتوقعي الأكل ()
٥ / ما بتدييهو اي سواثل غير لبن الام ()

- وقت (اسم الطفل) كان عندو اسهال عالجبينو بشنو ؟
(سجل اكثر من اجابة اذا وجدت)
- 1/ لاشيء ()
2/ هلع النرويجي ()
3/ محلول السكر والملح ()
4/ النشاء والكستور ()
5/ محاليل اخرى ()
6/ ادوية لعلاج الاسهال او مضادات حيويه ()
7/ اشياء اخرى (حدد) ()

- 10/ لمن (اسم الطفل) كان عنده اسهال طلبتي اى مساعده او علاج ؟
1/ نعم ()
2/ لا (تحول للسؤال 23) ()

- 11/ المساعدة دي طلبتها من منو ؟
(سجل اكثر من اجابة اذا وجدت)
- 1/ المستشفى العمومي ()
2/ المركز الصحي ()
3/ العيادة الخاصة (الدكتور الخارجي) ()
4/ الصيدليه (الاجزائة) ()
5/ معاون حتى ()
6/ الفكي او العلاج البلدي ()
7/ الداية التقليدية ()
8/ الاطباء او الاصدقاء ()
9/ اى محل اخر (حدد) ()
10/ مندوب اللجنة الصحية ()

- 12/ شنو العلامات والاعراض البتخليك تفتشى عن العلاج للاسهال بتام (اسم الطفل) ؟
(سجل اكثر من اجابة اذا وجدت)
- 1/ ما عارفة ()
2/ الطراش ()
3/ الحمى ()
4/ نشاف العم/عيون غائرة/بول بسيط (حاله حفاك) ()
5/ اسهال لفضه طويله (اقل حاحه اسوعين) ()
6/ وجود دم في السراش ()
7/ فقدان الشهية للاكل ()
8/ الفتور السام او الاعباء ()
9/ اشياء اخرى (حدد) ()

- 13/ انى بتعلمي شنو وقت (اسم الطفل) عنده اسهال ؟
(سجل اكثر من اجابة اذا وجدت)
- 1/ ما عارفة ()
2/ شاخذ الطفل للمستشفى او المركز الصحي (الحكيم) ()
3/ تمنطى الطفل سواثل بكميات اكثر من العاده ()
4/ تمنطى الطفل اكل بكميات اقل وفي اوقات متعارفة ()
5/ توقف السواثل ()
6/ توقف الاكل ()
7/ اشياء اخرى (حدد) ()

شئو الحاجات الهامة البتعمليها بعد ما يبيف الاسهال من الطفل ؟
(سجل اكثر من اجابة اذا وجدت)

- 1/ ما عارفه ()
2/ ندى الطفل اكل شوية في اوقات متقاربه ()
3/ ندى الطفل اكل اكثر من العاده ()
4/ ندى الطفل اكل فيهو طافه ()
5/ اشياء اخرى (حدد) ()

صحة الامومة

هل عندك كرت تطعيم ؟

- 1/ نعم (يجب روية الكرت) ()
2/ ضاع (تحول للسؤال 28) ()
3/ لا (تحول للسؤال 28) ()

انظر الى كرت التطعيم تم سجل عدد جرعات التيتانوس

- 1/ واحد ()
2/ اثنين او اكثر ()
3/ بلاسيء ()

متى الام بتقابل الحكيم/الدابة/الدكتور لما تعرف انها حامل؟

- 1/ الثلاثة شهور الاولى ()
2/ الثلاثة شهور الثانية ()
3/ الثلاثة شهور الاخير ()
4/ ماضي داعي تقابل الحكيم ()
5/ ما عارفه ()

ما في انواع الماكولات الخويصة للمرأة الحامل عشان (تحمي) شوي
نعحتها من مرض صف الدم ؟
(سجل اكثر من اجابة اذا وجدت)

- 1/ ما عارفه ()
2/ مواد بروتيينية غنية من الحديد مثل
البيض ، سمك ، اللحم ()
3/ خضروات ورفيم خضراء غنية من حديد
مثل الرطله او الحصره ()
4/ اي شيء اخر (حدد) ()

وكيف كنتي حامل ب (اسم الطفل) حالي مستخدم الدواء ، المرحل المصحى او
الدابه للمعاليه ؟

- 1/ نعم ()
2/ لا ()

وقت ولاده (اسم الطفل) عنو ربط وقطم خيل السره ؟

- 1/ انا ()
2/ واحد من البيت ()
3/ دابه خيل ()
4/ الحكيم زي الدكتور، الممرض او الدابه ()
5/ شخص اخر (حدد) ()
6/ ما عارفه ()

50

TRAINING AGENDA

DAY [1]

Training of Supervisors**

<u>Time</u>	<u>Activity</u>
8:00-9:00 am	Opening/Welcome/Administrative Issues (logistics, lodging, per diem, agenda overview,....)
9:00-9:30	Purpose of K & P Survey
9:30-10:30	Sample Size Method (why & how)
10:30-10:45	Coffee/Tea Break (in the room)
10:45-11:15	Starting Point Method
11:15-12:45 pm	Review questionnaire twice (second time explain the rationale for each question)
12:45-1:45	Lunch (on training site)
1:45-3:15	Interview Role Play (after demonstration each trainee should conduct 3 mock interviews and will be surveyed 3 times)
3:15-3:45	Supervision Expectation (roles and responsibilities of both supervisors interviewers)
4:45-4:00	Break
4:00-4:50	Tabulation Method (who will tabulate & how)
4:50-5:30	Analysis Tables (what it means)
5:30-5:40	Date/Venue Report (who will be invited & where)
5:40-6:00	Site Assignment

** Supervisors only should attend day [1]

51

TRAINING AGENDA

DAY [2]

Training of Interviewers **

<u>Time</u>	<u>Activity</u>
8:00-8:30 am	Opening/Welcome/Administrative Issues (logistics, lodging, perdiem, agenda overview,....)
8:30-9:00	Purpose of K & P Survey
9:00-9:30	Sample Size Method (why & how)
9:30-9:50	Starting Point Method
9:50-10:05	Coffee/Tea Break (on training site)
10:05-11:35	Review questionnaire twice with detail
11:35-1:35 pm	Interview Role Play (after demonstration, each trainee will conduct 3 mock interviews and will be interviewed 3 times)
1:35-2:35	Lunch (on training site)
3:35-3:10	Supervision Expectation (roles and responsibilities of both supervisors & interviewers)
3:10-3:30	Tabulation Method (who will tabulate & how)
3:30-3:50	Analysis Tables (what it means)
3:50-4:05	Coffee/Tea Break
4:05-4:15	Date/Venue of Report (who will be invited & where)
4:15-5:05	Site Assignment

** Both supervisors and interviewers should attend the whole day

Day [3]

Pilot Testing**

<u>Time</u>		<u>Activity</u>
8:00-10:00	am	Each supervisor and interviewer conducts three surveys in a designated area
10:30-12:30	pm	Review of each questionnaire
12:30-3:30	pm	The group reassembles for feedback and each person in turn raises his/her concerns regarding the questionnaire

**both supervisors and interviewers should attend the whole day

65

APPENDIX C

LIST OF PARTICIPANTS

Mr.	Madani Adam El Madani	SCF/Acting Field Office Director
Dr.	Biar Deng Biar	SCF/UR/CS project Manager
Mrs.	Catherine Sunday Awabe	SCF/Kht PHC Advisor
Dr.	Mohamed Kamal	SCF/UR Project Manager
Mr.	Lasu Lauya Joja	SCF/UR
Mr.	Mohamed El Hassan	SCF/UR
Mr.	Hassan Khalil	SCF/UR
Mrs.	Zeinab Khalil	SCF/UR
Mrs.	Wafaa El Daw	SCF/UR
Dr.	Salah Mostapha	SCF/UR
Mr.	Adam Babiker	MOH/Kht EPI Program
Dr.	Ismail Azzil Dine	MOH/Kht CDD Coordinator
Dr.	Abd El Rahim Ahmed	CARE/El Obeid
Mr.	Adil Sherif	CARE/EL Obeid
Mr.	Abd El Hadi Ali Makki	SCF/UR
Mr.	Abd El Hafiz Sokrab	SCF/UR
Mr.	Khaled	SCF/Kht
Mrs.	Sanaa	SCF/Kht

In addition, 19 interviewers were selected from SCF, the Sudanese Red Crescent and other collaborating agencies.