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SAVE THE CHILDREN/US

**MALAWI FIELD OFFICE
CHILD SURVIVAL V
FINAL EVALUATION REPORT**

Cooperative Agreement No. OTR-0500-A-00-9149-00

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TABLE OF CONTENTS

ACRONYMS	ii
EXECUTIVE SUMMARY	iii
I. TERMS OF REFERENCE	1
II. BACKGROUND AND DESCRIPTION OF THE PROJECT	1
III. METHODS OF EXECUTION OF FINAL EVALUATION	3
IV. FINDINGS	5
A. Achievement of Project Objectives	5
B. Sustainability	11
C. Successes, Deficiencies, and Lessons Learned	14
V. RECOMMENDATIONS	16
A. Sustainability in Mkhotan and Mbalachanda	16
B. Issues for Future Activities	19
APPENDICES	
A. USAID Sustainability Questionnaire (Attachment of Pipeline Analysis included)	
B. Questionnaires and Results	
C. Knowledge, Practice and Coverage Survey Results	
D. Persons Contacted	

ACRONYMS

AIDS	Acquired Immuno-Deficiency Syndrome
ANC	Antenatal care
CDA	Community Development Assistant
CHAM	Christian Health Association of Malawi
CHS	Community Health Supervisor
CHSU	Community Health Sciences Unit
CS II	Child Survival II
CS V	Child Survival V
CS IX	Child Survival IX
DCDO	District Community Development Officer
DHI	District Health Inspector
DHO	District Health Office
DIP	Detailed Implementation Plan
DRF	Drug Revolving Fund
HIS	Health Information System
HSA	Health Surveillance Assistant
IGA	Income Generating Activity
KPC	Knowledge, Practice, and Coverage Survey
MWCACS	Ministry of Women and Children's Affairs and Community Services
MOH	Ministry of Health
NGO	Non-Governmental Organization
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
PHC	Primary Health Care
SCF	Save the Children Federation/USA
TT	Tetanus Toxoid immunization
USAID	United States Agency for International Development
VHC	Village Health Committee
VHP	Village Health Promoter

EXECUTIVE SUMMARY

Save the Children (US) has just completed their CS V project in the Mkhota and Mbalachanda impact areas. These impact areas, by the end of the project, covered a combined population of about 80,000. The Mbalachanda area was also the location for a CS II project. Save the Children's project strategy was community-based: trained volunteer village health promoters, supported by village health committees and community health supervisors. Interventions included: management of diarrhoeal diseases, immunizations, growth monitoring and nutrition education, malaria control, management of acute respiratory infections, antenatal care, child spacing, and HIV/AIDS prevention.

The final evaluation took place August 2-16, 1993 and was conducted by a six-person team with an independent consultant as team leader; two representatives from the Ministry of Health; one from the Ministry of Women and Children's Affairs and Community Services; one from the Christian Health Association of Malawi; and one from USAID/Malawi. The team visited Mkhota and Mbalachanda where it conducted interviews with 111 mothers, 28 village health promoters, 23 village health committees, 17 community health supervisors, staff from 8 health centers, 4 community development assistants, 2 District Health Officers and 1 District Health Inspector, and Save the Children staff.

The evaluation team found the project had made substantial efforts at improving the knowledge of members of the communities related to the eight child survival interventions, through an impressive network of volunteer village health promoters, village health committees, and supervisors. Most project objectives had been met, and immunization/growth monitoring activities were well-integrated with those of health center staff and community development assistants. The project had made notable progress in ensuring sustainability of project activities after their phase-out, but some issues remain to be resolved.

I. GENERAL FINDINGS AND RECOMMENDATIONS

1. Overall levels of knowledge for mothers, village health promoters, and community health supervisors are impressive.

Mothers, village health promoters (VHP), and community health supervisors (CHS) were able to correctly answer most technical questions (without being prompted) on the range of child survival interventions. Such results reflect the project's efforts in training of mothers, and in training and supervision of VHPs and CHSs.

2. Drug revolving funds are highly appreciated by the communities.

Drug revolving funds (DRF) operate only in Mbalachanda impact area. Communities there remarked that DRFs improved their access to drugs and they would like to see it continued (those in Mkhota expressed the desire for DRFs to be initiated). The communities have assumed a sense of ownership of the DRFs and do not see them as only the VHP's responsibility. There are currently 136 DRFs operating, of the 141 initially started. This could be attributed to the effective system of checks and balances between the VHP, the village health committee (VHC) and the CHS, as well as the demand from the communities.

Recommendation: *Given the achievements in establishing a relatively large number of DRFs that have been operating for several years, Save the Children should establish some means of sustaining these DRFs before it pulls out. To ensure affordability, the villages will continue to need access to Central Medical Stores for purchasing (the private sector markups make the prices too high). Since it may take some time for the MOH to work out the mechanisms through which villages could be able to resupply through the MOH channels, the assistance of other donors should be requested immediately. Such assistance should include mechanisms for resupply, supervision in the management of these DRFs, and funds to establish a buffer stock. In addition, the Mbalachanda impact area provides an excellent location for conducting operations research on DRF issues which would help the MOH in developing its policies in this area.*

3. The continuity of drug supply in the villages has not always been assured.

Although availability of drugs is an important aspect of project activities, 45% of VHPs interviewed in both impact areas did not have oral rehydration salts (ORS). In Mbalachanda, of the 15 promoters interviewed, all reported having DRFs, but only 66% had chloroquine, 47% had aspirin, and less than 30% had bactrim, panadol, fansidar, or eye ointment. The resupply system required collecting a large amount of money for bulk purchasing from Central Medical Stores. A small buffer stock was available in the Mbalachanda project office, but it appears that this was not able to ensure continuous supply in the villages.

Recommendation: *A system for ensuring timely resupply of essential drugs to the villages needs to be developed. One option would be having buffer stocks available at the nearest health centers, managed jointly with area level leaders in order to ensure that drugs are used for the villages. Such a mechanism would require an effective system of checks of balances, and some training in DRF management at area level. (See above recommendation about donor assistance to support the DRFs).*

4. Efforts have been made to ensure sustainability in the impact areas but some issues still remain unresolved.

Sustainability at village level: Save the Children has trained VHPs and VHCs in child survival activities and VHP knowledge levels are quite high. There appears to be a sense of ownership of village-level project activities, especially in areas with the drug revolving fund.

Sustainability at the supervisory level: Save the Children arranged training for CHSs with the MOH Health Surveillance Assistant (HSA) curriculum in 1990. Discussions with the respective DHOs indicate that many of the community health supervisors will be employed as HSAs by the government, and hopefully would be made available to continue to support the VHPs in their area.

Sustainability at health centre level: Health centres will have difficulties in maintaining the intensity of activities (under five clinics, supervision, health information system) due to constraints in transport and supplies.

Sustainability at the area level: There will be a need for continuing leadership, as has been provided by the health project supervisors, to ensure ongoing support to the community-based activities.

Recommendation: *The DHOs should immediately take responsibility for the various community-based child survival activities, through their health facilities in the impact areas. To make sure that the VHCs remain active, and that the VHPs maintain their skills, HSAs and community development assistants (CDA) will need to be freed up to supervise VHPs and visit these villages. Districts should allow CHSs they employ to remain in their areas of operation to provide continuity to the communities. In addition, the DHO should assign a community-enrolled nurse or health inspector to take responsibility for maternal and child health and to provide leadership for child survival activities in the impact area. Sustainability of these activities will require coordination, collaboration, and cooperation mechanisms among the various actors: CDAs, HSAs, Health Inspectors, etc.*

Save the Children should let the senior public health nurse seconded to them in Mkhota stay in the impact area to supervise and support the CHSs (who will become HSAs) and the VHPs. In addition, Save the Children should make the bicycles used by the CHSs available to those employed as HSAs and to the CDAs working with them in the area to ensure continuity of supervision and outreach activities.

5. **Collaboration between Save the Children and government structures was strong in implementation but weaker in the areas of planning and management.**

The questions of sustainability of project activities after project funding ends were not given sufficient attention at the beginning of the project. The MOH was not adequately involved in the design, planning, and assigning of responsibilities for activities, and MOH staff did not feel information sharing was sufficient. However, collaboration between Save the Children and health centre staff was good for implementation of under five clinics, ANC, and sanitation activities, with a sharing of staff, transport, and supplies.

There was also good collaboration with the Community Development Assistants (CDAs) in the area, where they participated in formation and training of VHCs, community mobilization, supervision of CHSs, and support of income generating activities (IGA) and DRFs.

Recommendation: *Sustainability after a project requires collaboration from the beginning of a project. This collaboration needs to take place with the District as well as Central level staff. Such collaboration should begin with the development of the Detailed Implementation Plan and should include participation in the baseline survey and evaluations. Joint planning for phase-over of responsibilities should take place from the start. In addition, a joint management/advisory committee (including participants from Save the Children, the DHO and the DCDO) should be created to assure coordination and information sharing throughout the project.*

For Mkhota and Mbalachanda, Save the Children should make their staff available for discussion when the DHO and DCDO need clarification or information about child survival activities they are now responsible for. Save the Children staff should meet two to three times a year with district and health center staff to discuss issues and technical problems will sustainability of project activities.

6. Cooperation between Save the Children and the communities appeared to be quite good.

Save the Children enjoys a very good reputation in most communities. The relationship between the CHS and the VHP seemed quite supportive and there appears to be good collaboration between the VHP, VHC, and CHS in mobilizing the communities for under five clinics, tracing defaulters, and in the promotion of hygiene and sanitation activities. The very low attrition rates for VHPs (many working for almost 7 years) may well reflect the effect of such cooperation and support. Save the Children has developed a successful mechanism for developing community cooperation through a network of village health committees, promoters and supervisors living in the area. In addition, Save the Children has benefitted from spending more than three years in the Mbalachanda area.

Recommendation: *Save the Children should apply this model in their new project area, and should endeavor to spend more than three years in any area in which they work.*

7. The VHPs appear to be willing to continue to work even when Save the Children stops providing soap as an incentive.

Save the Children provided soap to VHPs which village health committees state they will not be able to continue. However, many VHCs (especially in Mbalachanda) were willing to do something else as an incentive to their promoters, such as income generating activities (field cropping of maize), working in the promoter's garden, etc. The promoters, on the other hand, have continued to work, even when the provision of soap had become irregular. Most VHPS interviewed said they were willing to continue, even without the soap incentive.

Recommendation: *Health centre staff and CDAs in these areas should follow-up with the VHCs to discuss if any incentives are being provided; if not, what could be done; and what effect this has on VHP drop out rates. Such action requires immediate assignment of responsibility for supervision and support of VHPs. In areas where the CHSs are to be engaged as HiSAs, they should be allowed to continue to work in their areas. In addition, the DHO should organize refresher trainings for the VHPs as a means of maintaining their skills and recognizing their role (motivating them).*

8. The health information system provides a means for identifying community-level problems.

The under five roster used by the VHP serves to monitor coverage with immunizations, growth monitoring and other activities by providing a population-based information system that can be maintained at village level. However, some VHPs have not kept their rosters up-to-date and a few have had some difficulties with the new monthly reporting forms. The family enrollment forms, on the other hand, require substantial resources, and are appropriate only for project situations.

Recommendation: *The importance of having community-based information justifies additional efforts at improving VHP performance with relation to the under five roster and the monthly reporting form. The DHO should undertake some studies to see why the VHPs are having difficulty with these components of the health information system (HIS) and take appropriate action to resolve them: this may involve simplifying the forms, providing refresher training, or some other*

action. Save the Children should provide the DHOs access to their Mkhota and Mbalachanda staff to assist in resolving these issues, even after the end of the project. As mentioned above, this assistance should be structured in workshop/meetings. For the information system, such a workshop should be held within three months of the phase-out to discuss technical problems and sustainability issues.

In future impact areas, compilation and use of HIS results should be done collaboratively with local health centre staff to ensure they can and know what to do with the data and have experience in using the information for their own management purposes before Save the Children pulls out.

In addition, ways of reducing the paper requirements of the reporting system should be investigated, such as reducing the format to two pages (from three), printing the reporting form on both sides of the sheet of paper, and having the supervisor fill in one form for all her VHPs, without having each promoter fill in an individual form.

The extensive system of village-based reporting could provide a useful sentinel site for morbidity and mortality data for the MOH. The Community Health Sciences Unit (CHSU) should use the data available retrospectively and set up a system to maintain quality data collection by VHPs in these areas. This would require resources for data collection forms and refresher training, support to strengthen supervision, and resources for collecting, compiling and verifying the data.

II. FINDINGS RELATED TO SPECIFIC CHILD SURVIVAL INTERVENTIONS

9. Knowledge and practice for home management of diarrhoea are good.

75% of mothers correctly described how to mix ORS and 66% correctly described how to administer it to a child with diarrhoea. Over 80% of VHPs knew the correct preparation and administration of ORS. Of mothers interviewed with children experiencing diarrhoea during the two weeks prior to the knowledge, practice and coverage (KPC) survey, 65% continued to breast-feed and over 80% gave some type of rehydration fluids (ORS, SSS, or cereal-based ORT). These figures can be compared to the national rates of 56% giving either ORS or home-based fluids (DHS, 1992).

10. Immunizations is seen by the community as one of the effective interventions, but coverage needs improvement.

Communities remarked on the reduction of certain diseases since the project's immunization activities began. More than 60% of mothers could name three or more immunizable diseases and knew when measles immunizations were to be given. Coverage rates, based on the strict criteria of information solely from the Road to Health card, for children 12-23 months was 52% for completed immunizations. National levels are higher, at 82% (DHS, 1992) but these figures include information from the card and mother's recall if no card was available.

11. Growth monitoring and nutrition activities were appreciated by the communities, but nutritional status appears to still be problematic.

71% of children were weighed in the last four months, and mothers' knowledge of what children should be fed appeared adequate. VHP knowledge levels were high for what to feed children and what actions to take for malnourished children. However, 60% of mothers still believe that semisolid foods should be introduced earlier than 4 months of age, and exclusive breast-feeding of infants less than three months of ages was only 13%. However, this latter rate is higher than the national figure of only 3% of mothers with children 0-3 months exclusively breastfeeding (DHS, 1992). Nutritional status appears to still be inadequate.

12. Knowledge levels for malaria are generally good, but issues of treatment need to be addressed.

Knowledge levels for recognition of malaria and treatment (tepid sponging and chloroquine) were high for mothers, VHPs, and CHSs. Over 70% of mothers whose child had fever in the two weeks prior to the KPC treated them with chloroquine or fansidar. However, only 36% of VHPs and 41% of supervisors were able to recite the correct chloroquine dosages for all ages. Although the MOH policy is now to treat malaria with fansidar as the first line drug, only 2 of the 15 VHPs interviewed in Mbalachanda had fansidar in their drug kits.

13. Improvements have been seen in child spacing activities.

Knowledge levels of mothers, VHPs, and CHSs about modern child spacing methods were high: 68% of mothers could name two or more modern methods, and 89% of VHPs and 100% of CHSs could name three or more modern child spacing methods. Actual utilization from the KPC survey is now 15%, an increase from pre-project rates and higher than the national rate of 6.3% (DHS, 1992). The project rate for women who do not desire another child within the next two years (or do not know) is 22%.

14. Levels of knowledge for mothers and VHPs are good for acute respiratory infections (ARI).

More than half the mothers cited difficult breathing as a symptom of respiratory infections requiring a visit to the health facility. Virtually all VHPs interviewed knew the signs and symptoms of ARI. Over 90% of children suspected of experiencing ARI in the two weeks previous to the KPC survey (based on mothers' recall of signs and symptoms) were taken to a health facility.

15. Knowledge and practice for antenatal care was good.

86% of the VHPs interviewed and a good number of the mothers knew what foods to eat during pregnancy and 94% of mothers had made at least one antenatal visit during their last pregnancy. 62% of mothers (according to their antenatal card) had received at least 2 Tetanus Toxoid injections and 89% knew that they needed at least two TT injections during pregnancy. The national rate for at least one TT is 86% (based on card and recall), and for at least one antenatal visit is 84% (DHS, 1992)

16. Knowledge levels about AIDS are quite good.

The messages about transmission and prevention of AIDS have resulted in 69% of women interviewed citing sexual intercourse as a means of transmission and 61% citing unsterile instruments. National levels of knowledge are 86% for transmission by sexual intercourse and 45% by unsterile instruments (DHS, 1992). Knowledge about intrauterine transmission was extremely low. 75% of mothers knew where to get condoms. However, only 25% mentioned condoms as a means of prevention. VHPs, on average, could name 3-4 methods of transmission. The project has instituted innovative approaches in the last months to get around cultural reticence to discuss matters such as AIDS in public: they have trained teachers in AIDS messages, and used students to perform in drama groups to their elders.

***Recommendation:** Save the Children has been successful in meeting most of their project objectives. They should continue their activities in training of people involved at the implementation level: mothers, VHCs, VHP, supervisors, and involving CDAs and health staff in training when they move to their next impact areas. In the areas of HIV/AIDS and child spacing, Save the Children should continue to look for innovative ways to bridge the gap between knowledge and practice.*

II. LESSONS LEARNED

1. Use of Women as Health Surveillance Assistants:

Women have successfully been used as CHS/HSAs in the Save the Children project. Save the Children has been able to recruit qualified female candidates and their CHS/HSAs use push bicycles for transportation. After an initial number who dropped out shortly after training, the rest have remained (with the exception of a few who have either died or moved away from the area).

2. Incentives for Village Health Promoters:

Incentives seem to be effective in motivating promoters to carry on with their work; however, continuation of incentives provided by donors are difficult for villages to sustain. It would be useful to start village responsibility for some kind of incentives from the beginning. This way, donors can work with village committees to develop mechanisms for generating resources for such incentives.

3. Health Information System:

The project's health information system has demonstrated the ability of CHSs and VHPs to gather community-based health data. This information is important for good management of community activities. HIS activities could be incorporated into the formal responsibilities of the MOH HSAs, and should then be added into the HSA training curriculum. Village health promoters can be trained to collect and use data at village level, but they require supervision, which can be provided by HSAs.

4. Training:

The project has achieved impressive levels of knowledge by training of various categories of people: VHPs, VHCs, CHSs, and CDAs. The system for transmitting and maintaining skills requires more than single training sessions; other methods include refresher training, informal

training during monthly meetings, use of skill assessment to determine areas for reinforcement, and regular supervision.

5. Drug Revolving Funds:

Drug revolving funds can be operated at village level to provide access to treatment for the common diseases. Drug revolving funds allow VHPs to see that they are making an impact on the lives of their community members, and motivates them to continue their activities. DRFs give villagers and VHCs a concrete way to take responsibility for their own health. The presence of drugs in the village helps them see that VHPs are making a difference and makes them more inclined to support the efforts of their VHP. However, villages require assistance in establishment of such funds and mechanisms for resupply are needed.

6. Duration of Project:

Community-based health projects require intensive efforts and work with villages. Three years is an insufficient duration to achieve the desired results and make them sustainable.

7. Use of Intersectoral Collaboration:

Community development assistants, part of the Ministry of Women and Children's Affairs and Community Services, can be effectively integrated into the support of village level child survival activities, especially if provided some training in child survival.

8. Integrity of Project areas:

The Mkhota impact area fell under two different Districts and was bisected by a river which made transportation difficult and expensive. More care should be taken in choosing sites for projects, since management and sustainability of such situations is difficult.

**FINAL EVALUATION REPORT FOR
SAVE THE CHILDREN (US)
CHILD SURVIVAL V PROJECT**

I. TERMS OF REFERENCE

The final evaluation team was presented with terms of reference that outlined what was expected of them:

1. to assess the achievements reached in relation to the stated objectives in the project's Detailed Implementation Plan
2. to answer the USAID Final Evaluation Sustainability Questionnaire
3. to provide an overall assessment of the project's successes and failures
4. to document lessons learned for other organizations and Save the Children field offices
5. to formulate recommendations for future health activities.

This report will describe the project and its background, the methods used to conduct the evaluation, and then will present findings in terms of: achievement of objectives, sustainability, lessons learned (successes and deficiencies). Recommendations will follow, focusing on actions for sustainability in Mkhota and Mbalachanda and on issues for future activities.

II. BACKGROUND AND DESCRIPTION OF THE PROJECT

Malawi is a small, densely populated, land-locked country in southeastern Africa, which gained independence from Great Britain in 1964. Stretching over 500 miles north-south and 50-100 miles east-west, it is bordered by Mozambique, Tanzania, and Zambia. The total population is 9 million inhabitants, and population density is high at 163 per square mile.

Malawi's economy is based on agriculture, with tobacco as the major export crop and maize as the major subsistence crop. Approximately 90% of the population can be found in the rural areas, living in small villages and working smallholder farms. Per capita income was estimated in 1993 at \$200, one of the world's lowest.

Infant mortality, while slowly declining, is still one of the highest in the world at 144 deaths per 1000 live births (UNICEF, 1993). Fertility is high, at 6.7 (DHS, 1992), and the birth rate is 55 births a year per 1000 population (UNICEF, 1993). The leading causes of death in children under five include: malaria, measles, diarrhoea, malnutrition, and pneumonia. Rates of under five malnutrition have historically been high and they have increased in recent years due to the drought.

The Ministry of Health (MOH) operates a system of district hospitals and rural health centres, supplemented by a number of private hospitals and clinics. Since independence, the Government of Malawi (GOM) has worked with donors and non-governmental organizations (NGO) to establish rural growth centers to strengthen the agricultural base of the country. In 1983, Save the Children began working in the Mbalachanda rural growth center (Mzimba district) and in 1986, started in the Mkhota rural

growth center (straddling Kasungu, Lilongwe, and Mchinji districts). Mbalachanda benefited from a Child Survival II project from 1986-1989.

For the Child Survival V project (1989-1993¹), initiated in 1989, the Mbalachanda impact area originally covered a population of 38,000, although the project is now actively covering 28,800 living in 120 villages. In the Mkhota impact area, the population to be served has changed substantially, from an original 32,000 to 110,000 to 80,000 to a final effectively covered population of 49,000 living in 84 villages. Reasons cited for the reduction in the target populations in Mbalachanda were due to the loss of supervisors in some areas that were not replaced as a means of reducing costs and phasing² out. In Mkhota, current Save the Children/Malawi staff cited the difficulties of effectively covering an impact area divided by a river. Although all villages were covered by the original census, not all were adequately involved in the project, due to logistic difficulties, exacerbated by the difficulties of recruiting appropriate supervisors in some areas. The evaluation team felt that Save the Children had originally been over ambitious in their target areas for Mkhota.

The Save the Children Child Survival project focused on management of diarrhoeal diseases, immunizations, growth monitoring and nutrition education, malaria control, management of acute respiratory infections, antenatal care, child spacing, and HIV/AIDS prevention. Other activities included village sanitation and well protection. The Save the Children project activities, whether initiated in 1986 (in Mbalachanda) or 1989 (in Mkhota), started by developing active participation of the community: forming village health committees and selecting village health promoters³. The promoters were trained by the project to conduct health education, mobilize women for under five clinics, follow up malnourished children, provide ORS (and in Mbalachanda, a limited array of drugs to treat malaria, respiratory infections, eye infections and a few other common ailments). Community health supervisors were women, living in the area and having a JCE (or at least finishing Form 2), who were hired and trained to supervise and support the village health promoters. Collaboration was established with local health centers to conduct joint static and outreach under five clinics, and with community development assistants to support village level activities.

Training was a major activity of Save the Children staff: in addition to the initial training provided to village health promoters, they were given a 2 day refresher course every year, as well as more informal trainings. During the last year, refresher training was intensified to strengthen the sustainability of activities after Save the Children phased out. The initial four week training of community health supervisors was supplemented in 1990 with the six week Health Surveillance Assistants course conducted by the respective District Health Offices and refresher courses were provided twice a year. Village health committees received training (in 1989 in Mbalachanda and in 1991 in Mkhota), as well as annual refresher courses.

¹ The original project duration was from 1989-1992, but a no-cost extension was requested and granted, prolonging the project until 8/31/93.

² The midterm evaluation team had recommended gradually phasing out of supervisors as a means of reducing the cost of the supervisory system.

³ Promoters were required to be able to read and write in the local language (Chichewa or Chitumbuka). A few exceptions were made when a woman had other desired qualities and had someone in her household who would take responsibility for recording.

In addition to the strategies for the eight child survival interventions, Save the Children also implemented an extensive health information system and, in Mbalachanda, a drug revolving fund. The health information system was based on a complete census of the population which was then registered onto family enrollment cards. These cards were kept up-to-date by project staff, based on reporting forms filled in by the promoters. In addition, rosters of children under five were established and maintained in the villages by the promoters. These rosters were used to record births, deaths, immunizations, weighings, and trainings of mothers. The information was then used to monitor coverage and identify defaulters.

The drug revolving fund (DRF) was established only in Mbalachanda. Because USAID does not allow NGOs to use Child Survival funds to purchase drugs, Save the Children had to abandon their plans to implement DRFs in both impact areas. They managed to find private funds for the start-up in Mbalachanda before the end of CS II. However, Save the Children was not able to repeat this for Mkhota. The DRF is jointly managed by the promoter and the village health committee, with an effective system of checks and balances through signatures of promoters, committee members and community health supervisors. The drugs were purchased by the project from Central Medical Stores and sold by the promoters with a markup of about 100%. The money was then used to purchase new stocks and additional types of drugs.

III. METHODS OF EXECUTION OF THE FINAL EVALUATION

A. Team Composition

The final evaluation team was composed of six regular members and one ex-officio member (from SCF/Malawi). The team leader was an external consultant, and was joined by representatives from the Ministry of Health (MOH), the Ministry of Women and Children's Affairs and Community Services (MWCACS), the Christian Medical Association (CHAM), and United States Agency for International Development (USAID):

- Lynne Miller Franco, Team Leader
- Huggins Shaba, National PHC Coordinator, MOH
- Benjamin Chandiyamba, National Hygiene Education and Sanitation Promotion Coordinator, MOH
- Louis Nkhotima, Social Welfare Officer, MWCACS
- George Mandambwe, PHC Coordinator for the Central Region, CHAM
- Kenneth Sklaw, Assistant Project Manager, Promoting Health Interventions for Child Survival project, USAID
- Stanley Jere, Health Project Manager, Save the Children/Malawi (ex-officio)

B. Work Schedule

Except for the final preparation of this report, the entire evaluation was conducted as a team effort in the period of August 2-16, 1993. The team met for two days in Lilongwe to review documents and prepare for data collection, and then departed for 8 days in the field: 3 days in Mkhota, 3 days in Mbalachanda, with 2 days travel. The days in the field were spent gathering information from interviews, focus group discussions, and review of reports. The team then spent two more days in Lilongwe compiling and

interpreting the data, and developing findings and recommendations. A debriefing was held on August 16, 1993, chaired by the Ministry of Women and Children's Affairs and Community Services (the project's parent Ministry) and attended by representatives from that ministry, UNICEF, CHAM, the Ministry of Health (including members of the District health teams from Lilongwe and Kasungu Districts) and Save the Children staff.

C. Data Collection

A series of 10 questionnaires were employed to collect information for this evaluation (copies of these questionnaires can be found in Appendix B):

Data Collection Instrument	Sample size
Questionnaires for mothers with children under five	111
Questionnaires for village health promoters	28
Focus group guides for village health promoters	8
Focus group guides for village health committees	23
Questionnaires for community health supervisors	17
Focus group guides for community health supervisors	4
Questionnaires for community development assistants	4
Questionnaires for health centre staff	8
Questionnaires for District Health Office staff	2
Questionnaires for Save the Children staff	6

The selection of samples was conducted in the following manner:

1. In each impact area, a third of the areas⁴ were chosen randomly (3 of 9 in Mkhota and 4 of 12 in Mbalachanda).
2. For each area chosen, a fixed number of promoters were chosen randomly from the list of villages to make a total of 14 in each impact area (Mkhota: 4,5,5; Mbalachanda: 4,4,3,3).
3. In each village where a VHP was chosen, members of the village health committee (if existing) was interviewed.
4. In each village where a VHP was chosen, four mothers with children under five were interviewed. These mothers were chosen by locating the center of the village, spinning the bottle to chose a random direction, and interviewing the first four mothers encountered.
5. VHPs interviewed individually were brought together for focus group discussions by area.
6. Half of the community health supervisors were randomly chosen to be interviewed, and all supervisors who could attend were asked to participate in the focus group discussions.
7. All community development assistants and staff at health centres functioning in the impact areas were to be interviewed. [1 health centre was not contacted due to shortage of time, and 3 CDAs were not interviewed because they were out of the area for training.]

⁴ "Area" refers to a local administration area: there are nine such areas in Mkhota and twelve in Mbalachanda.

8. District Health Officers and Inspectors were interviewed in Kasungu and Mzimba districts.

The design of the instruments was based on those used during the midterm evaluation so that comparable data could be collected. Then, instruments were modified to:

- remove questions that had been included in the knowledge, practice and coverage survey conducted in July 1993,
- add questions relating to project objectives not yet covered by the midterm evaluation questionnaires and the KPC survey,
- add questions relating to the USAID sustainability questionnaire.

The entire team reviewed all questionnaires before finalizing them.

All team members participated in data collection at village level. Data collection from Save the Children staff, health centre staff, community development assistants and DHOs was generally conducted by the non-Chichewa/non-Chitumbuka speaking members. When translation was required, local Save the Children staff served as interpreters.

IV. FINDINGS

A. Achievement of Project Objectives

This section will review the achievements of the project relative to their stated goals and objectives in the Detailed Implementation Plan (DIP). A review and assessment of the overall goals will be presented first, followed by assessment of the individual interventions. For the specific interventions, the DIP objective is cited first.

Some comments should be made about the final evaluation team's assessment of achievements. As the team had limited time to carry out its work, it was not able to gather all the information needed to truly assess the achievement of all project objectives. Findings based on the final evaluation team's instruments are conservative: they were designed to be conducted with no prompting of answers, making mothers and VHPs to rely solely on their memory⁵.

The KPC survey, required by USAID, used a standardized questionnaire that was not always in alignment with the Save the Children objectives. In addition, the survey did not sample separately in Mkhota and Mbalachanda, so no distinctions between impact areas could be made. For interviews conducted during the final evaluation, the sample of 111 mothers and 28 VHPs was too small to allow disaggregation by impact area (although results presented in Appendix B are shown by impact area).

1. Achievement of Overall Goals

The overall goals of the program, as stated in the Detailed Implementation Plan (DIP), were as follows:

⁵ The evaluation team felt that the best test of sustainability was to see what mothers and promoters could recite from memory. However, this method does not necessarily reflect all knowledge, since nervousness could cause them to temporarily forget things they do know.

1. to improve the health status of the population in the impact areas, especially children under five and women of child bearing age, through a process of community training and support to local health centres.
2. to establish and maintain a close working relationship with the MOH at all levels and to ensure the integration of the program into the MOH structure by the end of the grant period.
3. to promote community participation in planning, implementation, and evaluation of the program in order to strengthen community organization and ensure the sustainability of the program.

In reference to the first goal, the final evaluation team did not attempt to assess improvement in health status, since the drought conditions over the last several years would complicate any such analysis. However, if knowledge and coverage can be taken as a proxy for improvement in health status, the process of community training and support to local health centres has achieved this goal.

Save the Children did establish and maintain close working relationships with local MOH staff and community development assistants from the MWCACS. Some aspects of the project will be integrated into the MOH structure at the end of the project, while sustainability of other aspects are not yet assured. This topic will be discussed in more detail in Section IV.B. and in Appendix A.

The communities in the impact areas have participated in the implementation of project activities, and to a certain extent in the evaluation of activities (through feedback from the health information system). One area where they fully participated in the planning of activities is the development of the drug revolving fund, which involved extensive discussions and planning with the communities. Although the Save the Children approach may not be "community participation" in its purest sense, village health committees have been formed and trained, so community organization has been strengthened. It remains to be seen how well they will be able to sustain activities after Save the Children leaves, when they are provided with less technical and moral support.

2. Achievements Related to Population Registration

By August 1992, the population size, demographics, and health status of children under five will be defined in Mkhota and updated in Mbalachanda so that monitoring of vital events and health program participation can be instituted for the duration of the project.

The initial population registration was completed. All VHPs were trained in developing and maintaining rosters and updating vital events. The updating of the rosters on a continuous basis had not always been achieved: the final evaluation team found that of the 86 children for whom the rosters were available and whose card was with the mother, 30 were not listed in the rosters.

The results of Save the Children's Lot Quality Assessment in March 1992 in Mbalachanda showed that only 7 of 14 supervisors had met the goal of 85% or more of demographic data updated in their promoters' rosters.⁶ Results for updating of immunizations were better, with 13 out of 14 CHSs meeting the goal of 85% or more children with immunizations updated in the roster. Trainings in ORT were not well recorded, with only 5 out of 14 CHSs meeting the goal of 85% of trainings updated in the roster.

⁶ If 80% was used as the goal, this would change to 10 out of 14.

Monthly reports based on these rosters were not always submitted (on time). For the month of June, only 90 of 140 promoters in Mkhota and 125 of 140 in Mbalachanda turned in monthly reports (through their CHS).

3. Achievements related to immunizations

By August 1992, 75% of the 0-11 months and 1-4 year old children and all enrolled expectant mothers in villages where there is a VHP will be fully immunized against the 6 killer diseases in Mkhota and 85% of the target population in Mbalachanda will be immunized according to the MOH guidelines.

Although village health committee members interviewed in many villages remarked on the reduction of cases of immunizable diseases since the project started, coverage rates from the KPC survey for complete immunization in children 12-23 months was only 52%. It should be noted that this figure is based on the strict criteria of information solely from the Road to Health card. Although this figure is lower than one would have suspected, the evaluation team was not able to adequately investigate why the figure was so low. National rates for complete immunization coverage for the same age group is 82%, but this figure is based on the card, and on mother's recall if the card was not available.

Training of VHPs and CHSs on immunizations was implemented. Promoters generally knew what was to go into the roster, but only two-thirds of the children seen who were in the rosters and whose card was available had their immunizations correctly registered in the rosters. Collaboration with the MOH facilities in the area was good relative to joint provision of under five clinics. More than 60% of mothers could name three or more immunizable diseases and knew when measles immunizations were to be given.

4. Achievements related to Control of Diarrhoeal Disease

By August 1992, 60% of families in Mkhota and 90% of families in Mbalachanda will demonstrate competence in preparation and administration of ORS in the management of diarrhoea, and how to feed a child suffering from diarrhoea. All children who lose weight are and defaulting in their immunizations will be monitored through the rosters.

Again, training and refresher training of VHPs and CHSs took place. Homecraft workers and CDAs received training in child survival activities in 1992. 75% of mothers interviewed correctly described how to prepare ORS and 66% correctly described how to administer it to a child with diarrhoea. The final evaluation team did not ask them to demonstrate and it is possible that some mothers may have been able to show what they did not say. Many mothers went beyond the team's criteria, citing the need to throw out the solution the next day. Over 80% of VHPs knew the correct preparation and administration of ORS. Of mothers interviewed with children experiencing diarrhoea during the two weeks prior to the knowledge, practice and coverage (KPC) survey, 65% continued to breast-feed and over 80% gave some type of rehydration fluids (ORS, SSS, or cereal-based ORT). When compared to the national figures of 32% for ORS packets (DHS, 1992), the project's rate of 56% is quite high. However, 23% of mothers interviewed during the KPC survey stopped fluids completely and 41% gave their child less food than usual.

5. Achievements related to Growth Monitoring and Nutrition

By August 1992, 60% of 0-35 month children will attend at least 4 growth monitoring sessions a year in Mkhota and 70% will do so in Mbalachanda. 40% in Mkhota and 20% in Mbalachanda will be followed up in their homes. 50% of children who show signs of

malnutrition in Mkhota and 30% in Mbalachanda will have their mothers trained how to feed their children adequately with food available in their homes.

71% of children were weighed in the last four months, and mothers' knowledge of what children should be fed appeared adequate. During the final evaluation interviews with mothers, 40% of mothers with a child not growing at his/her last weighing were visited at home by their promoter.

VHP knowledge levels were high for what to feed children and what actions to take for malnourished children. However, the KPC survey showed 60% of mothers interviewed still believe that semisolid foods should be introduced earlier than 4 months of age, and the rate of exclusive breast-feeding for infants less than three months of ages was only 13%. However, the latter is high compared to a national rate of only 3% of children 0-3 months being exclusively breastfed (DHS, 1992). Nutritional status appears to still be inadequate, although it was not possible to determine how much of this is due to the drought and how much was due to inadequate practices by the mothers.

6. Achievements related to Child Spacing

By August 1992, 80% of mothers in Mkhota and 90% of mothers in Mbalachanda will be made aware of the advantages and methods of modern child spacing. All community leaders will also be made aware of these services.

Training of promoters and supervisors took place and knowledge levels of VHPs and CHSs about modern child spacing methods were high: 89% of VHPs and 100% of CHSs could name three or more methods. 68% of mothers interviewed could name two or more modern child spacing methods and 75% knew where they could get condoms. Actual utilization rates from the KPC survey is now 15% (of mothers with a child under two who were not pregnant), an increase from pre-project rates and notably higher than the national rate of 6.3% of women of child bearing age (DHS, 1992). Project rates for women not desiring another child in the next two years was 22%.

Knowledge of community leaders was not assessed during the final evaluation.

7. Achievements related to Malaria Prevention and Treatment

By August 1992, 80% of families in Mkhota and 95% of families in Mbalachanda will be able to recognize the signs and symptoms of malaria; have access to Chloroquine; and be competent to treat cases of malaria correctly by age according to MOH guidelines. They will be able to refer to the nearest Health Centre as well as know how to control the breeding of mosquitos.

Knowledge levels for recognition of malaria and treatment (tepid sponging and chloroquine) were high for mothers, VHPs, and CHSs. 90% of mothers interviewed knew the signs and symptoms of malaria, 80% knew to give a child a tepid sponge bath, and 77% said that they would give Chloroquine to a child with malaria. Over 70% of mothers whose child had fever in the two weeks prior to the KPC treated them with chloroquine or fansidar. However, only 36% of VHPs and 41% of supervisors were able to recite the correct chloroquine dosages for all ages from memory. Dosages for fansidar (the new drug) are much easier, but knowledge was not tested. 89% of VHPs interviewed knew how to control breeding of mosquitos.

Access to treatment was not assured in Mkhota. Since no drug revolving funds were established. In Mbalachanda, VHPS and CHSs were trained in DRF. Although the MOH policy is now to treat malaria with fansidar as the first line drug, only 2 of the 15 VHPs interviewed in Mbalachanda currently had fansidar in their drug kits (10 out of 15 had Chloroquine). It should be noted that at the time of the evaluation, all village DRFs were in the process of being restocked (money was being collected and stocks were to be purchased before the end of August 1993).

8. Achievement related to Treatment of Acute Respiratory Infections

By August 1992, 80% of families in Mkhota and 90% in Mbalachanda will be able to recognize signs and symptoms of mild, moderate, and severe pneumonia and the need for obtaining treatment without delay and referring to the nearest Health Centre.

VHPs and CHSs received initial and refresher training on ARI. During the KPC, 51% of mothers cited difficult breathing and 18% cited chest indrawing as a symptom of respiratory infections requiring a visit to the health facility. All but one VHP interviewed knew the signs and symptoms of ARI. Over 90% of children suspected of experiencing ARI in the two weeks previous to the KPC survey went to a health facility. However, again no access to village-based treatment was available in Mkhota (no DRFs). In Mbalachanda, at the time of the evaluation, only 4 of 15 DRFs currently contained Bactrim.

9. Achievements in Antenatal Care

By August 1992, 80% of expectant women in Mkhota and 90% in Mbalachanda will attend at least one antenatal visit during the time of pregnancy. All expectant mothers will get two TTs before delivery.

VHPs and CHSs received training in motivation of mothers for antenatal services. 77% of mothers knew pregnant women should eat green leafy vegetables and 58% said they should eat protein. 86% of the VHPs interviewed knew what foods to advise pregnant women to eat. 94% of mothers had made at least one antenatal visit during their last pregnancy. 62% of mothers (according to their antenatal card) had received at least 2 Tetanus Toxoid injections and 89% knew that they needed at least two TT injections during pregnancy. National rates for TT were 86% (based on information from the card or mothers' recall) for at least one TT and 84% of at least one antenatal visit (DHS, 1992). Pregnancy outcomes and antenatal visits were recorded on the monthly HIS recording form (see 2. Achievements related to Population Registration).

10. Achievements related to HIV/AIDS

By August 1992, 80% of families in Mkhota and 90% in Mbalachanda will have been trained in the severity and dangers of AIDS/STD and mode of transmission and how the disease can be prevented.

VHPs and CHSs received training and refresher training on AIDS. More concentration was placed on this topic after the midterm evaluation. The messages about transmission and prevention of AIDS have resulted in 69% of women interviewed citing sexual intercourse as a means of transmission and 61% citing unsterile instruments, although knowledge about intrauterine transmission was extremely low. The national rates are 86% for sexual transmission and only 45% for transmission by unsterile instruments. 75% of mothers knew where to get condoms (most mentioned the health centers although promoters should have condoms), only 25% mentioned condoms as a means of prevention. It is not known whether this was a

lack of knowledge or a discomfort to mention condoms to a male interviewer (in public) as a means of AIDS prevention. VHP knowledge was good, and they could, on average, could name three-four methods of transmission. The project has instituted innovative approaches in the last months to get around cultural reticence to discuss matters such as AIDS in public: they have trained teachers in AIDS messages, and used students to perform in drama groups to their elders.

11. Achievements related to the Health Information System

By August 1992, the Health Information System (HIS) will have been modified and revised so that it is in a format that can be sustained by the Govt. health centres at the end of the present funding.

Two seminar/workshops were conducted with the staff from MOH Headquarters, the Regional Health Offices of the North and Central regions, the District Health Offices of Lilongwe, Kasungu, and Mzimba, World Vision, and from the health centers in the Impact Areas. The goal of these workshops was to develop a format that was simple and contained the information desired by the MOH as well as that used by Save the Children. The format has been made much simpler. These new forms have been in use since June and training has been provided to VHPs and CHSs. The evaluation team noticed that a few promoters still had some difficulty with the forms, and in Mkhota, the return rate was only about 65% for the month of June. Save the Children will leave about 1000 blank forms in each impact area, which is about 8 month supply, but it is not known what will happen after that supply runs out. In addition, it is not clear who will do the compiling of forms in the areas where the CHSs are not hired as HSAs and allowed to continue to work in their areas.

12. Achievements related to Training

By August 1992, 26 Community Health Supervisors and all the CDAs in Mkhota and 20 CHS and all CDAs in Mbalachanda will be trained and retrained according to the MOH Health Surveillance Assistant syllabus.

The CHSs were trained in 1990 by the District Health Office staff in their respective districts. The course lasted six weeks and used the MOH syllabus. Certificates were awarded last year. As a result, it appears that many of the CHSs will be employed by the MOH as HSAs.

13. Achievements related to Sustainability

By August 1992, 92 homecraft workers and community leaders will have been oriented to all child survival interventions and strategies for sustainability of the program.

The number of homecraft workers and leaders trained by the project was 2 workers and 10 leaders in each impact area. Training/orientation for community leaders were held in each 'area' to discuss sustainability of project activities. Village health committees were given initial training in Mbalachanda in 1989 and in Mkhota in 1991. VHCs received annual refresher courses as well. The final evaluation did not assess their knowledge of child survival interventions.

B. Sustainability

One important component of the USAID-funded Child Survival project evaluations is the assessment of sustainability of project activities when the NGOs phase out. A detailed response to the specific questions

in the USAID Sustainability Questionnaire can be found in Appendix A. A summary of the issues not covered elsewhere in the body of the report follows here.

1. Plans and Status of Sustainability

Save the Children's plan for sustainability outlined in the D/P included the following aspects.

training of village health committees who will have responsibilities to select VHPs, provide ongoing support and supervision to the VHP, and manage the drug revolving funds

1. refresher training of VHCs by the CDAs
2. sharing of information from the HIS
3. implementation of immunizations and growth monitoring by joint MOH/SCF teams
4. training of the community health supervisors (CHS) with the MOH HSA curriculum by the DHO staff
5. convincing the MOH to assign a community health nurse to each impact area
6. modification/simplification of the HIS so that the MOH can take over supervision
7. establishment of DRFs in Mbalachanda
8. transfer of knowledge to VHPs, VHCs, CDAs, CHSs
9. phase-over discussions with MOH

Save the Children has carried out all of these activities, and they have been successful in most of these. One exception is in obtaining a MOH nurse assigned to each impact area (they only have one in Mkhota). The assessment of sustainability is best discussed for the various levels:

Village level: Save the Children has provided a significant amount of training to village health promoters and village health committees. These in turn have educated the mothers and others in the villages. Knowledge levels of mothers and promoters were generally high. In addition to the 28 active VHPs interviewed, the evaluation team visited four promoters in Mbalachanda who had not been supervised for more than one year because their CHSs moved out of the area or had died. The team found the knowledge levels of these four promoters were still high and they continued to be active in working with their villages. The village health committee members interviewed through the impact areas seemed appreciative of what the project had introduced and interested in continuing after Save the Children phases out.

Attrition levels for the promoters have been very low. In Mbalachanda where there are currently 140 VHPs, over a period of seven years, 5 died (and were replaced), 3 dropped out, and 3 married and left the village. In Mkhota, where there are also 140 promoters, since 1989, 2 have died and 8 were phased out because their supervisor dropped out. Save the Children initially provided soap monthly to promoters, but over the last year or so, has made this irregular and told promoters that this was not payment for their work; when Save the Children could, they would buy soap. Promoters interviewed said they would continue, even

when Save the Children no longer provides them with soap, and village health committees appear willing to find an alternative incentive (that does not require cash).

There are currently 136 villages with drug revolving funds in Mbalachanda. The DRFs failed in only 5 villages since 1988. Some other villages have had problems, but these were resolved and the DRF reinitiated.

Supervisory level: Supervision of village-level activities was performed by community health supervisors and community development assistants. Supervision during the project from these sources appeared to be generally adequate, although some technical issues still need to be resolved (under five rosters, new reporting form, treatment schedule for malaria, etc.). Continuation of technical and moral support is however, not yet ensured. Many of the CHSs will be hired by the respective districts, but it is not clear whether they will all be allowed to remain in their areas. The CDAs who have been collaborating with the project will not necessarily stay in the area (several are out for training) and without project support for transport, they may have difficulty continuing to visit the villages.

Health Centre level: Continuation of immunizations and growth monitoring sessions conducted jointly with the local MOH health centres will suffer when Save the Children pulls out, since they provided both manpower and transportation for outreach clinics. The MOH does not have sufficient resources to maintain the intensity of activities. If bicycles used by the CHSs are left to those who become HSAs, this may mitigate the transportation problem somewhat. However, in time, lack of resources for maintenance will create shortages in means of transportation.

Impact area level: The leadership in child survival provided by the project staff, especially by those in place at the end of the project, is important for technical and moral support to the CHSs and to the communities. The leadership provided at impact area level is important for several reasons: communication and support to VHPs, VHCs, and supervisors; managing collection of money and resupply of drugs for the DRFs; and management of the HIS. Many of these tasks could be carried out by MOH staff (a community nurse or a health inspector), if they are properly oriented and interested. The sustainability effect gained by fact that Save the Children managed to get the MOH to second a nurse to Mkhota has been lost by Save the Children's decision to take her with them to their new project in Mangochi.

Save the Children has made efforts to communicate with community leaders, health centre staff, and District Health Office staff about the phase-over. However, the project would have benefited from more close collaboration with these groups from the initial planning phase of the project right up to the end. Save the Children had good relations with the various actors, but MOH staff perceived the project as an independent entity carrying out its own activities (except under five clinics).

⁷ Community development assistants are civil servants within the Ministry of Women and Children's Affairs and Community Services. The CDAs working in the project areas were trained in child survival interventions by the project.

⁸ The MOH seconded a senior public health nurse to Save the Children for three years, and so far, she has only been with them 18 months. She will be an asset to their new project, but this is a great loss for the people of Mkhota.

2. Projected Costs and Revenues

Estimations of the cost of continuing project activities come to an annual cost of about \$22,000 (or 96,000 K) a year for both impact areas (80,000 people and 280 village health promoters). These costs include salaries for 40 community health supervisors (the current number), salaries for two project-level supervisors, bicycle maintenance for 40 bicycles, stationary, annual refresher trainings for VHPS, VHCs, and CHSs, drug purchasing distribution costs for Mbalachanda, and motivation/health education visits to the villages.⁹ This amounts to about \$ 0.27 (or 1.2 K) per capita. If the number of CHS were reduced by half (the number likely to be absorbed by the MOH), the cost would be reduced to about \$15,000 or \$ 0.18 per capita.

Revenues from the sale of drugs at village level are generated only in Mbalachanda. However, these revenues are the property of the village and are not used to cover any project costs. They are used to buy new supplies of drugs, expand the types of drugs, and to finance some incentives for the promoters. Field cropping of maize as a means of revenue generation at village level was introduced last year in a few villages. However, there are no possibilities of expanding this program to other villages, since there is no longer a source of funds for seed and fertilizer that the project provided.

The initial cost for drugs to institute the DRFs in 120 villages in Mbalachanda in 1988 was about \$800, or about \$6.70 per village.¹⁰

3. Efforts to Reduce Costs

Save the Children has made several efforts to keep the costs of child survival activities low: using locally hired CHSs, decentralizing VHP and VHC training, and streamlining the health information system reporting. By hiring CHSs that come from the area they will be supervising in, Save the Children was able to avoid the costs of accommodation. Initial training of VHPs was conducted at a central location, which involved costs for blankets, food preparation, etc. Trainings are now done by area (or several areas together) and the area health committees are assigned responsibility to find someone to prepare food (that the project provides), find places for the promoters to sleep (Save the Children provides the blankets), and provide firewood. Finally, efforts were made to make the health information system less costly, by reducing the format for reporting.

The midterm evaluation team recommended that Save the Children test ways to reduce the costs of the supervisory system which they felt was too costly to be sustained by the MOH. As a natural experiment, this was done: not replacing supervisors who died or left. Save the Children should have made a more concerted effort to test the effects of less frequent supervision. The final evaluation was not able to

⁹ These costs do not include the cost of providing soap to the VHPs, since most village health committees interviewed indicated they would find some way to motivate their promoter.

¹⁰ This amount in Kwacha at the rate of exchange then was about 20 K per village or 2,350 Kwacha in total.

ascertain whether promoters with less supervision perform differently than those with more supervision.¹¹ The questions revolving around the amount and type of supervision are important ones, and the chance to have some answers has been lost. Save the Children could have systematically tested for knowledge and coverage levels achieved in VHP's villages to assess the effects of differences in the intensity of supervision.

C. Successes, Deficiencies, and Lessons Learned

1. Project Successes

The Save the Children project has been most successful in developing knowledge levels of promoters, mothers, and community leaders. It is this knowledge and the practice related to this knowledge that will be able, in the long run, to improve child survival. The project has been able to create village-based structures that will remain after the project leaves. This is not to say that the villages will be able to continue without outside support, but a good base has been established. The village health promoters are generally well-respected and appreciated by the villages, an achievement for women in Malawi.

The project has also been able to establish 136 drug revolving funds that have been "revolving" for more than four years. This success may be attributable to the intensive consultative planning of the DRFs with the villages. There are still many kinks to be worked out, especially now that Save the Children will no longer be there to collect money and purchase new stocks of drugs. However, it is a notable achievement to have maintained so many DRFs.

Save the Children enjoys a very good reputation in most communities. Save the Children has developed a successful mechanism for developing community cooperation through a network of village health committees, promoters and supervisors living in the area. The relationship between the CHS and the VHP seemed quite supportive and there appears to be good collaboration between the VHP, VHC, and CHS in mobilizing the communities for under five clinics, tracing defaulters, and in the promotion of hygiene and sanitation activities. The attrition rates for VHPs are only 6.6% and drop-out rates are very low (less than 2%); this may well reflect the effect of such cooperation and support, especially in Mbalachanda, where they have been working for almost 7 years.

2. Project Deficiencies

There are only a few general areas in which the project was weak. One such area is collaboration with government structures in planning and management of activities. Although collaboration at the implementation level with CDAs and with health centre staff (for under five clinics) was good, issues of sustainability of project activities after phasing out were not given sufficient attention at the beginning of the project. The MOH was not adequately involved in the design, planning, and assigning of responsibilities for activities. MOH staff complained that information sharing had not been sufficient and that Save the Children generally worked independently from them.

¹¹ Knowledge levels assessed in interviews with four VHPs who had not been supervised in over a year (in Mbalachanda) suggest that it is possible to reduce the frequency of supervision, if the promoters have acquired a good base (working for several years with supervision) and are still provided access to refresher training.

Another weakness was not implementing DRFs in Mkhota. The communities appeared very interested in having drug revolving funds. Community ownership and independence appeared greater in Mbalachanda where management of DRFs was part of the VHC's tasks.

3. Lessons Learned

Save the Children has implemented a relatively successful program in the two impact areas. Besides the finding that the model of community-based child survival activities can improve knowledge and practice levels in the villages, there are several other lessons that be drawn from the experiences in Mkhota and Mbalachanda.

Use of Women as Health Surveillance Assistants: Experience with female CHS/HSAs in the Save the Children project have shown that they are capable of doing the job. Save the Children has shown that it is possible to recruit qualified female candidates and that female CHS/HSAs can and will use push bicycles for transportation. Although the responsibilities of a community health supervisor require frequent travel by bicycle and days away from their families, drop-out rates have been relatively low. An initial number dropped out shortly after initial training, due to misinformation about benefits, but the rest have remained (with the exception of a few who have either died or moved away from the area). Choosing women resident in the area increases the chances of stability and avoids the need to furnish accommodation.

Incentives for Village Health Promoters: Save the Children provided initially provided promoters with badges, an apron, plastic shoes, a uniform, and then gave them soap on a regular basis. These incentives seemed effective in motivating promoters to carry on with their work. However, continuation of incentives provided by donors are difficult for villages to sustain. Save the Children recognized that the soap could be seen as a sort of salary that was coming from the NGO and not from the community. They decided to provide soap more irregularly and to clarify that this was not a salary. Village health committees interviewed did not feel they could continue to provide any incentive that required an outlay of cash, although most seemed willing to provide some other kind of incentive. From these experiences, it seems that village responsibility for some kind of incentives should be negotiated from the beginning. This way, donors can work with village committees to develop mechanisms for generating resources for such incentives.

Health Information System: The project's health information system has demonstrated the ability of CHSs and VHPs to gather community-based health data. This information is important for good management of community activities. Save the Children has made progress in getting communities to look at the data coming from their villages. There is still work to be done in this area, but the HIS system of under five rosters and monthly reports appears to be a feasible means of data collection at village level. Village health promoters can be trained to collect and use data at village level, but they require supervision, which can be provided by HSAs. HIS activities could be incorporated into the formal responsibilities of the MOH HSAs, and added into the HSA training curriculum.

In addition, the project's use of Lot Quality Assessment (LQA) techniques for assessing coverage and accuracy of the health information system in 1992 provided useful data and this technique could be applied elsewhere.

Training: The project has achieved impressive levels of knowledge by training of various categories of people: VHPs, VHCs, CHSs, and CDAs. Save the Children's system of training involved more than a single initial training session. Transmission and maintenance of skills was achieved through regular refresher

training, informal training during monthly meetings, use of skill assessment to determine areas for reinforcement, and regular supervision.

Drug Revolving Funds. Save the Children has shown that drug revolving funds can be operated at village level to provide access to treatment for common diseases. Drug revolving funds allowed VHPs to see that they are making an impact on the lives of their community members, and motivated them to continue their activities. DRFs gave villagers and VHCs a concrete way to take responsibility for their own health. The presence of drugs in the village helped them see that VHPs are making a difference and made them more inclined to support the efforts of their VHP. However, villages require assistance in establish of such funds and mechanisms for resupply are needed.

Duration of Project: Community-based health projects require intensive efforts and work with villages. Although there was no ascertainable difference in knowledge levels of mothers and promoters between Mbalachanda and Mkhota, there appeared to be a difference in the activity levels of the VHCs. Mbalachanda has benefited from seven years of child survival activities, compared to four years in Mkhota. Support of VHCs will be crucial for the continuation of VHPs. Four years is an insufficient duration to achieve the desired results and make them sustainable.

Use of Intersectoral Collaboration: Experiences from the Save the Children project have shown that community development assistants from the Ministry of Women and Children Affairs and Community Services can be effectively integrated into the support of village level child survival activities, especially if provided some training in child survival.

Integrity of Project areas: The boundaries of the Mkhota impact area crossed two different Districts, increasing the number of people to collaborate with. The impact area was also bisected by a river which made transportation difficult and expensive. More care should be taken in choosing sites for projects, since management and sustainability of such situations is difficult.

V. RECOMMENDATIONS

The following recommendations are divided into two categories: those relating to the improvement of sustainability in the CS V impact areas, and those pertaining to actions for Save the Children's CS IX project and efforts by other NGOs.

A. Sustainability in Mkhota and Mbalachanda

Save the Children has made substantial efforts to ensure the sustainability of child survival activities in Mkhota and Mbalachanda. However, there are still some issues that remain unresolved. The following recommendations, addressed to Save the Children, the Ministry of Health, and others, pertain to these issues.

1. Child Survival Activities

a. Recommendations for the District Health Offices

The DHOs should immediately take responsibility for the various community-based child survival activities initiated by Save the Children in their districts. This responsibility can be managed through the health facilities in the impact areas.

Supervision: Supervision will be required to ensure that VHCs remain active, and that VHPs maintain their skills. DHOs (or health centre staff) and DCDOs (for CDAs) should immediately assign responsibility for supervision and support of VHPs. In areas where the CHSs are to be engaged as HSAs, they should be allowed to remain in their areas of operation to provide continuity for the communities and to take advantage of their knowledge of the child survival interventions and activities. Schedules for supervision should be established. Since not all CHSs will be employed as HSAs, health centre managers will need to reassign some VHPs to those supervisors remaining.

Leadership: The DHOs should assign a community-enrolled nurse or health inspector to take responsibility for maternal and child health and to provide leadership for child survival activities in the impact areas. If no appropriate level of staff are available, training should be provided to other staff interested in community-based work.

Intersectoral Coordination: Mechanisms for sustaining the intersectoral collaboration seen in the Save the Children project need to be developed. Although the various cadres (CDAs, HSAs, Health Inspectors) may continue to work together on their own, the lines of authority do not necessarily cross. Efforts must be made to establish an apparatus for coordination, collaboration, and cooperation among the various actors and ministries at the local level.

Incentives: Health centre staff, HSAs, and CDAs in the impact areas should follow-up with the VHCs to discuss incentives for promoters. These discussions should focus on whether any incentives are being provided, and if not, what the village could do to support the promoter. Discussions among supervisors should explore how the types of incentives villages are providing affect VHP satisfaction or drop out rates.

Training: Training has been one of the mainstays of the Save the Children strategy. The DHOs should look for funds and organize refresher trainings for the VHPs annually or every 18 months. These refresher trainings will serve to maintain promoter skill levels (since supervision will necessarily be less frequent) and to motivate the promoters by recognizing their role in serving their communities.

b. Recommendations for Save the Children

In order to assist the DHO/Kasungu in providing leadership in the impact area, Save the Children should let the senior public health nurse seconded to them in Mkhota stay in the impact area to supervise and support the VHPs and the CHSs who will become HSAs. In addition, to ensure continuity of supervision and outreach activities, Save the Children should make the bicycles used by the CHSs available to those employed as HSAs and to the CDAs working with them in the impact areas.

Transition of responsibility for the child survival activities will inevitably encounter some difficulties over time. Save the Children should make their staff available for discussion when the DHO and DCDO need clarification or information about child survival activities they will now be responsible for. Save the Children staff should make themselves available to meet two to three times a year with district and health center staff in their former impact areas to discuss issues and technical problems.

2. Drug Revolving Funds

a. Recommendations for Save the Children and Other Donors

Save the Children has succeeded in establishing a relatively large number of DRFs that have been operating for several years. To ensure affordability, the villages will continue to need access to Central Medical Stores for purchasing (the private sector markups make the prices too high). Since it may take some time for the MOH to work out the mechanisms through which villages could be able to resupply through the MOH channels, the assistance of other donors should be requested immediately. Such donor assistance should include:

- immediate establishment of temporary mechanisms for resupply while MOH channels are being developed,
- provision of supervisory support to VHCs in the management of these DRFs by providing refresher training and transportation for HSAs and/or CDAs, and
- creation of buffer stocks and establishment of a system for their management.

For the buffer stock management, one option would be keep them at the nearest health centers and have them be managed jointly by health centre staff and area level community leaders in order to ensure that drugs are used for the village DRFs. Such a mechanism would require an effective system of checks of balances, and some training in DRF management for area level community leaders.

b. Recommendations for the Ministry of Health

The Mbalachanda impact area provides an excellent location for conducting operations research on DRF issues which would help the MOH in developing its policies in this area. The MOH should develop proposals for such studies and identify possible funders (e.g., UNICEF or USAID under PHICS).

3. Health Information System

a. Recommendations for District Health Offices and the Community Health Sciences Unit (MOH Headquarters)

The importance of having community-based information for management at local and district levels justifies additional efforts at improving VHP performance with relation to the under five roster and the monthly reporting form. The DHOs should undertake some studies to see why some VHPs are having difficulty with these components of the health information system (HIS) and take appropriate action to resolve them: this may involve simplifying the forms, providing refresher training, or some other action.

The extensive system of village-based reporting could also provide a useful sentinel site for morbidity and mortality data for MOH Headquarters. The Community Health Sciences Unit (CHSU) should make use of the data available retrospectively, as well as set up a system to maintain quality data collection by VHPs in these areas. This would require resources for data collection forms and refresher training, support to strengthen supervision, and resources for collecting, compiling and verifying the data. The DHOs could work together with CHSU to identify and resolve VHP problems with data collection.

Ways of reducing the paper requirements of the reporting system should also be investigated, such as reducing the format to two pages (from three), printing the reporting form on both sides of the sheet of

paper, and having the supervisor fill in one form for all her VHPs, without having each promoter fill in an individual form.

b. Recommendations for Save the Children

Save the Children should provide the DHOs access to their Mkhota and Mbalachanda staff to assist in resolving issues related to the information system, even after the end of the project. As mentioned above, this assistance should be structured in workshop/meetings. For the information system, such a workshop should be held within three months of the phase-out to discuss technical problems and sustainability issues that have arisen. Such discussions will be useful for the DHOs and for Save the Children by providing insights into sustainability for their new impact areas.

B. Issues for Future Activities

With respect to Save the Children's future activities in Malawi, there are two areas of recommendations: those that relate to specific interventions and those that relate to project sustainability.

1. Child Survival Interventions in Future Project Areas

There are a few areas mentioned in Section IV.A. (Findings: Achievement of Project Objectives) where Save the Children has not been able to meet its objectives. If nothing is changed in the implementation of CS IX, these areas will probably continue to be weak. Save the Children should focus their attention on these areas in the new impact areas and search for mechanisms for strengthening them. These areas include: exclusive breastfeeding and weaning, fluids and continued feeding during diarrhoea, immunizations, maternal care, treatment for malaria, and bridging the gap between knowledge and practice for child spacing and AIDS prevention. Some specific recommendations can be found in Appendix C: Knowledge, Practice and Coverage Survey Results.

2. Sustainability in Future Project Areas

Sustainability after a project requires collaboration from the beginning. The complexity of managing community-based child survival activities requires intimate knowledge of training, supervision, health information systems, and drug revolving funds. It is unreasonable to expect MOH staff to pick up these responsibilities (after an NGO phases out) without experiencing difficulties in integrating these new activities into their current responsibilities. To avoid such situations, collaboration between the NGO and the MOH needs to take place at the Central, District, and local level. Such collaboration should start with the development of the Detailed Implementation Plan and should include participation in the baseline survey and evaluations. Planning for phase-over of responsibilities should take place from the start, and should be done jointly.

To facilitate collaboration in management and ongoing planning, a joint management/advisory committee (including participants from Save the Children, the DHO and the DCDO) should be created to assure coordination and information sharing throughout the project. The government structures in the impact areas should not be viewed as independent of project activities, but as an integral partner in their implementation.

Finally, Save the Children health project staff should arrange to visit their former impact areas every six months for the first year, and annually after that, to see what aspects of their child survival project have been sustained. It is important to draw lessons from Mkhota and Mbalachanda about sustainability. This

report has raised some concerns, but only time will tell what is really sustainable. Since Save the Children will remain in Malawi for their Child Survival IX project in Mangochi, they can easily arrange for periodic visits to the former impact areas. These visits should include discussions with MOH staff based at District and health facility level, with HSAs and CDAs, and with promoters and village health committees. The discussions should focus on what activities are still being carried out and what kind of difficulties are being encountered. These lessons can then be incorporated into Save the Children's project in Mangochi.

Appendix A

Appendix A: Answers to the USAID Sustainability Questionnaire

**APPENDIX A:
ANSWERS TO THE USAID SUSTAINABILITY QUESTIONNAIRE**

A. SUSTAINABILITY STATUS

A1. Funding for Save the Children's Child Survival V project ends on August 31, 1993.

A2. All salaries end as of August 31, 1993, but the Health Project Manager is looking for Save the Children private funds to cover salary costs in September so they would be able to tie up the loose ends of the Drug Revolving Fund in Mbalachanda and the field cropping activities (used for village-level income generation) in both Mbalachanda and Mkhota.

A3. Activities for phasing over responsibility and control of project activities have taken place at several levels: village, health centres, and district level.

Village level: Village health committees and village leaders have been visited by project staff to discuss phase out. VHCs have attended refresher "training" in the following areas: organizing community activities, supporting the VHP in her teaching, providing some kind of incentive to the VHP (such as working in her garden occasionally), reminding the VHP of the importance of the under five roster, and conducting regular meetings with the VHPs and their supervisors to discuss and plan activities. In addition, general meetings have been held in each impact area for local authorities, the DHO and local health staff, and staff from the Ministry of Education in the areas to discuss phase out. VHPs are currently assisting in MOH under five clinics in their areas and will presumably continue to do so.

Health centres: Discussions have been held with some health centres on taking over responsibility for the mobile under five clinics that Save the Children conducted alone and those conducted jointly by Save the Children and health centre staff. Most will be closed for lack of transport and staff. However, if the CHSs are hired as Health Surveillance Assistants (HSAs) by the MOH, it may be possible to continue some of these clinics. The family enrollment forms of the Save the Children HIS will be handed over to the nearest health centre. CHSs have already begun (June 1993) to give the nearest health centre 2 copies of the monthly reporting form (one for their records and one to be passed on to the DHO). A stock of blank reporting forms (about 8 months worth) will be left with the health centres.

CDAs have been integrally involved in Save the Children activities and Save the Children has conducted special seminars for them in the areas of child survival. They should continue to provide supervision and liaison support between the villages and the health centres, as long as they have a means of transportation. However, their permanence in the project areas is not assured, and several are currently away for training.

District level: Discussions about employment of the CHSs (who have undergone HSA training in 1990) have led to the prospect of a good number becoming HSAs. It looks like many will be allowed to remain in their areas and so continue in their work after Save the Children leaves. In Mzimba District (Mbalachanda area), the DHO is looking for an appropriate candidate (community nurse) to provide leadership in child survival activities in the area (as the Save the Children health project supervisor has done). In Kasungu, unfortunately, Save the Children has decided to take the MOH senior public health nurse seconded to the project with them to their CS IX project in Mangochi. Discussions with the previous DHO in Lilongwe District to turn the Save the Children satellite office in Malembo into a MOH dispensary have unfortunately

not yet come to fruition. Save the Children has discussed with another NGO, InterAid, about the possibilities of supporting the Lilongwe section of Mkhota.

B. ESTIMATED RECURRENT COSTS AND PROJECTED REVENUES

B1. Project staff have cited the following as effective interventions: immunizations, growth monitoring, ORT, ARI, malaria, AIDS, antenatal care, and child spacing. The HIS and DRF have also been mentioned. This list encompasses all child survival interventions implemented under the CS V grant.

B2. To maintain these activities, the following expenditures would be needed:

- salaries for supervisors
- transportation for supervision and under five clinics (push bicycles - repair and replacement): transport is also needed for CDAs, health centre staff, and the CHS/HSAs
- paper supplies and duplication services for the HIS (rosters and reporting forms)
- funds for refresher training for VHPs, VHCs, and supervisors (to reinforce knowledge and provide opportunities for villages to replace VHPs and VHC members who have left or died)
- logistics costs for maintaining the DRF (resupplying village drug supplies)

B3. Annual (recurrent) costs estimated by Save the Children for approximately 300 VHPs covering about 80,000 people (total for both impact areas) are as follows:

Salaries	
CHS (40)	\$12,000
Health Project Supervisors (2)	\$ 6,000
Stationary	
reporting forms	\$ 150
office supplies	\$ 150
Transportation	
bicycle maintenance (40)	\$ 1,800
Training Costs	
refresher for VHPs (21 sites/2 days)	\$ 750
refresher VHC (21 sites/1 day)	\$ 750
refresher CHS (2 days)	\$ 180
Drug Revolving Fund	
transportation for restocking annually (collection \$, purchasing, distribution)	\$ 120
Motivation/training of villages	
21 sites/3 times a year	\$ 100
TOTAL	\$22,000

3

This comes to about \$ 0.27 per capita. If the number of CHS were reduced by half (the number likely to be absorbed by the MOH), the cost would be \$15,010 or \$ 0.18 per capita.

Project costs for restocking of the DRF are estimated to include transportation to the Central Medical Stores in Mzuzu and transport back to the local health centres for distribution, plus costs of replacing account notebooks in the villages. Personnel time for inventory and packaging for village drug kits has not been included.

Additional costs for expanding the number of villages for field cropping would be about \$20/village for initial inputs (12 villages participated in Mbalachanda in 1992, and in 1993, 19 in Mbalachanda and 9 in Mkhota).

B4. The costs of salaries could be absorbed by the MOH since the government is expanding the size of the HSA cadre (and the costs are to be borne by the World Bank for the next several years). The costs of the HIS, transportation and refresher training are more problematic for the MOH, since they have very limited resources. However, the types of expenses are reasonable for the environment.

R5. The revenues generated in the project areas are from two sources: the sale of drugs for treatment in the villages (DRF) and sale of maize grown as part of field cropping activities. Both sources of revenue provide resources for the villages. They are used to maintain or increase the drug stocks, and provide some incentives for promoters. Last year the DRF in Mbalachanda generated over \$1,350. The total DRF amount raised since 1990 is about \$4,300. The field cropping revenues for 1992 (drought year) appeared to cover the original investment. The figures for field cropping for 1993 are not yet known, but the rate of return should be better due to the rains.

B6. The type of costs most likely to be sustainable are those of salaries, since the government will probably employ a number of the CHSs as HSAs. The costs of resupply for the DRFs could also be sustained if the government can develop a mechanism for resupply. If the World Bank also provides transportation to these HSAs (they are supposed to provide transport and kits to newly trained HSAs), then this may be sustained as well. The costs of the HIS, training, etc. will continue to be dependent on donor funds.

B7. Save the Children has developed a relatively inexpensive community-based model by establishing a strong network of volunteer village health promoters, village health committees, and female supervisors who correspond to the MOH Health Surveillance Assistant cadre, and using bicycles as transportation. However, maintenance of transportation, stationary, and training costs will still be difficult for the MOH to cover.

C. SUSTAINABILITY PLAN

C1. The following persons were interviewed:

Mr. Stan Jere, Health Project Manager: Mr Jere has been heavily involved in the development of the Detailed Implementation Plan, project implementation and evaluation.

Mrs. Rose Kaolimbo, Senior PHN, CS Coordinator, Mkhota: Mrs. Kaolimbo was only seconded to the project 18 months ago, but she is involved in implementation, ongoing monitoring, and evaluation.

Mr. Macdonald Mtekama, Health Project Supervisor, Mkhota: Mr. Mtekama has been involved in the baseline survey, implementation, ongoing monitoring, and evaluation.

Mr. Tobias Manda, Impact Area Manager, Mkhota: Mr. Manda has been primarily involved in staff administration.

Mr. Martin Saka, HIS Clerk, Mkhota: Mr. Saka has been involved in the baseline survey, implementation, ongoing monitoring, and evaluation.

Mrs. Ruth Manjolo, Health Project Supervisor, Mbalachanda: Mrs. Manjolo joined the project 18 months ago, and she has been involved in implementation, ongoing monitoring, and evaluation.

Mr. Geoffry Banda, HIS Clerk, Mbalachanda: Mr. Banda joined the project in Mbalachanda in 1990, after the baseline survey. He has been involved in implementation, ongoing monitoring, and evaluation.

C2. The sustainability plan outlined in the DIP included the following components:

1. training of village health committees responsible for selecting VHPs, providing ongoing support and supervision to the VHP, and managing the DRF
2. refresher training of VHCs by the CDAs
3. sharing of information from the HIS
4. implementation of immunizations and growth monitoring by joint MOH/SCF teams
5. training of the community health supervisors (CHS) with the MOH HSA curriculum by the DHO staff
6. MOH will assign a community health nurse to each impact area
7. modification/simplification of the HIS so that the MOH can take over supervision
8. establishment of DRFs in Mbalachanda
9. transfer of knowledge to VHPs, VHCs, CDAs, CHSs
10. phase-over discussions with MOH

In addition, the Save the Children staff are all Malawian, with the exception of the Field Office Director.

C3. Save the Children has carried out all the above activities, and they have successfully completed most of them. One exception is the assignment of a MOH community health nurse to both impact areas: they were only able to get one for Mkhota. Other activities are discussed in detail in A3.

C4. Save the Children successfully implemented the training of village health committees, refresher training of VHCs with the participation of the CDAs, joint implementation of immunization/growth monitoring sessions, training of the CHSs with the MOH HSA curriculum, establishment of DRFs in Mbalachanda, and transfer of knowledge to VHPs, VHCs, CHS, and CDAs.

The areas where they have not less successful include:

- sharing of information from the HIS: 51% of VHCs in Mkhota and 23% in Mbalachanda said they not received information about the health status of their community. In addition, Save the Children only began regularly sending reports from their HIS to the DHO in January 1993.
- modification/simplification of the HIS so that the MOH can take over supervision: The HIS has been simplified through a consensus process with the MOH, but it is not clear whether local health staff will be able to take over supervision, since they lack transport, stationary, and have not been directly involved in the compilation and interpretation of the data in the past.

One originally unplanned activity was to hold discussions with community leaders in each area to discuss the phase-out/phase-over. These sessions provided leaders with a chance to discuss and ask questions. Meetings were also held at impact area level with representatives from the communities, the Ministry of Health, and the Ministry of Education to talk about phase-over issues. See A3 for more details.

C5. No counterpart institutions made commitments to sustain project benefits during the design of the project.

C6. No commitments were made to be unkept.

D. MONITORING AND EVALUATION OF SUSTAINABILITY

D1. The project had no specific indicators to track progress with sustainability.

D2. The project had no specific indicators for sustainability.

D3. Qualitative data indicating sustainability potential of the project include:

1. VHP attrition rate of only 6.6% and a drop-out rate of less than 2% (in Mbalachanda, many have been working for seven years). There were some problems originally in Mkhota where the communities had thought promoters would be getting access to loans. A few dropped out when they found it was not true.
2. many VHPs say they will continue even without the soap incentive, and many villages say they're willing to provide some kind of incentive for the VHP (working in their garden, etc.)
3. DRF failed in only 5 villages (plus one where the community thought the promoter was a witch and did not want to buy her drugs). One village where the DRF was not successful, the promoter's husband ran a grocery that also sold chloroquine.
4. during focus group discussions held by project staff in Mbalachanda with villagers, the knowledge levels appeared high.

D4. In-country agencies represented on the mid-term evaluation team included: Ministry of Health (Nutrition and PHC programmes), Christian Health Association of Malawi (an NGO running about 40% of health facilities in Malawi, but only one in the SCF impact areas), and USAID. For the final evaluation, members included: two from the Ministry of Health (PHC and Hygiene Education and Sanitation Promotion), one from the Ministry of Women and Children's Affairs and Community Services, one from the

Christian Health Association of Malawi, and one from USAID. Team members participated actively in the design, implementation, analysis and presentation of the results.

D5. Save the Children received feedback on the proposal and DIP. It appears that no suggestions related specifically to sustainability, although recommendations related to VHP turnover and VHP/family ratios could be put into this category. Save the Children did reduce the VHP/family ratio by having more than one promoter in larger villages. Given the low attrition rate, this seems to be effective. Very few VHPs have needed to be replaced, and since refresher courses were frequent, replacements were slotted into these courses. For replacement of CHSs, several were chosen from among the better promoters.

D6. The midterm evaluation team made a number of recommendations related to sustainability:

1. **Reduce cost of VHP support system:** The costs of the VHP support system have been reduced, by no longer replacing CHS who die or drop out. The final evaluation team interviewed 4 VHPs who no longer had supervisors and they seemed to remain knowledgeable and active. The project has intensified refresher training for VHPs and CHSs, as was suggested by the midterm evaluation team.
2. **Reduce service to find sustainable model:** The number of SCF staff supporting the project in the impact areas was lower at the time of the final evaluation than originally. In Mkhota, the staff included an Impact Area Manager, a Child Survival Coordinator and an HIS clerk based on the Kasungu side, and a health project supervisor on the Lilongwe side. In Mbalachanda, there was no Child Survival Coordinator, only a Health Project Supervisor and an HIS clerk. Given the change of focus in training, it appears that these individuals are not so involved on service delivery.
3. **Create buffer stocks for DRE:** A small buffer stock of drugs exists at the Project office in Mbalachanda, but this has not been sufficient for maintaining stocks at the village level while waiting to collect enough monies to purchase in bulk from Central Medical Stores. Save the Children encountered constraints when trying to create a larger buffer stock. SCF would have had to get clearance and be registered as a business, since the drugs are being exchanged for money. In addition, a larger buffer stock would have required funds in addition to those generated from the DRFs themselves and the project could not use USAID funds to pay for drugs.
4. **Create wholesale distribution function:** The system for resupplying the DRFs has remained the responsibility of Save the Children throughout the life of the project. Discussions have been held with the DHO in Mzimba District about the possibility of the District purchasing drugs on behalf of the villages. There are, however, some legal aspects to this which have not yet been adequately resolved. The final evaluation team has recommended that another donor take over the support of these DRFs while the GOM is working through its issues about collection and maintenance of monies by health facilities.
5. **Market population registration as an evaluation tool:** Save the Children has conducted two seminars with the MOH Headquarters, the Regional Health Officers from the Central and Northern regions, the DHOs from Mzimba, Kasungu, and Lilongwe, World Vision, local health center staff, and CHAM to discuss reporting forms from their HIS. However, the final evaluation team was not able to find evidence that SCF has actively marketed the roster system. The final evaluation team has suggested that the Epidemiology Unit in CHSU take over responsibility for reporting from these areas, since SCF has put in place an extensive system of community-based reporting on morbidity, mortality, and coverage.

6. Provide more information to community leaders: Village health committees have received at least one training in each area. Homecraft workers were also trained (once). In addition, the SCF staff have gone to villages to conduct focus group discussions/health education sessions with village leaders and community members.

E. COMMUNITY PARTICIPATION

E1. Village health committees in 23 villages were interviewed during the final evaluation (10 in Mkhota and 13 in Mbalachanda). The percentage of women interviewed (as part of the VHC) was 8% in Mbalachanda and 27% in Mkhota. However, this may not necessarily reflect their representation on these VHCs, since no advance notice was given to villages that the team was coming. The team talked with 16 chairmen, 10 secretaries, 5 treasurers, 3 vice chairmen, 7 village headmen, and 11 regular members of the VHCs.

E2. Members of the VHCs in Mkhota, when asked which Save the Children project activities they thought were most effective mentioned under five clinics, nutrition, and well protection most frequently, followed by sanitation, diarrhea management, AIDS, and training of VHPs. In Mbalachanda, ten villages (out of 13) mentioned the DRF, followed by under five clinics and health education. However, when asked what they were doing to improve the health of their village, they mentioned sanitation activities (hygiene, well protection, rubbish pits, latrines), growth monitoring, malaria control, diarrhea, and AIDS.

E3. The most important activity that Save the Children carried out to enable communities to take care of themselves was the training of village health promoters and village health committees who imparted knowledge to other community members about child survival activities. In addition, in Mbalachanda, the introduction of DRFs has helped communities ensure access to treatment for malaria, ARI, wounds, scabies, ear and eye infections. Save the Children started income-generating activities in a few villages through field cropping of maize. The project supplied seed and fertilizer and the money earned from the sale was to be used for providing incentives to the promoter and augmenting funds for the DRF. Only about 4% (12) of the villages participated in the first year (1992) which was a drought year. That number has increased to about 29 in 1993, representing 10% of the villages.

E4. Communities did not participate in the design of project activities, but were involved in the implementation through: selection of promoters, mobilization of mothers, sanitation activities, managing drug revolving funds, and conducting income generating activities (maize). VHC members interviewed in Mbalachanda appeared to feel more involved, due to the presence of a DRF. They also more frequently mentioned that they received information on the health status of their communities from their VHPs or SCF staff.

E5. Accurate figures on the total number of VHCs was not obtained during the evaluation. However, discussions with 17 CHS (out of 35) revealed 80 VHCs (for 107 VHPs) of which 49 were considered active. Those active tended to meet at least once in six months, and many met 2-3 times. The VHCs were composed of the VHP, the village headman, political leaders, youth groups and other elected members. There can be up to 10 members. The final evaluation team was told that female representation is much higher in Mkhota, where inheritance is matrilineal, than in Mbalachanda, where no all committees included a woman in addition to the promoter.

E6. Health committees in both areas were involved in village sanitation activities (village inspection, pit latrines, well protection, kitchen, rubbish pits), mobilization of mothers for under five clinics, and supporting the promoter. In Mbalachanda, the VHCs also jointly manage the DRFs with the promoters.

E7. The only resource contributions made by villages came in terms of labor -- for field cropping of maize, mobilization of women, sanitation activities. In Mbalachanda, the communities are providing wooden boxes to keep the drugs in (SCF provides the locks).

E8. Up until now, no other contributions have been asked of the villages, except now to provide some incentives to the promoters. Most villages said they would not be able to continue to provide soap, as SCF has done (SCF also initially provided a badge, an apron, a pair of plastic shoes, and a khaki uniform). VHCs mentioned other methods to motivate their promoters, such as working in the promoter's garden, pounding her maize, and field cropping activities. Most VHCs said they would be able to continue sanitation activities, health education, and the DRF (in Mbalachanda) after SCF leaves.

The level of activity of the VHCs appears greater in Mbalachanda than in Mkhota. There are several factors that might explain this:

- the DRF provides a concrete mechanism for community participation and responsibility.
- Save the Children has been active longer in Mbalachanda, allowing for more time to develop cooperative relationships with the villages.

F. ABILITY AND WILLINGNESS OF COUNTERPART INSTITUTIONS TO SUSTAIN ACTIVITIES

F1. Health staff were interviewed at eight health centers (4 in Mkhota and 4 in Mbalachanda). Persons interviewed at these locations included medical assistants, health inspectors, health assistants and enrolled nurse/midwives. These individuals were involved in the joint implementation of under five clinics -- both static and outreach.

Five community development assistants (4 in Mkhota and 1 in Mbalachanda) were interviewed. These CDAs collaborate with SCF in training and supporting village health committees, supervising CHSs, mobilizing communities, and supporting VHPs.

Discussions were also held with the DHO from Mzimba and Kasungu Districts, and with the District Health Inspector from Kasungu. These individuals are responsible for district level activities.

The nurse from the one CHAM unit in the impact areas was interviewed. SCF also collaborates with them on a few under five clinics.

F2. The child survival project was effectively linked to the local health facilities in jointly conducting under five clinics (as well as conducting some alone). During these clinics, vaccinators, CHSs and VHPs assisted the health center staff team in providing immunizations, weighing children and providing health education. Save the Children provided transport and labor, while the health facilities provided vaccines and supplies. In addition, whenever health assistants or health inspectors went to the villages, they worked with the promoters.

More recently, Save the Children has worked with MOH and other NGOs in the area to simplify their health information system. They have also started sending two copies of their monthly reports to the nearest health center: one copy for the facility and one to be sent on to the DHO.

The project also incorporated the CDAs working in the impact areas into the project activities, providing them with training in child survival activities, as well as transport, and in some cases, housing and office space.

F3. The local institutions that will be taking responsibility for sustaining project activities are the local health facilities, the District Health Office, and the CDAs. They have contacted another NGO to take responsibility for the Lilongwe side of the Mkhota area.

F4. Staff at the local health facilities, when asked which project activities they felt were most effective, mentioned teaching of people in the villages, growth monitoring and nutrition education, AIDS, child spacing, diarrhea management, ARI, and in Mbalachanda, the DRF.

F5. Save the Children has provided training sessions for CDAs and homecraft workers in child survival. The course for the CDAs also included issues of sustainability - their responsibilities after Save the Children phases out. Health center staff were invited to seminars on specific topics, such as AIDS. Health center staff in some areas (Mkhota) were involved in the refresher training of CHSs and VHPs. Health center staff were also used as supervisors during the final knowledge, practice and coverage survey. 25 of the 33 primary school teachers were given a workshop on AIDS and shown how to use the AIDS syllabus, as well as how to start drama groups. Two seminars on HIS were held with MOH staff to design the new reporting forms.

Save the Children has also conducted general meetings in both impact areas with local leaders, MOH, Ministry of Education, and Ministry of Community Services to discuss phase-out and phase-over activities.

F6. The MOH will be able to sustain certain aspects of the child survival activities in the impact areas because they will probably be employing about half of the community health supervisors as Health Surveillance Assistants. If Save the Children leaves them with their bicycles, and the MOH does not assign them to other areas, these HSAs will be able to continue support to the VHPs and VHCs. Other activities, such as under five clinics, will be reduced, due to lack of transport. There most probably be difficulties in covering the stationary and training costs.

F7. see F4.

G. PROJECT EXPENDITURES

G1. see attached. Pipeline Analysis which includes an explanation of the budget.

G2. According to the pipeline analysis through 6/30/93, there are several small differences between the original budget in the DIP and actual expenditures:

supplies	18% higher than planned
assets (equipment)	34% lower than planned
consultants	75% lower than planned
evaluation	36% higher than planned
personnel	9% lower than planned

travel	34% higher than planned
other	23% higher than planned

G3. Save the Children redistributed the money in their budget according to the above changes (compare pipeline analysis "planned budget" with "DIP budget"). In most categories, they spent most of the money, with a few exceptions: "consultants" where they heavily underspent, and "assets" and "other" where they overspent to some degree. For consultants, they had originally budgeted \$32,000 which they reduced to \$7,700 in their pipeline analysis budget. Of this, they only spent \$96.61.

The Save the Children project appears to have used its funds such that they met most of their objectives. Even though the target population was reduced, they managed to make their funds for four years instead of three, extending the period of service for the communities being served.

The one area where they could have perhaps used their budget differently would have been for consultants. For example, the midterm evaluation team recommended studying the effects of reduced supervision in an effort to find a more cost-effective support system. Save the Children, if they did not feel they had the time or competence to carry out such operations research, could have hired a consultant to help them.

G4. No lessons to be passed on here.

H. ATTEMPTS TO INCREASE EFFICIENCY

H1. Save the Children has implemented the following strategies to reduce costs:

- reduction of the number of pages of the HIS reporting forms,
- * allowing for natural attrition to reduce the number of supervisors,
- * reduction of training costs by decentralizing training to the area level (political-administrative division) and having the community provide a cook, firewood, and a place for the VHPs or VHCs to sleep,
- hiring women resident in the area as CHSs so that there was no need to provide them with accommodation costs.

H2. These strategies seemed to have been successful, although it is difficult to estimate the financial impact.

H3. It would have been useful to study more carefully the effects of reduced supervision. NGOs should use more operations research techniques to examine the impact of cost-reduction strategies.

L COST RECOVERY ATTEMPTS

L1. Cost recovery mechanisms, in the form of drug revolving funds, were only implemented in one area of the project - Mbalachanda. The reasons cited for this were related to USAID restrictions about using Child Survival funds for purchasing of drugs. Save the Children managed to find private funds to set up the system in Mbalachanda (at the end of CS II) but were unable to do so in Mkhota. As a result, no drugs were available in villages in Mkhota, except those villages with private groceries. The overall management of the cost recovery efforts was handled by the Health Project Manager, although in

individual villages, management was conducted jointly by the VHP and the VHC. Health project staff assisted in collecting money and distributing drugs after purchasing from Central Medical Stores.

12. Since 1990, more than 15,000 K (about \$4,300¹) has been collected from the villages. This money was not used to cover project costs, since the project would not have been providing drugs to the villages if no DRFs existed (as in Mkhota). The money generated belongs to the villages. The DRFs have been successful in generating sufficient funds to keep going for more than three years.

13. Drug revolving funds have contributed substantially to Save the Children's reputation in the area. Villages were highly appreciative of having drugs in their villages, and villages in Mkhota were unhappy that they did not have the opportunity to have such DRFs in their area. The costs of drugs available through the DRFs at village level were still lower than those in the groceries (since they were purchased in bulk through Central Medical Stores). Save the Children staff stated that charging for drugs would not cause any inequities, since prices were low and, in any case health care was free at the health centers if one could not pay in the village.

14. The success of DRFs is probably in large part due to the extensive discussions with the community in developing the system for the DRF. In addition, there is a good system of checks and balances, with the VHP, the VHC, and the CHS having to sign whenever drugs are distributed or whenever money is collected for resupply. In addition, the VHP is encouraged not to keep more than K 10 at the time. Money should be turned over to the VHC treasurer periodically. There are still questions about how villages can keep their money. The possibility of opening small bank accounts was explored but found to be unfeasible because the amount of money involved was too small.

15. The aspects discussed in 14. provide lessons for other CS projects.

J. HOUSEHOLD INCOME GENERATING ACTIVITIES

J1. The only income generating activities implemented by the project were field cropping of maize in a limited number of villages (12 in 1992 and 28 in 1993). The project provided seed and fertilizer (at a cost of about \$20) and the communities were to plant, harvest, and sell the maize. The funds were to be managed by the VHC and were to be used for augmenting the drug revolving funds in Mbalachanda (or to start DRFs in Mkhota) and to help provide incentives to the promoters.

J2. In the first year, 1992, which was also a drought year, a total of K 1,150 was raised by 12 villages in Mbalachanda (the original inputs were about K 800). This year, 28 villages have participated but the accounting has not yet taken place. The money earned is not at household, but at village level.

J3. It will remain to be seen, with this year's yields, whether this activity provides sufficient revenue to realize a return on investment.

J4. Some members of the VHC have complained that only a few did the work, whereas the whole village will benefit. However, this type of activity, when based on the staple crop, is relatively easy to implement (no training needed, easy markets for selling). Income generating activities should be initiated

¹ This dollar amount was calculated, taking into account the recent devaluations of the currency.

early on in the project so that there is time to work out any difficulties and to ensure that such activities can continue without further project inputs.

K. SUMMARY

K1. The project has done much to enable communities to continue child survival activities at the village and family level. The extensive training and health education has resulted in high levels of knowledge for most child survival interventions. DRFs have created a feeling of ownership and responsibility at village level. The project has made efforts to phase-over support activities to the local health institutions: their supervisors were trained by DHO staff in the Health Surveillance Assistant's curriculum, and it now appears that 11 of 18 from Mkhota and an unspecified number from Mbalachanda will be employed by the MOH as HSAs. If allowed to stay in their area, they would be able to continue to provide support to VHPs and VHCs. There is good cooperation between the health center staff (and CDAs) in the areas and the CHS and VHP and they should be able to continue working together after the project leaves. The issue of sustainability will depend on the ability of the local health facilities to ensure supervision of promoters, and provide occasional refresher training. Other aspects, such as outreach under five clinics, will most likely not be continued, due to a shortage of transport. However, it should be noted that the system implemented is one that is endorsed by the Ministry of Health, with HSAs supervising village volunteers and having a means of transport (push bike) like Save the Children provided to their supervisors.

The project has demonstrated its competence in developing knowledge and skills at the village level (VHPs, VHCs, mothers). The project has created relatively effective links with the local institutions (health center staff and CDAs) and has managed to have government civil servants seconded to their project (one nurse midwife and several CDAs). One reason for such cooperation may be the fact that the Health Project Manager is retired from the MOH where he was responsible for MCH for many years. He therefore knows whom to contact and whom to talk to.

The areas in which sustainability-promoting activities were weakest include the inclusion of health staff in the planning and managing of the child survival activities. The Detailed Implementation Plan should have been developed in cooperation with the MOH staff at the District and local levels. Joint management/advisory committees should be established to ensure continuous sharing of information and responsibilities. The phase-over should be an issue of constant discussion with those to whom responsibility will be phased-over, from the beginning of the project's planning stages until the last day of the project. Although central MOH staff were involved in the midterm and final evaluations, it would have been useful to have participation of DHO staff, since they will be the ones operationally responsible for the child survival activities when Save the Children leaves.

K2. The members of the final evaluation team were the following:

Lynne Miller Franco, Team Leader

Huggins Shaba, National PHC Coordinator, Ministry of Health Headquarters

Benjamin Chandiyamba, National Hygiene Education/Sanitation Promotion Coordinator, Ministry of Health Headquarters

Louis Nkotima, Social Welfare Officer, Ministry of Women and Children's Affairs, and Community Services Headquarters

George Mandambwe, Regional PHC Coordinator, Christian Health Association of Malawi

Kenneth Sklaw, Assistant Project Manager for Promoting Health Interventions for Child Survival Project, USAID/Malawi

Stanley Jere (ex-officio), Health Program Manager, Save the Children (US)/Malawi

**SAVE THE CHILDREN
MALAWI FIELD OFFICE
Notes to CSS Pipeline Analysis**

The Life of Grant Malawi budget was revised in May 1992. Changes corresponded to the percentage restrictions of AID as stipulated in the cooperative agreement, and were approved by the SC Headquarters.

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: CUM TOTAL VS. TOTAL GRANT *			
	EXPENSES YEAR 1	EXPENSES YEAR 2	EXPENSES YEAR 3	EXPENSES 07/31/83	PLANNED BUDGET **	BALANCE	% SPENT		CUMULATIVE TOTAL ACTUALS	CUMULATIVE TOTAL PLANNED BUDGET ***	BALANCE	% SPENT
Procurement												
Supplies***	17,158.84	31,700.88	20,833.83	10,448.95	18,852.48	8,403.51	55.4%	0.00	79,842.58	88,348.08	8,403.51	80.9%
Assets***	0.00	23,723.85	803.83	(275.17)	(903.83)	(328.88)		0.00	24,052.51	23,723.85	(328.88)	101.4%
Consultants	1,473.54	0.00	(1,374.93)	0.00	7,700.00	7,700.00	0.0%	0.00	98.61	7,798.61	7,700.00	1.3%
Sub-Total:	18,632.38	55,424.71	19,862.83	10,173.78	25,948.63	15,774.85	39.2%	0.00	104,093.70	119,869.55	15,774.85	88.6%
Evaluation	344.33	585.07	1,300.87	3,125.88	8,404.26	8,278.28		0.00	5,388.05	11,644.33	8,278.28	48.1%
Other Program Costs												
Personnel	34,088.83	50,211.87	45,808.28	55,448.58	81,654.72	8,208.14	88.0%	0.00	185,565.48	181,773.80	8,208.14	88.8%
Travel	12,638.47	12,089.81	23,850.88	11,732.19	19,249.34	7,517.15	80.9%	0.00	80,121.23	87,838.38	7,517.15	88.9%
Other	35,032.85	35,383.28	17,421.83	32,358.55	15,534.37	(18,824.18)	208.3%	0.00	120,208.32	103,382.14	(18,824.18)	118.3%
Sub-Total:	81,760.85	87,705.17	86,880.97	99,537.32	98,438.43	(3,098.89)	103.2%	0.00	365,893.01	382,794.12	(3,098.89)	100.9%
TOTAL	100,748.88	153,724.85	108,044.07	112,837.08	131,791.32	18,954.24	85.6%	0.00	475,352.78	484,357.00	18,854.24	88.2%

* First expenses for Year 3; Year 4 through: 07/31/83
 ** Year 4 includes balances from Year 3. LOG Revised Budget approved 4/26/82.
 *** 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.

Appendix B

Appendix B: Questionnaires (Samples) and Results from the Final Evaluation

			<u>Mkhota</u>	<u>Mbalachand</u>
9.	what do you do to a child with fever? (Tepid sponge is Yes)	Yes	No 75%	84%
10.	What do you give to a child with malaria? (Chloroquine or S-P (Fansidar is Yes)	Yes	No 68%	84%
11.	Where do you get Chloroquine? VVHP, HC, or Grocery is Yes)	Yes	No	
11.	Can you tell us how to mix ORS? (if not prompt)			
	Washing hands	Yes	No	
	Washing utensils	Yes	No 32%	31%
	One liter water (3 coke bottles or measure)	Yes	No 74%	78%
	one packet	Yes	No	
	Mix	Yes	No	
	Taste	Yes	No	
12.	Tell us how you would give the ORT to your child: (Wait to see if points are covered, do not prompt)			
	Spoon or glass/cup	Yes	No	
	Quantity (little by little until the bottle is finished).	Yes	No 66%	67%
	Continue breast-feeding and/or feeding	Yes	No	
13.	Name how AIDS is spread			
	Sexual	Yes	No 77%	62%
	Contaminated instruments	Yes	No 62%	60%
	Infected pregnant mother to the baby	Yes	No	
	Do not know	Yes	No	
14.	Name methods of prevention			
	One faithful partner	Yes	No	
	Use of condoms	Yes	No 23%	29%
	Use of sterile instruments	Yes	No	
	Do not know	Yes	No	

			<u>Mkchota</u>	<u>Mbalachanda</u>
15.	If you wanted to use a condoms, where would you get one?			
	VVHP	Yes No		
	CHS	Yes No	85%	62%
	HC staff	Yes No		
	Other (specify)_____	Yes No		
16.	Do the immunizations in the Road to Health Card correspond with what the VVHP Roster Has?	Yes No	34%	54%
17.	Does last weight on the Road to Health Card correspond with the last weigh in the VVHP's Roster?	Yes No	32%	44%
18.	When was the last training of the family recorded in the Roster?		28%	38%
	Child not registered in roster		49%	18%

40

ALL UNPROMPTED QUESTIONS

QUESTIONNAIRE FOR THE VILLAGE HEALTH PROMOTERS

Name of person interviewed _____
 Impact Area _____ village _____
 Date _____

1. When did you receive your first training as a VVHP(month/year)_____
2. How long was the course?
3. Who conducted the training?
4. Was immunization training part of your initial training? Yes No
5. Have you received any refresher training in immunizations? Yes No
6. What diseases do immunizations protect from?

		<u>Mkhota</u> n=14	<u>Mbalachanda</u> n=14
TB	Yes No		
Polio	Yes No		
Diphtheria	Yes No		
Tetanus	Yes No		
Pertussis	Yes No		
Measles	Yes No		
≥ 4 Diseases		93%	87%
7. What is the schedule for a child's immunizations? Yes No
 (OPV:1, 6, 10 14 weeks; DPT: 6, 10, 14 weeks; BCG: 1 week; measles: 9 months)

79%	58%
-----	-----
8. Was malaria management part of your initial training Yes No
9. Have you received any refresher training in malaria management? Yes No
10. How do you recognize a person has malaria (fever)? Yes No

100%	100%
------	------
11. How do you treat malaria? (Chloroquine/ S-P (fansidar)) Yes No

87%	93%
-----	-----
12. What is the proper treatment for each age range for choloroquine and for S-P (fansidar)?

	Chloroquine	S-P	<u>ALL AGES</u>	
0-11 months	(1/2, 1/2, 1/2)			Yes No
1-3 years	(1, 1, 1,)			Yes No
4-6 years	(1 1/2, 1 1/2, 1 1/2)			Yes No
7-12 years	(3, 3, 2)			Yes No
Adult	(4, 4, 2)			Yes No

21%	50%
-----	-----
13. When do you refer a malaria patient to HC for treatment?

71%	86%
-----	----------------
14. How do you control mosquito breeding? (drain pools of water, remove contaners which catch water) Yes No

87%	93%
-----	-----

41

				<u>Mkhota</u>	<u>Mbalachanda</u>
15. What advise do you give a mother for wearing her child?					
o Breast-feed ideally up to two years	Yes	No		58%	72%
o Age the mother should start giving solid food 3-4 months	Yes	No		65%	93%
o Frequency solid food .3 times per day	Yes	No		72%	65%
o what food (Mgaiwa & Groundnuts)	Yes	No		93%	87%
16. How can you tell if a child malnourished or growth faltering? (loss of weight or no weight gain over three months)	Yes	No		65%	87%
17. What can you tell if a child in the community is malnourished or growth faltering?					
Determine the cause	Yes	No			
Advise	Yes	No	—————>	100%	86%
Home visit	Yes	No			
18. Was nutrition training part of your initial training?	Yes	No			
19. Have you received any refresher training nutrition?	Yes	No			
20. What types of foods are important for mothers to give to children. (Give specific examples).					
protein					
Vitamin A				71%	71%
Iron rich foods					
21. What types of foods are important for pregnant women to eat (give example).					
				86%	71%
22. Was management of diarrhea part of your initial training?	Yes	No			
23. Have you received any refresher training in management of diarrhea?	Yes	No			
24. What do you teach mothers about management of a child with diarrhea?					
Giving fluids (ORS, home available fluids)	Yes	No		100%	100%
Continued breast feeding/feeding	Yes	No		72%	72%
Catch up feeding?	Yes	No		43%	36%
Prevention of diarrhea	Yes	No		43%	36%
25. Do you have ORS packets?	Yes	No		58%	50%
26. How do you prepare ORS?					
Wash hands	Yes	No			
Wash utensils	Yes	No			
One liter water (3 coke bottles or measure)	Yes	No	}	87%	79%
One packet	Yes	No			
Mix	Yes	No			
Taste	Yes	No			
	Yes	No			

			<u>Mkhota</u>	<u>Mbalachand</u>
27. What do you tell mothers about how to give ORS to their children?				
Spoon or glass/cup	Yes	No	93%	79%
As much as child will take/or w/each stool	Yes	No		
28. How do follow-up a child after diarrhea?				
follow for weight loss	Yes	No	87%	58%
follow for immunization defaulting	Yes	No	36%	29%
29. Was promotion of child spacing part of your initial training?	Yes	No		
30. Have you received any refresher training promotion of child spacing?	Yes	No		
31. Name modern methods for child spacing? (no.) <u>≥ 3</u> methods which available in your area: where?	Yes	No	87%	93%
32. Where are they available?	know where available		93%	93%
33. Have you received refresher training in HIV/AIDS prevention?	Yes	No		
34. Was HIV/AIDS prevention part of your initial training?	Yes	No		
35. How is HIV/AIDS transmitted? (number of correct modes stated)			average #	3.5 2.0
36. How can you prevent the transmission of AIDS? No. _____	<i>avr</i>			2.2 2.2
37. Was management of pneumonia part of your initial training?	Yes	No		
38. Have you refresher training in management				
39. How do you recognize a person has pneumonia? (cough, difficult breathing, chest in-drawing)	Yes	No	93%	100%
40. When do you refer a patient with pneumonia to the health center?	Yes	No	79%	64%
41. Was ANC part of your initial training?	Yes	No		
42. Have you received refresher training in ANC?	Yes	No		
43. What do you advise pregnant women to do for ANC?	Yes	No	79%	93%
44. What is the schedule for tetanus toxoid? (At least two TTVs)	Yes	No	72%	72%
45. Have you received training in developing and maintaining rosters?	Yes	No		
46. Have you received refresher training in developing and maintaining rosters?	Yes	No		
47. May we see your rosters for 0-5's	Yes	No	65%	72%

43

	<u>Mkhota</u>	<u>Mbalachanda</u>
48. How are you using them?		
49. How do you use the information from the rosters and birth, death and pregnancy reports:		
In discussions with supervisors	Yes No	58% 79%
In discussions with communities	Yes No	58% 50%
In discussions with families	Yes No	65% 65%
50. Was training in operations of the revolving drug fund part of your initial training?	Yes No	
51. Have you received refresher training in operations of the revolving drug fund?	Yes No	
52. Explain how it works.		
53. Do you have a revolving drug fund in your village?	Yes No	
54. What are your current supplies?		
List _____		

ALL UNPROMPTED QUESTIONS

QUESTIONNAIRE
FOR THE COMMUNITY SUPERVISORS

Name of person interviewed _____
 Impact Area _____ Village _____
 Date _____

	n=10	n=7
	Mkhota	Mbalachanda
1. When did you receive your first training (month/year) _____		
2. What have you been trained in? Antenatal Care _____ AIDS _____ Immunizations _____ Growth monitoring _____ ORT _____ ARI _____ Child spacing _____ Malaria _____ HIS _____		
3. Have you attended any refresher courses on the above topic? _____		
4. May we see your registers for 0-5's? (if yes & used) _____ yes No		
5. What diseases do immunization protect you from? (no.) _____	60%	86%
6. What is the schedule for a child's immunizations? (OPV: 1,6, 10 14 weeks; DPT:6, 10, 14 weeks; BCG: 1 week; measles: 9 months)	Yes No 80%	86%
7. What is the schedule for tetanus toxoid? (two before delivery, with four week interval)	Yes No 80%	86%
8. How do you recognize a person has malaria (fever)?	Yes No 100%	100%
9. How do you treat malaria?	100%	86%
10. What is the proper treatment for each age range? 0-11 months (1/2, 1/2, 1/2) 1- 3 years (1,1,1) 4- 6 years (1 1/2, 1 1/2, 1 1/2) 7- 12 Years (3, 3, 2) Adult (4, 4, 2)	Yes No Yes No Yes No 30% Yes No Yes No	72%
11. What advise do you give a mother for weaning her child? o Breastfeed ideally up to two years o Age the mother should start giving solid food 4-6 months o Frequency of solid food .3 times per day o What food (Mgaiwa & Groundnuts)	Yes No 50% Yes No 100% Yes No 70% Yes No 80%	58% 100% 58% 86%
12. How can you tell if a child in your community is malnourished or growth faltering? (loss of weight or no weight gain over three months is yes)	Yes No 100%	72%

45

		<u>Mkhota</u>	<u>Mbalachanda</u>
13. Please interpret this road to Health card (correctly is yes)	Yes No		
14. What do you do when a child in your community is malnourished or growth faltering?		100%	100%
Determine the cause	Yes No		
Advise	Yes No	10%	14%
Home visit	Yes No	100%	100%
15. What do you teach mothers about management of a child with diarrhea?			
Giving fluids (ORS, home available fluids)	Yes No	100%	100%
Continue breast-feeding and continue feeding	Yes No	60%	100%
Prevention of diarrhea	Yes No	10%	14%
16. Are ORS packets readily available? as the villages you are responsible for ORS?	Yes No	60%	100%
17. How do you demonstrate the preparation of ORS?			
Wash hands	Yes No		
Wash utensils	Yes No		
one liter water (3 coke bottles or measure)	Yes No	90%	72%
one packet	Yes No		
Mix	Yes No		
Taste	Yes No		
18. What do you tell mothers about how give ORS to their children?			
Spoon or glass/cup	Yes No		
Quantity (as much as child will take or with each stool	Yes No	30%	29%
Continue breast-feeding and/or feeding	Yes No		
19. What are the modern methods for child spacing? Are they available in your area? if Yes where?	(no.) <u>> 3</u> Yes No	100%	100%
21. How is AIDS transmitted? (number of correct modes stated) <u>> 2</u> modes		90%	100%
22. Do you think the communities have participated in the design implementation and evaluation of the project activities?	Yes No		
23. If yes how did they participate?			
Meetings			
surveys			
labour			
DRF			
IGA			
Cash consolation			

	<u>Mkhota</u>	<u>Mbalachanda</u>
24. How many VHC are in the area? No. _____ avg. #	4.3	5.3
25. How many of this are functioning No. _____ avg. #	2.7	3.1
26. How many times did they meet in the last six months? No. _____		
27. How many VHPs do you supervise? _____ avg. #	6.6	5.9
28. What do you do when you visit your VHPs? _____ How often do you visit them? _____ per month?	3.1	2.9
29. What is your role in the drug revolving fund?		

4 focus groups

FOCUS GROUPS QUESTIONNAIRE
VILLAGE HEALTH PROMOTERS

Impact Area village
Date _____ Number of people present _____

1. Why did you become a village health promoter? to help people to learn more about health, as a way of community, changing village culture
2. Have you been involved in the planning, design and /or evaluation of the project? Implementation
At what stage? _____
3. Do you feel you are making a positive change in people's health in your village? How? yes - through activities such as the exercise program, health talks, etc.
4. What have you learned that families find most useful? management of malaria & diarrhoea
5. Will you continue to work even Save the Children leaves? Yes
Why? as we are responsible for health & survival in emergency & we still have a lot of work to do
6. What kind of support do you receive from the community leaders/community? mobile phone to contact them, people to help with work
What else could they provide? _____
7. What incentives do you receive? 5000 shillings (monthly) which is used to buy drugs
What would you like to receive? uniform, food money to support many children
8. From whom? Do you feel the drug revolving funds of any use? How has the change in government policy on malaria effected funds? How can you plan for this? NIA
What has been reaction of villagers? _____
9. What are the greatest problems you face? mothers dying as they have no drugs; children being undernourished; women who are poor in some villages
10. What are the solutions? DRF - payment for work; add more activities; activities to attract women; explain why DRF cannot be made available
11. Is the health information system useful? yes - in the form of health journals, underweight; for monitoring activities
12. What parts of the health information system are difficult? follow-up visits and diagnosis; IQR; ANC information
13. How could it be improved? summary report; reduce activities; more activities

48

FOCUS OF IPS QUESTIONNAIRE
VILLAGE HEALTH PROMOTERS

Impact Area MBALACHANDA village 4 Villages
Date 12/8/93 Number of people present 11

- Why did you become a village health promoter? Help with Health, & Sanitation, mobilising families to improve their lives, elected, to help in developing the village.
- Have you been involved in the planning, design and /or evaluation of the project? Yes - 3
At what stage? Implementation = 3 KPC = 1
- Do you feel you are making a positive change in people's health in your village? How? Yes - 4
People provide themselves 2 pit latrines Attend V/S clinic: knowled of childspacing, reduction in morbidity & mortality, much consultation on health issues.
- What have you learned that families find most useful?
Child Spacing (2) Sanitation (2) V/S clinic (4) Diarrhoea Management (1) Malaria (2)
Drug revolving fund (1) ANC (1) Knowledge of AIDS (1)
- Will you continue to work even Save the Children leaves?
Why? Yes (4) - Assisting the Community on drug revolving fund (1)
Serving their own Community (3)
- What kind of support do you receive from the community leaders/community? No (1) Solving problems (1) mobilising women (1) assist in Sanitation Promotion (1)
What else could they provide? Cultivating their gardens (2) Nothing (2)
- What incentives do you receive? Soap (4)
What would you like to receive? None thought of anything (1) Money = 2
Uniform (Apron & shoes) (1) Yes = 2 No use = 2
- From whom? Do you feel the drug revolving funds of any use? How treatment at home (2)
has the change in government policy on malaria effected funds? How → Yes (2)
can you plan for this? - No idea (2) Advise mothers for the change (2)
What has been reaction of villagers? Positive resistance (2) no reaction (2)
- What are the greatest problems you face? None (3) Chloroquine still in demand (1)
- What are the solutions? No solutions = 2 Give each according to what he/she has requested: (1) Increase supplies = 1
- Is the health information system useful? Yes = 4
- What parts of the health information system are difficult? Not difficult when CHS is present for help = 1 VHP/Supervisor's monthly Report = 1 Repatriation Reports = 1
Armed Monitoring (weighing cards) = 1
- How could it be improved? Wait until situation in Mozambique is good = 1
S.C. to organise special courts for completing the forms = 2
No idea - 1

CS		} must write & go to US cl
EPI		
ARI		
Malaria		
ANC		
AIDS		
Rosts		
DRF		

FOCUS GROUPS QUESTIONNAIRE
VILLAGE HEALTH PROMOTERS

Years since supervised $\frac{1}{2} = 11$
 $\frac{2}{2} = 1$

(if materials are those (drugs, ORS)

Impact Area _____ village _____
Date _____ Number of people present _____

1. Why did you become a village health promoter? _____
to give knowledge to mothers. hired by village headman
2. Have you been involved in the planning, design and /or evaluation of the project? _____
At what stage? _____
3. Do you feel you are making a positive change in people's health in your village? How? Yes, encouraging mothers to attend US Clinics, keep village clean & safe for children, getting treatment for malaria, design & design cabinet
4. What have you learned that families find most useful? _____
5. Will you continue to work even Save the Children leaves?
Why? Yes, because I am a village health promoter & I have seen good results. What SCF has done, village headman = 2 = continue in work & I will continue
6. What kind of support do you receive from the community leaders/community? no support, village headman only
What else could they provide? help with patients & health
7. What incentives do you receive? SCF did a post and workable to continue
What would you like to receive? _____
8. From whom? Do you feel the drug revolving funds of any use? How has the change in government policy on malaria effected funds? How can you plan for this?
What has been reaction of villagers? _____
9. What are the greatest problems you face? _____
10. What are the solutions? _____
11. Is the health information system useful? _____
12. What parts of the health information system are difficult? _____
13. How could it be improved? _____

soap from SCF
no soap for 2 years

DRF fund . Drug supply, ran out 1 year ago (now KIE and world bank is supplying)
has no money to help in (KIE in East Africa) children are dying & mothers, no drugs out here
Problems without experience. ^{new} reporting forms; enter weights & losses (if return to give cards, no one to discuss problems with)

14. Did the project implement any household income-generating activities? Yes = 2 NO = 2
15. Estimate the amount of income these activities added to a families annual income? Do not know = 4
-

16. Did the revenue contribute to meeting the cost of health activities? NO = 2 No idea = 2
-

17. What do you feel are the reasons for the success or failure of the household income generating activities of this project?

1. Failure due to improper Training on IGA management = 1
2. No idea as to why IGA was not successful = 2
3. The community used home funds to pay for VHP, this resulted the failure of IGA = 1

N = 9 VHCS

FOCUS GROUP FOR COMMUNITY LEADERS
IN THE VILLAGE HEALTH COMMITTEE

IMPACT AREA	NAME	GENDER	STRUCTURE
VILLAGE			
# PRESENT	26 persons	M = 19	
DATE	interview	F = 7	

1. What do you feel is the role of the village Health Committee?
Sanitation promotion, advice, malaria to go to ANCS US clinics, support VHP; help community in health issues
2. How many of you have been trained in CS activities?
3, 4, 2; 6; 1, 2; 2
? = 2
3. Which activities specifically?
DRF, IGA, Sanitation, report outbreaks, mobilize women groups, latrines; support VHP
4. Do you assist VHPs in carrying out their duties?
Yes = IIII
No = I
5. What health priorities in the community are you helping to address?
 - 1. diarrhoea, emergence of resistant problems, sanitation, malaria, malnutrition
 - 2. p + latrine, sanitation, kitchens AIDS, malaria, wells protection
6. Did you participate in the design, implementation and /or evaluation of child survival activities? How?
YES = IIII
NO = IIII
participate in design, implementation, monitoring, evaluation; transferring
7. What is SC doing to improve the health of your children and women?
knowledge
training = II
training VHP, immunization, ANC, sanitation, SH, DRF, malaria prevention
8. Which Save the children project activities do you perceive as being effective at meeting your health needs?
Sanitation, US clinic, training VHP, nutrition
well plan, diarrhoea mgmt, AIDS, have done
9. What else should the SC health team do?
DRF, IGA, wells, provide clinic in village, DRF, supplementary feeds (point on clinics)
What do you think could be improved?
wells, supply wells, clean village, better
wells, build bridge
10. SC will be phasing out soon. What is the SC health team doing now that the community could do? Will you continue activities without outside assistance?
Sanitation or hygiene promotion, continue health education, sanitation, diarrhoea/malaria
YES = IIII
NO = II
(since VHP don't do this, SC should provide training, need for IGA (don't) IGA, nutrition)
11. VHPs are currently incentives from SC, How will you sustain this?
could be - if there is an IGA - cannot continue because of financial hardship, will encourage VHP to continue with no incentives
12. How was your VHP chosen?
selected by community, selected by village headman, voted by village
13. How do you feel about your VHPs work?
good performing well, especially in health education; excellent, good advisor
14. Any insights on what motivates VHPs? why do they volunteer?
volunteer on their own, to help their community, to help their village (development) interest in development of village, help their village (development)
15. How often have you met during the past six months?
0, 2; 6; 4; 3, 12; 3; 8; 5
16. Are you receiving information about the health status of your community from the VHPs or SC staff? Yes No
IIII IIII

52

if yes, what? diarrhoea outbreaks, deaths, malnourished children; feedback on where to improve
if no, would you like to? YES = 111
NO =

17. Does your village have a drug revolving funds? NO = 9

18. ~~If yes, are the medicines and health supplies useful in the community?~~

19. ~~What is the drugs do you keep here in village?~~ N/A

20. ~~Have you been trained in managing the drug revolving fund?
If no, do you want to?~~

21. What is the role of the VHC in the drug revolving fund?

22. What feedback do you get from project managers on surveys, evaluations, performance of project personnel (VHPs, CHSs etc) and on successes / failures of project activities?

None = 111
ask for stories

- would like common dip board of water meter
- dip water is important but - don't need to make the necessary to correct or to be example (e.g. keep to walk path)

N = 13 VHCs.

FOCUS GROUP FOR COMMUNITY LEADERS
IN THE VILLAGE HEALTH COMMITTEE

IMPACT AREA	NAME	GENDER	STRUCTURE
VILLAGE			
# PRESENT	24	22 (M)	
DATE		2/1	

1. What do you feel is the role of the village Health Committee?
Simulation, greatest support VHA, encourage personal hygiene, encourage people to attend VHC classes and areas
2. How many of you have been trained in CS activities?
3, 12, 15, 4, 10, 1, 10, 1
3. Which activities specifically?
Simulation, treatment of diseases, water, ground monitoring, IGA
4. Do you assist VHPs in carrying out their duties?
Yes = 111111, mobilize mothers to attend VHC classes
5. What health priorities in the community are you helping to address?
a. *Simulation, personal hygiene, ground monitoring, water, adequate water*
b. *water, latrines and indoor pits, radiation, control, infection*
6. Did you participate in the design, implementation and /or evaluation of child survival activities? How?
Yes = 111111, No = 1111
7. What is SC doing to improve the health of your children and women?
Water, simulation, IGA, water, radiation and personal hygiene, IGA, VHC, VHP, CS, No idea = 1
8. Which Save the children project activities do you perceive as being effective at meeting your health needs?
Water, simulation, IGA, water, radiation and personal hygiene, IGA, VHC, VHP, CS, No idea = 1
9. What else should the SC health team
Water, simulation, IGA, water, radiation and personal hygiene, IGA, VHC, VHP, CS, No idea = 1
10. SC will be phasing out soon. What is the SC health team doing now that the community could do? Will you continue activities without outside assistance?
ART = 1111111111, Simulation + hygiene = 111111
11. VHPs are currently incentives from SC, How will you sustain this?
in cash, home food = 1, collecting the VHPs garden = 11, other means = 1111, don't know = 1111
12. How was your VHP chosen?
by the community = 1111111111
13. How do you feel about your VHPs work?
Good = 111111111111, No good = 1
14. Any insights on what motivates VHPs? why do they volunteer?
love of the people, health, 1111111111, health, 1111111111, personal interest = 11, No idea = 11
15. How often have you met during the past six months?
2, 5, 1, 2, 9, 2, 4, 3, 6, 2
16. Are you receiving information about the health status of your community from the VHPs or SC staff? Yes No

Yes = 1111111111 No = 1111

54

if yes, what? 4/5 AMC AFFORDABLE 11111 DRE 11111
if no, would you like to? _____

17. Does your village have a drug revolving funds? yes = 111111111111

18. If yes, are the medicines and health supplies useful in the community? yes = 111111111111 NO = 1

19. What is the drugs do you keep here in village? Chloroquine: 11111111

Aspirin 111111111111, ORS 1111, Paracetamol 111111111111, Eye ointment 11111

20. Have you been trained in managing the drug revolving fund? _____

If no, do you want to? Yes Managing = 111111111111

21. What is the role of the VHC in the drug revolving fund? ←

NO = 11

YES = 111111111111

22. What feedback do you get from project managers on surveys, evaluations, performance of project personnel (VHCs, CHSs etc) and on successes / failures of project activities?

NO = 11111111

YES = 1111

(19) Electricity 11111

Personnel 111111111111

Date _____ Name of participants _____
 Impact Area MBALACHANDA _____

 N = 2

1. Do people in the community regard the CS project as their own? *Yes*
It helps them, the VHP is theirs and do not see her as part of SCF
2. What support do you receive from community leaders? *helps to inform communities about U/S clinics and by promoting cleanliness, hygiene, informing mothers to attend ANC and U/S clinics.*
3. Why did you become a CHS? *To help in the community, to promote good health to families and to earn a living.*
4. What will you do when SCF leaves? *Nowhere to go unless handed over to government. U/S clinics will close and many who have attended will stop attending.*
5. Which activities introduced by CS project are important to the communities? Which can easily be sustained by the communities? *Self growth, monthly health education, VHP incentives. VHP incentives difficult to be sustained and some VHP will stop after their incentives come to an end.*
6. Who manages the drug revolving funds? How are they managed? *VHC, VHP, village head*
ally-drugs sold, money given to treasurer, drugs come from SCF CHS brings to all
7. What support do you provide to help manage the revolving drug funds? *tell VHP to use drugs efficiently*
8. How do you use the HIS? *Find # of children, # of families, tetanus, births, deaths, immunizations, families with children, provide feedback to community and encourage them to follow through*
9. What major problems do you face in performing your work as a supervisor? *Few people attend group meetings, so most of the time has to be carried out at people's homes. People do not think they need care for winter, protect, ie. repair wells and discussions on water, soil, etc. people busy in their fields during rainy season.*
10. How do you deal with them? *encourage with village meetings that women meet with their 1-2 x/ month, conduct home visits*
11. At what stage did you participate in the design, implementation and evaluation of the CS project activities? *When SCF want to do village inspections check list, they go with CHS and give feedback to communities.*
12. At what stage do communities participate in CS project activities? *VHC helps VHP to teach, motivate mothers*
13. How many VVHPs are functioning in your area? *A: 6 B: 4 have my been replaced A: 4 B: 1*
have any village that someone to be trained by SCF active it looks like
14. Why do you think they became VVHPs? *They were chosen and did not know until they were trained, wanted to help their community.*
15. Why do you think some VVHPs are more active than others? *Some were interested in their work that others, the more active ones enjoy their job*
16. Why have some dropped out? *removed by the village headman because not hardworking not interested in their job.*
17. Why do you think some VHCs are more active than others? *Active ones - because see change in their village, village headman strong, know what what they are doing is important*
18. What problems are being dealt with by VHC? *mainly change VHC, encourage families to have children, in village sanitation, to attend U/S clinic, ANC, monthly visits to protect and maintain shallow wells.*
19. In what ways have communities contributed to the continuation of CS project activities? *cooperation between VHC, village headman and community - supporting VHP and those that VHP keeps BRF properly, encourage mothers to go to U/S clinics ANC, CS.*
20. How do you think communities will continue then when CS projects ends? *Some will some won't especially when village headman weak*
also, VHC is weak

Date _____ Name of participants _____
 Impact Area _____

1. Do people in the community regard the CS project as their own?
 Yes, they appreciate activities
2. What support do you receive from community leaders?
 Mobilizing the village; advising people on health; conducting village health inspections
3. Why did you become a CHS?
 To learn more about health, to help the community
4. What will you do when SCF leaves?
 Continue to teach people (if opportunity to be employed, they will do so)
5. Which activities introduced by CS project are important to the communities? Which can easily be sustained by the communities?
 Sanitation, growth monitoring, health education (training of mothers)
- ~~6. Who manages the drug revolving funds? How are they managed?~~
- ~~7. What support do you provide to help manage the revolving drug funds?~~
8. How do you use the HIS? Information used to give advice & following up immunization
 To record vital events, immunizations, disease outbreaks, outbreaks distribution
9. What major problems do you face in performing your work as a supervisor? No DRF, negligence of communities, lack of support from some people
 Do not gather
10. How do you deal with them?
 Teaching the communities; discuss with village health committee; give advice for drugs
11. At what stage did you participate in the design, implementation and evaluation of the CS project activities?
 In the design, implementation and evaluation
12. At what stage do communities participate in CS project activities?
 Plan together with communities for activities, village health committee
13. How many VVHs are functioning in your area?
 6, 2, 3, 4, 7, 8, 11, 7, 8, 5 = 6/10 = 60% CHS
14. Why do you think they became VVHs?
 Only way to learn more about health (volunteered) could be trained, not missing cases, incentives (cash)
 Some thought they got drugs
15. Why do you think some VVHs are more active than others?
 Incentives, negligence, some just happy to do a job, not interested in the work
16. Why have some dropped out?
 Discouragement, negligence of communities, working for no pay, some expecting a promotion to supervisor
17. Why do you think some VHCs are more active than others?
 Laziness, want incentives, some discouraged by others who have dropped, community need
18. What problems are being dealt with by VHC?
 Outbreak of disease, sanitation, work with health committee; growth monitoring
19. In what ways have communities contributed to the continuation of CS project activities?
 Mothers encourage and monitor (growth monitoring, child spacing)
 Women have understood importance of growth monitoring, ANC, immunizations
20. How do you think communities will continue then when CS projects ends?
 VVHs who are active will continue discuss with help, communities may not provide incentives
 Since no DRF
21. What problems will you encounter after SCF pull out?
 No salary at end of month how we will get support from community?

QUESTIONNAIRE FOR
COMMUNITY DEVELOPMENT ASSISTANT

Name and person interviewed _____

Impact Area _____

Village _____

1. Do you closely work together with CS protect staff? *yes*

2. What is your role ⁱⁿ CS project activities?

assist in minor activities; health education; training of VHCs; follow-up/visit com. (H.C.V.P. help VHPs in relation to communities)

3. As a supervisor of VHPs and CHs, how many ^{do} you supervise?

0, 3 CHs, not put # (just general idea); 30 VHPs, 9 VHCs, 3 CHs

4. What support do you receive from Save the Children?

transport, housing of a stationery, training

5. What things have you learned from CS projects that have assisted

you in your work? Good health problems; children; T.T. or distributed activities; working

6. Will you continue to assist VHPs, CHs, VHCs once the project stop?

yes, since we assist with health care; but transport will be a bit difficult

7. How many VHC you participated in training?

2, 0, many, 6

8. What topics are covered in these trainings?

V. basic first aid, health, child, community, CS project, IGA

9. Do you organize and attend VHC meetings?

yes with SCF staff

10. How often you attend such meeting?

once/month, once/week, 1x/week

11. Which CS activities do you feel have been most effective or less

effective? *effective: immunization, training of VHP/CHs, CS project meeting*

less effective: preparing health information

12. Which CS project activities do you think can be sustained by the

communities themselves? How do you intend to assist communities in

maintaining them? *quality monitoring, immunization, health and nutrition*

by visiting communities, encouraging VHPs & VHCs, hold regular meetings

13. Which CS project activities do you consider difficult to sustain

by communities? *HIS (stationery costs), VHPs (need intensive supervision, hand vs)*

14. What should be done to these activities to make them more

sustainable? *To encourage USAs to remain in area to stationery should teaching*

leadership skills to VHPs & importance of CS services to local bodies, IGAs, more

promotion w/ villages; provide transport to USAs

QUESTIONNAIRE FOR
COMMUNITY DEVELOPMENT ASSISTANT

Name and person interviewed Geoffrey Shamba

Impact Area Mbalachanda
Village Mbalachanda

1. Do you closely work together with CS protect staff?
not currently involved, was seconded to SCF, but moved to a GTZ project.
2. What is your role in CS project activities?
supervising CHSs, advising on project activities
3. As a supervisor of ~~CHSs~~ CHS, how many ~~CHSs~~ you supervised?
5
4. What support do you receive from Save the Children?
none
5. What things have you learned from CS projects that have assisted you in your work?
learned about treatment of children, caring around home, things to make
6. Will you continue to assist VHPs, CHSs, VHCs once the project stop?
no - will continue w/ GTZ through 1998
7. How many VHC you participated in training?
none
8. What topics are covered in these trainings?
9. Do you organize and attend VHC meetings?
yes
10. How often you attend such meeting?
every 2 months - discussed operation of DRF, oversee VHP to make
11. Which CS activities do you feel have been most effective? less effective?
*effective: treatment of malaria, diarrhea
less effective - child spacing, field cropping (IGA) was not planned well, it*
12. Which CS project activities do you think can be sustained by the communities themselves? How do you intend to assist communities in maintaining them?
Need to be right channels developed for communities to continue (DRF - need to be able to purchase and IHP)
13. Which CS project activities do you consider difficult to sustain by communities?
Few people per... and often VHPs or VHC said benefits were for them.
14. What should be done to these activities to make them more sustainable?
Set up ~~mechanisms~~ mechanisms for others to take over certain activities - (See #12)

Also w/out incentives: only the most dedicated of VHPs & VHCs will continue. Perhaps the DRF could provide some funds for incentives.

N = 4

QUESTIONNAIRE FOR HEALTH CENTERS
(MOH and PHAM)

SCF Malawi Mid Project CS-V Evaluation

(If possible, carry out two interviews in each health center, one with the Medical Assistant (MA) and one with the Health Assistant (HA).

Name of Interviewer -----
Date -----

Name Health Center -----
Location of Health Center ----- Mbalachanda ----- Mkhota
Name Person Interviewed -----
Title Person Interviewed ----- MA ----- HA -----
other (specify) -----

1. Do you know what health activities are done by SCF in this area? If so can you name them and how they are coordinated with your health center if at all.

ACTIVITY	SCF	HOW COORDINATED
Teach ORI	II (2)	help in school education
Promote Immunization	II (3)	help with vaccination
Growth Monitoring	III (4)	
Nutrition Education	II (2)	
Malaria Treatment	I (1)	
Child spacing	I (1)	
Antenatal care	I (1)	through SCF
STD/AIDS	I (1)	
Pneumonia Treatment	I (1)	
Drug Distribution/HC	I (1)	
Other (specify) <i>See attachment</i>	II (2)	

2. Which project activities do you feel have been most effective?
working program in village, also in men to educate on AIDS and spacing
3. Do any health clinic staff have regular meetings with SCF staff? -----
Yes *II* ----- No. If Yes, how often? *every month, 4-5 times*
4. Do you receive patient referrals from SCF staff or volunteers? -----
Yes *II* ----- No. How often? *weekly, daily* ----- Primarily for what kinds of problems? -----
6x in 3 wks

Malaria -----
ARI -----
Malnutrition *II* -----

5. Do you know any of the SCF CHSs or VVHPs? If so can you name them?

CHSs *II* -----
VVHPs *II* -----

-
1. What has the project done in order to prepare you for the taking over management and activities? $NC = 111$ $YES = 1$
 (discuss) with her what she could do to help CHS
 2. What aspects of the project activities would you likely take over responsibility. CHS supervision, growth monitoring, health talks / nutrition education
 VHP/CHS have assisted alot in work; supervision of VHPs & help with VHC (HSA already doing this)
 What problems can you /do you foresee?
 VHPs know how to carry on; transport & decreased manpower; if paid (VHP/CHS) - no problem; reduced
~~costs~~ ^{costs} without CHS & transport
 Who do you think you will consult/or write in order to solve them?
 MOH should discuss with SCF

SCF has helped by giving ^{jobs} salaries, by advice & helping w/ transport
 CHS should be attached to Health centers
 would like CHS to be part of her staff - would supervise & make her own rule

N = 4

QUESTIONNAIRE FOR HEALTH CENTERS
(MOH and PHAM)

SCF Malawi Mid Project CS-V Evaluation

(If possible, carry out two interviews in each health center, one with the Medical Assistant (MA) and one with the Health Assistant (HA).

Name of Interviewer -----

Date -----

Name Health Center -----

Location of Health Center ----- Mbalachanda ----- Mkhota

Name Person Interviewed -----

Title Person Interviewed ----- MA ----- HA -----

other (specify) -----

- Do you know what health activities are done by SCF in this area? If so can you name them and how they are coordinated with your health center if at all.

ACTIVITY	SCF	HOW COORDINATED
Teach DRI	II	
Promote Immunization	III	collect vaccines, help with health center
Growth Monitoring	III	
Nutrition Education	II	
Malaria Treatment	I	
Child spacing	I	
Antenatal care	II	
STD/AIDS	II	
Pneumonia Treatment	II	
Drug Distribution	III	
Other (specify) <i>Sanitation</i>	III	very important

- Which project activities do you feel have been most effective?
child spacing, disease management, AIDS ARI, SCF staff at US clinics, trained in villages
- Do any health clinic staff have regular meetings with SCF staff? -----
Yes ----- No. If Yes, how often? *at least once a week*
not once a year ago *4x this year (mostly in morning)*
- Do you receive patient referrals from SCF staff or volunteers? -----
Yes ----- No. How often? ----- Primarily for what kinds of problems? -----

Malaria ----- TB I
ARI ----- ANC I
Malnutrition -----
disease II

5. Do you know any of the SCF CHSs or VVHPs? If so can you name them?

CHSs: 0
YES
12
1

VVHPs: 0
12
3

1. What has the project done in order to prepare you for the taking over management and activities? preparation of HIS for hand over, AIDS seminar; phase-out meeting; nothing; no, thought SCF would continue forever
2. What aspects of the project activities would you likely take over responsibility.

What problems can you /do you foresee?

Intensive phase of project cannot be continued (stationary-HIS; transport for CHS; soap for VAP)

Who do you think you will consult/or write in order to solve them?

- transport for DRF if need to go to villages; logistics for (to bring food/transport) community meetings

CHAM is already showing 2 or 3 or 4 JS clinics and was given a t. MCH due to lack of funds

CHS should have reported to MCH as well as SCF (the much separation)

HI involved in training of husbands of VHP, HSA training, VHC

would like MCH to take over CHS DRF

1. EUNGU

FOR MOH/NGOs

Lists names titles and organization of all participants

Name	Title	Organization
DHW/DHI		

1. What is your relationship to the child survival project?
Thru CS Coordinator (Most employees) meet every 2 months to discuss
2. Did any one from your office make any commitments been kept or will they be kept in the future? HI involved 12 CHS, 8 will be hired - 6 will stay where they are - 2 will be posted elsewhere (where there are 2 CHS/health facilities)
3. Did your work office with SCF on the design, implementation, or analysis of the midterm evaluation and this final evaluation?
No involvement
4. What linkages do you know of between the child survival project and your office? Do these linkages involve any financial exchange?
Rose Kasimbwa secured from EUNGU DHO
5. What has SCF done to build the capacity of your personnel or staff. NO Did they involve you in the training HSAs or management of these child survival activities? Yes develop curriculum & participating in train of HSAs (A90)
6. Are there project activities that you perceive as effective?
UK diff to work with + little but US clinics
7. What is your office's current ability to provide the necessary financial, human and material resources to sustain effective project activities once CS funding ends in August?
- don't have money for fuel but expect it will be included to work for some resources
- depends on what FIN is in supplying HSAs

For DHO'S office only

1. What role does your office play in helping communities to procure drugs for their drug revolving fund? N/A
2. Has your office been involved in the design and/or implementation of the project HIS? How does it relate to your HIS? will your office take over the project HIS after funding ends?
Involved in HIS in Mporoko but has received no reports so far (but appears useful)

discussed possibility of ^{refueling} training for VHPs
transport could be made for CHS (as US J... supervision)

Appendix C

Appendix C: Results from the Final Knowledge, Practice and Coverage Survey



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Supervisors:

1. Mr. Z. Disi (Malawi MOH/Health Assistant)
2. Mr. L. Gama (Malawi MOH/Health Assistant)
3. Mr. S. Mulebe (Malawi MOH/Health Inspector)
4. Ms. R. Kaulimbo (SCF/M and MOH Sr. Community Health Nurse)
5. Mr. M. Mtekama (SCF/M Health Project Supervisor)
6. Mr. B. Chunga (Malawi MCS/Community Development Assistant)
7. Mr. M. Saka (SCF/M Health information Clerk)
8. Mr. P. Gondwe (SCF/M/ Health Surveillance Assistant)
9. Mr. W. Pindani (Malawi MCS/Community Development Assistant)
10. Mr. M. Kalemba (Malawi MCS/ Community Development Assistant)

Interviewers:

(SCF/MFO Health Supervisors from Mbalachanda/Mkhota Impact Areas)

1. Ms. A. Chione
2. Ms. E. Bota
3. Ms. J. Kandinda
4. Ms. C. Kumwenda
5. Ms. N. Banda
6. Ms. E. Chisambi
7. Ms. J. Kanyinji
8. Ms. A. Jere
9. Ms. L. Nakuwawa
10. Ms. L. Chimtolo
11. Ms. H. Mbewe
12. Ms. J. Ngwira
13. Ms. M. Nakhumba
14. Ms. E. Chingwalu
15. Ms. C. Zimba
16. Ms. M. Banda

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66

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during the planning stages for this survey.

TABLE OF CONTENTS

	<u>Page</u>
EXECUTIVE SUMMARY	1
I. INTRODUCTION	2
A. Background information	2
B. Intervention area	3
C. Objectives of the survey	4
D. Schedule of activities	5
II. METHODOLOGY	6
A. The questionnaire	6
B. Determination of sample size	7
C. Selection of Sample	7
D. Method of Data Analysis	7
III. THE SURVEY	8
A. Training	8
B. The interviews	8
IV. SURVEY RESULTS	10
A. Results of baseline survey	10
B. Discussion and recommendations	24
C. Implications of final data	32
D. National Data	33
V. FEEDBACK SESSIONS	33
VI. SURVEY COSTS	34
VII. REFERENCES	34
Appendix 1: English Questionnaire	
Appendix 2: Chichewa Questionnaire	
Appendix 3: Chitumbuka Questionnaire	
Appendix 4: Training Schedule	
Appendix 5: List of Clusters	

EXECUTIVE SUMMARY

A Knowledge, Practice and Coverage (KPC) Survey was carried out in Mbalachanda and Mkhota impact areas of Malawi from July 7 to July 21, 1993. The survey was achieved through cooperation between Save the Children Malawi Field Office and SCF/ Headquarters. The objective of the survey was to provide a final assessment on the health knowledge and practices of mothers with children under two years of age and Immunization coverage of children (12-23 months) and Tetanus Toxoid coverage for mothers of under two years old children.

A Child Survival (CS) V project is being implemented by SCF/Malawi, a PVO with Headquarters in Westport/USA. The project is receiving US \$600,000 in A.I.D. funding from the Bureau for Food and Humanitarian Assistance/Office of Private and Voluntary Cooperation (FHA/PVC) to implement CS activities from July 1989 to September, 1992. A no-cost extension was approved by USAID until September of 1993.

The standardized survey questionnaire designed by the Johns Hopkins University PVO CSSP was adapted by SCF/Malawi and SCF/Headquarters - it was based on a standardized format which A.I.D. is requiring of all PVO Child Survival projects. The field team received training in 30 cluster sample surveys facilitated by the SCF/Headquarters representative, Loren Galvao. The training was conducted so that the SCF/Malawi staff can further carry out this type of survey to measure project progress. The survey was accomplished in fourteen days.

Major findings included: 86.0% of mothers started breastfeeding during the first eight hours after delivery; exclusive breastfeeding below 4 months of age was 13.0%; 28% of the mothers were treating diarrhea with ORS and 10.0% with SSS; 96% of the mothers whose child had ALRI in the last 2 weeks sought treatment; the DPT Drop-out rate $[(DPT1-DPT3)/DPT1] \times 100$ was 15%; 82% of the children 12-23 months received DPT1; 68% of children 12-23 months received OPV3; 60% of the children 12-23 months received Measles vaccine; the Tetanus Toxoid coverage was 62%; the modern contraceptive usage is 22%; 94.0% of the mothers visited a health facility while pregnant with child; in 51.0% of deliveries in this sample a Health Professional cut and tied the cord; 94% of the children with fever in the last two weeks received treatment: 57% with Chloroquine and 16% with Fansidar.

I. INTRODUCTION

A. Background information

Malawi is a land-locked country in Southeastern Africa, which gained independence from Great Britain in 1964. It stretches over 500 miles in length, while its width varies from 50-100 miles with a population of 9.9 million. Its population density of 163 per square mile ranks it as one of the most densely populated countries in Africa. The per capita GNP is \$200, with birth rate of 55 per 1,000 population, population annual growth rate of 4.3% and a total fertility rate of 7.6 per woman. The infant mortality rate is 144 and the contraceptive prevalence is 7% (Source: UNICEF 1993).

Save The Children Federation Malawi Field Office (SCF/MFO) has been implementing community-based, integrated rural development projects in Malawi since 1983 in Mbalachanda Impact area. SCF/MFO started to implement Child Survival activities in 1986: CS II from 1986 through 1989 (Mbalachanda Impact Area) and CS V from August, 1989 through July, 1992 (Mbalachanda and Mkhota Impact Areas). A no-cost extension for CS V was approved by U.S.A.I.D. until September, 1993. The CS V implementation plan includes Diarrheal Disease Control (15%), Immunization (15%), Breastfeeding (3%), Growth Monitoring/ Weaning Foods (15%), Women's Nutrition (5%), Child Spacing/Maternal Health (10%), HIV/AIDS (15%), Malaria (15%) and ARI (7%).

MFO data indicates that under-5 mortality rate in Mkhota is 233 and in Mbalachanda is 231. The Infant Mortality Rate in Mkhota is 150 and in Mbalachanda 140 (source: SCF/MFO Health Information System). The leading causes of death of children under five include malaria, measles, diarrhea, malnutrition and pneumonia. Exclusive breastfeeding and weaning at the correct age are almost nonexistent.

Child and maternal malnutrition, which also contribute to low birth weight, are widespread. The drought during 1992 has been a major constraint in the country. Data from SCF/MFO shows that between May 1992 and May 1993 there were 596 cases of malnutrition (children 0-11 months) and mortality was 17%; there were 1236 cases of malnutrition (children 12-59 months) and the mortality was 11%. In May of 1992 a Measles outbreak was recognized in Mkhota Impact area. SCF/MFO collaborated extensively with the MOH and the Ministry of Women and Children Affairs and Community Services, and local NGOS during the drought in the Supplementary Feeding Distribution program. SCF also intensified the Immunization intervention during the drought period.

Women's status in these traditional rural societies is very low and the female literacy rate is about 18% nationally (UNICEF, 1993: data from 1970). Maternal Mortality Rates are estimated at 170 deaths per 100,000 live births. Nationally, 45% of deliveries are attended by trained health personnel (UNICEF, 1993).

B. Intervention area

The intervention area for CS V is within two defined impact areas: Mkhota and Mbalachanda. The original population covered was approximately 38,000 in Mbalachanda and 32,000 in Mkhota (Source: Proposal to USAID, 1989). In Mkhota the 32,000 population was expanded to cover 110,000 at the beginning of the current grant (Source: Malawi CS5 MTE/August 1991). The MTE team recommended a decrease in the Mkhota population to 80,000 in order to achieve impact and work towards sustainability (Source: CS 5 Annual Report/October, 1992).

SCF/MFO decided in December of 1991 to decrease the total population covered in Mkhota to 49,072 and in Mbalachanda Impact area to 28,098 due to extremely difficult logistic problems and to work towards sustainability (decision was reported to SCF/Headquarters during the planning stages of this survey in June of 1993). The Malawi CS 5 Final KPC team in consultation with the CS 5 Final Evaluation Team Leader decided to conduct the Final KPC survey only in the areas that SCF/MFO has been actively working since the beginning of the grant to allow epidemiologically significant results. Thus, the survey covered a total population of 77,970 in 204 villages: 49,072 in 84 villages in Mkhota Impact Area and 28,898 in 120 villages in Mbalachanda Impact Area.

Mkhota and Mbalachanda Impact areas differ in several aspects. Mkhota Impact area is located almost midway along the length of Malawi in the central region of the country. This region is more sparsely populated and the communications are very limited during six months of the year in the rainy season; when the Bua River in Mkhota impact area floods program operations are negatively affected since the river runs between two major regions of this impact area. The literacy level is lower in Mkhota; the language spoken is Chichewa and it is a matriarchal society. Tobacco growing is the predominant economic activity.

Mbalachanda impact area is located in the northern region of Malawi, in Mzimba District. There the population has a higher literacy level, their main economic activity is maize growing and it is a patriarchal society. The local language in Mbalachanda is Chitumbuka. Floods in the rainy season also affect program operations in Mbalachanda but to

a lesser extent than in Mkhota. SCF/MFO has been working in Mbalachanda for 10 years and in Mkhota for 7 years. There is better access to health services in Mbalachanda which is served by five PHC clinics, while in Mkhota there are only four PHC clinics to serve a much larger population.

C. Objectives of the survey

A standardized survey was carried out following an agreement between SCF/Headquarters and SCF/MFO: Loren Galvao from SCF/Westport would come to Malawi to train the project staff in conducting the survey and the SCF/MFO core staff would be adequately trained to conduct future Rapid KPC surveys with a minimum of external assistance.

The objective of the survey was to provide SCF/MFO with knowledge and practice final evaluation information in the project impact areas about the following issues:

- * Mothers' knowledge (mothers of children under two) regarding: maternal care, child spacing, appropriate weaning practices and nutrition, breastfeeding, diarrheal disease control, immunizations, ARI and Malaria.

- * Mothers' practices related to the intervention areas mentioned above. The survey also attempts to assess women's literacy levels and participation in Income Generation Activities.

- * Immunization card coverage rate of children (12-23 months) with BCG, DPT, OPV, and measles vaccine.

- * Card coverage rate with Tetanus Toxoid (TT) of mothers of children under two

An evaluation of the sustainability strategy and of other CS V DIP objectives will take place in August of 1993.

D. Schedule of activities

May/93-June/93 Communication and coordination with survey trainer prior to her arrival at project site.

July 6/93 Loren Galvao's arrival

July 7-9 Preliminary training of project coordinator - Core Team formation
Finalizing the questionnaire - 45 questions
Finalizing translation of the questionnaire into Chichewa and Chitumbuka
Logistic preparation and preparation of materials
Training preparation and assignments

July 10-12 Training of supervisors (10th)
Training of interviewers and supervisors (11th)
Field (Pilot) test of the teams & questionnaire including a discussion (12th) and final adjustments of questionnaire

July 13-15 Data collection (three days) 300 interviews of 45 questions for CS V KPC Final Survey

July 16 Hand tabulation

July 17 Finalizing hand tabulation and analysis

July 18 Discussion of findings with survey and field staff
Trip to Lilongwe

July 19-20 Draft Report Writing

July 21 Feedback of data to SCF/MFO, UNICEF, MCS and USAID staff and to the Team Leader of the CS5 Final Evaluation.
Finalizing survey draft report

July 22 Loren Galvao's departure to USA

II. METHODOLOGY

A. The questionnaire

The standardized survey questionnaire was designed by the Child Survival Support Program at Johns Hopkins with assistance of US and international experts for the various intervention areas. Frequent discussions were held with SCF/Headquarters and SCF/MFO to further customize and finalize the standard questionnaire according to the actual CS V project interventions and the project area. The questionnaire was administered to mothers aged 14 to 45 with a child of under 24 months of age.

The questionnaire was composed of 45 questions.

Q# 1-2 deal with demographic data (age)

Q# 3-4 collect data regarding mother's education and occupation

Q# 5-10 deal with breastfeeding and other nutrition practices

Q# 11-12 deal with Vitamin A

Q# 13-14 deal with growth monitoring

Q# 15-21 deal with diarrheal disease control (practice and knowledge).

Q# 22-26 deal with ARI

Q# 27-34 child and mother immunization

Q# 35-41 child spacing and maternal care

Q# 42-45 deal with Malaria

The questionnaire was first written in English and then translated into Chichewa and Chitumbuka. A translated version was presented to interviewers and supervisors during training. This was further refined for clarity of the intent of the questions.

B. Determination of sample size

The sampling methodology followed the 30 cluster sampling according to the WHO/EPI model.

For the determination of the sample sizes, the following formula was used

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

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

The sample size was set up in the following way: the degree of precision (d) was set up at 0.1 and the p was set up at 0.5. Thus, the resulting minimum sample size was 210, which was increased at 300.

The number of clusters was 30 with a sample size equal to 300. Thus, for each cluster ten mothers with children under two years of age were interviewed.

C. Selection of sample

The following methodology was used: the sampling interval was calculated by dividing the total population by 30; and using a random number as a starting point, 30 clusters were chosen.

The starting point for each cluster was determined in the following manner: the center of the village was located and a random direction was selected. The households were counted towards that direction and the first household was randomly selected among them as a starting point household. The second and subsequent households were the ones which were nearest and to the right side to the previous one, following always the same direction.

For each cluster, 10 mothers were interviewed in both intervention areas. Due to time constraints, in cases that the mother was not available at the time of the interview another household was chosen (the household nearest to the last household).

D. Method of Data Analysis

The data analysis was performed by hand. The tabulation by hand was performed to allow the survey staff to understand completely all the steps of the survey process. For the data analysis frequencies were generated and some cross tabulations (Exclusive Breastfeeding and

Immunizations). MFO project staff may further develop other cross tabulations.

III. THE SURVEY

A. Training

There were 10 supervisors including SCF/MFO (project officers), MOH and MCS staff and 16 female interviewers (SCF/MFO community health supervisors) whose training lasted three days (including the pilot test). The training was predominantly carried out in Chichewa and Chitumbuka by the CS Project Manager with support of the survey trainer.

The training included the purpose of the survey, sample size, sampling methodology, starting point, understanding of the meaning of each question and how to ask each question. Role plays were used to familiarize the interviewers with the technique to be used. The training included role-plays on interviewing and selecting the starting point.

The tasks of the supervisors and interviewers were also outlined. The three main tasks of the supervisors were to:

1. Select the starting point
2. Observe at least one interview each day
3. Check the questionnaires for accuracy and completeness
and sign each when finished as their approval assurance

Finally, the interviewers and supervisors went out into a project area (that had not been selected as one of the 30 clusters) to interview 3 mothers for the pilot test. A debriefing session was held to deal with any questions that had arisen during the afternoon and to re-emphasize important points in preparation for data gathering the following day. Staff were available for input throughout the entire training process. The debriefing session after the pilot test was conducted by the CS Project Manager and the Survey Trainer.

B. The interviews

The supervisors assured, during the data collection, an observation of at least one interview for each interviewer per day. They verified the questionnaire in order to check out its quality.

There were concerns for sensitive questions contained in the questionnaire, namely the maternal care questions on birth spacing, prenatal care and delivery. For this reason,

the surveyors decided only to select female interviewers in order to make sure that the mothers interviewed were comfortable answering the questions thus assuring the reliability of the data.

IV. SURVEY RESULTS

Q1. Distribution of Mothers by Age in Years

	Number	Percent
Age in years		
Up to 19	25	8.4%
20 to 24	102	34.3%
25 to 29	64	21.5%
30 to 34	41	14.0%
35 to 39	37	12.4%
40 to 46	28	9.4%

Total 297 100.0%
Mean 27.5

Q2. Distribution of Children by Age in Months

	Number	Percent
Age in months		
Up to 5	67	22.3%
6 to 11	108	36.0%
12 to 17	67	22.3%
18 to 23	58	19.3%

Total 300 100.0%
Mean 10.75

Q3. Distribution of Mothers by the Highest Educational Level Attained

	Number	Percent
None	92	30.6%
Primary/Reads	204	68.0%
Secondary or Higher	4	1.3%

Total 300 100.0%

**Q4. Distribution of Mothers by Participation in
Income Generation Activities**

	Number	Percent
Income Generation Activities		
Other	25	8.3%
Nothing	29	9.6%
Agricultural products for sale	248	82.1%
Small trading, shop keeper	18	5.8%
Salaried worker	2	.6%

Total YES 322

Q5. Distribution of Mothers by Breastfeeding Now

	Number	Percent
Breastfeeding now		
Yes	274	91.0%
No	26	9.0%

Total 300 100.0%

Q6. Distribution of Mothers by Ever Breastfed

	Number	Percent
Ever breastfed		
Yes	22	84.6%
No	3	11.5%

No response 1 3.8%
Total 26 100.0%

**Q7. Distribution of Mothers by When Breastfed
First Time After Delivery**

	Number	Percent
First time breastfed		
Within 1 hour after delivery	155	52.1%
Within 1 to 8 hours after delivery	101	34.0%
More than 8 hours after delivery	37	12.4%
Can not remember	4	1.3%

Total 297 100.0%

19

Q8. Distribution of Mothers by Giving the Child

	Number	Percent
Water or sweetened water		
Yes	164	54.6%
Cow milk, goat milk or formula		
Yes	96	32.1%
Semisolid foods		
Yes	247	82.6%
Carrot, squash, mango or papaya		
Yes	165	55.3%
Leafy green vegetables		
Yes	229	76.6%
Meat or fish		
Yes	220	73.6%
Lentils		
Yes	237	79.0%
Eggs		
Yes	188	63.0%
Honey		
Yes	196	65.6%
Iodized Salt		
Yes	270	90.0%

Q9. Distribution of Mothers by When Should Start Adding Foods to Breastfeeding

	Number	Percent
When		
Between 4 and 6 months	79	26.3%
Earlier than 4 months	181	60.3%
6 months or later	21	7.0%
Does not know	19	6.3%
Total	300	100.0%

**Distribution of Children by Exclusive Breastfeeding
in the first four months**

n=38 children from 0-3months

Exclusive Breastfeeding: 13%
No Exclusive Breastfeeding: 87%

**Q10. Distribution of Mothers by What Should the Additional
Foods to Breastfeeding be (Multiple Answers Possible)**

	Number	Percent
Does not know		
Yes	4	1.3%
Add oil to food		
Yes	50	17.0%
Carrots and/or Dark Green Vegetables		
Yes	95	32.0%
Food rich in Iron		
Yes	97	32.0%
Other		
Yes	204	68.0%

**Q11. Distribution by which Vitamin Prevents "Night
Blindness"**

	Number	Percent
Vitamin A	55	18%
Doesn't Know or Other	243	82%
Total	298	100%

Q12. Distribution By Which Foods Contain Vitamin A to Prevent "Night Blindness"

	Number	Percent
Doesn't know or other		
Yes	147	49.0%
Green Leafy Vegetables		
Yes	117	40.0%
Yellow Type Fruits		
Yes	79	27.0%
Meat/Fish		
Yes	56	19.0%
Breastmilk		
Yes	42	15.0%
Egg Yolks		
Yes	33	11.0%

Q13. Distribution of Children by Growth Monitoring Card

	Number	Percent
Have growth card		
Yes	238	79.0%
Lost card	32	11.0%
No	30	10.0%

Total 300 100.0%

Q14. Distribution of Children by Weighed in The Last Four Months

	Number	Percent
Weighed		
Yes	170	71.0%
No	68	29.0%

Total 238 100.0%

Q15. Distribution of Children by Had Diarrhea During the Last Two Weeks

	Number	Percent
Had diarrhea		
Yes	150	50.0%
No	150	50.0%

Total 300 100.0%

82

Q16. Distribution of Mothers by Breastfeeding Practice
During the Child's Diarrhea

	Number	Percent
Breastfed		
More than usual	57	38.0%
Same as usual	41	27.0%
Less than usual	43	29.0%
Stopped completely	5	3.0%
Child not breastfed	4	3.0%

Total 150 100.0%

Q17. Distribution of Mothers by Providing the Child with
Fluids Other Than Breastmilk

	Number	Percent
Provided		
More than usual	57	38.0%
Same as usual	17	11.3%
Less than usual	27	18.0%
Stopped completely	35	23.3%
Exclusively Breastfeeding	14	9.3%

Total 150 100.0%

Q18. Distribution of Mothers by Providing the Child with
Solid/semisolid Foods

	Number	Percent
Continued		
More than usual	44	29.0%
Same as usual	26	17.0%
Less than usual	61	41.0%
Stopped completely	5	3.0%
Exclusively Breastfeeding	14	9.0%

Total 150 100.0%

43

Q19. Distribution of Children by Treatment During Diarrhea
(Multiple Answers Possible)

	Number	Percent
Nothing		
Yes	6	2.0%
ORS		
Yes	84	28.0%
Sugar salt solution		
Yes	30	10.0%
Cereal based ORT/barley water		
Yes	14	5.0%
Infusion or other fluids		
Yes	25	8.0%
Anti diarrhea medicine		
Yes	41	14.0%
Other		
Yes	23	8.0%

Q20. Distribution of Mothers by Signs/Symptoms would Cause
to Seek Advice or Treatment for Diarrhea of the Child
(Multiple Answers Possible)

	Number	Percent
Does not know		
Yes	7	2.0%
Vomiting		
Yes	40	13.0%
Fever		
Yes	27	9.0%
Dry mouth, sunken eyes		
Yes	35	12.0%
Diarrhea of prolonged duration		
Yes	62	21.0%
Blood in stool		
Yes	13	4.0%
Loss of appetite		
Yes	26	9.0%
Weakness or tiredness		
Yes	59	20.0%
Other		
Yes	19	6.0%

Q21. Distribution of Mothers by Actions Should be Taken If
the Child Has Diarrhea
(Multiple Answers Possible)

	Number	Percent
Does not know		
Yes	11	4.0%
Give the child more to drink		
Yes	161	54.0%
Give the child smaller more frequent feeds		
Yes	65	22.0%
Take child to the hospital/health center		
Yes	161	54.0%
Withhold foods		
Yes	1	0.3%
Other		
Yes	65	22.0%
Withhold Fluids		
Yes	10	3.0%

Q22. Distribution of Children by Cough or Difficult
Breathing in the Last Two Weeks

	Number	Percent
Cough or difficult breathing		
Yes	128	43.0%
No	171	57.0%

Total 299 100.0%

Q23. Distribution of Children by Rapid Difficult
Breathing When Ill

	Number	Percent
Rapid difficult breathing		
Yes	80	63.0%
No	48	37.0%

Total 128 100.0%

Q24. Distribution of Mothers by Sought Treatment When the Child was Ill With Respiratory Problem

	Number	Percent
Sought treatment		
Yes	77	96.0%
No	3	4.0%

Total 80 100.0%

Q25. Distribution of Mothers by From Whom They Sought Advice When Child Ill with difficult Breathing

	Number	Percent
General Hospital		
Yes	55	71%
Health Center/Clinic		
Yes	8	10%
Private Doctor		
Yes	1	1%
Village Health Worker		
Yes	9	12%
Traditional Healer		
Yes	9	12%
Traditional Birth Attendant		
Yes	0	0%
Relatives/Friends		
Yes	1	1%
Other		
Yes	2	3%

Q26. Distribution of Mothers by Signs/Symptoms of Resp. Infection That Would Cause Her to Take the Child to a Health Facility (Multiple Answers Possible)

	Number	Percent
Does not know		
Yes	11	4.0%
Fast or difficult breathing		
Yes	154	51.0%
Chest indrawing		
Yes	54	18.0%
Loss of appetite		
Yes	21	7.0%
Fever		
Yes	81	27.0%
Cough		
Yes	205	68.0%
Other		
Yes	51	17.0%

26

Q27. Distribution of Children by Ever Received any Immunization

	Number	Percent
Received		
Yes	257	86.0%
No	43	14.0%

Total 300 100.0%

Q28. Distribution of Mothers by Age to Receive Measles Vaccine

	Number	Percent
Age in months		
9 months	138	46.0%
10 months	44	15.0%
Does not know or incorrect age	118	39.0%

Total 300 100.0%

Q29. Distribution of Mothers by Reasons Why Pregnant Women Need to be Vaccinated with TT

	Number	Percent
Reasons		
To protect both mother/newborn	150	50.0%
To protect only women	8	2.7%
To protect only newborn	82	27.3%
Does not know	60	20.0%

Total 300 100.0%

Q30. Distribution of Mothers by How Many TT to Receive to Protect the Newborn Against Tetanus

	Number	Percent
How many		
One	2	0.7%
Two	47	15.6%
More than two	218	72.6%
None	0	.0%
Does not know	33	11.0%

Total 300 100.0%

Q31. Distribution of Children by Immunization Card

	Number	Percent
Immunization Card		
Yes	235	78.3%
Lost it	28	9.3%
Never had one	37	12.3%
Total	300	100.0%

**Q32. Distribution of Children 12-23 months Immunized by Card
(Denominator= Number of Children 12-23 months= 125 children)**

YES	NUMBER	PERCENT
BCG	105	84.0%
OPV1	103	82.4%
OPV2	98	78.4%
OPV3	85	68.0%
DPT1	103	82.4%
DPT2	98	78.4%
DPT3	88	70.0%
Measles	75	60.0%

**Fully Immunized Status-Children 12-23 months of Age
with BCG + OPV3 +DPT3 +Measles**

	Number	Percent
YES	65	52%

Overall Drop Out Rate:

$(BCG - Measles) / BCG \times 100 = (105 - 75) / 105 \times 100 = 29.0\%$

DPT Drop Out Rate:

$(DPT1 - DPT3) / DPT1 \times 100 = (103 - 88) / 103 \times 100 = 15.0\%$

OPV Drop Out Rate:

$(OPV1 - OPV3) / OPV1 \times 100 = (103 - 85) / 103 \times 100 = 17.0\%$

88

Q33. Distribution of Mothers by TT Card

	Number	Percent
TT card		
Yes	216	72.0%
Lost it	42	14.0%
No	42	14.0%
Total	300	100.0%

Q34. Distribution of Mothers TT Immunization by Card

	Number
TT record	
One	28
Two or more	187
None	1
Total	216

Distribution of Mothers Immunized with Two or More TT by Card (Denominator=300)

$187/300=62\%$

Q35. Distribution of Mothers by Pregnant Now

	Number	Percent
Pregnant now		
Yes	32	11.0%
No	268	89.0%
Total	300	100.0%

Q36. Distribution of Mothers by Willingness to Have Another Child in The Next Two Years

	Number	Percent
Yes	91	34.0%
No	159	59.3%
Doesn't Know	18	7.0%
Total	268	100.0%

- 39

Q37. Distribution of Mothers by Currently Contracepting

	Number	Percent
Contracepting		
Yes	74	42.0%
No	103	58.0%

Total 177 100.0%

Q38. Distribution of Mothers by Methods of Contraception

	Number	Percent
Methods		
Tubal ligation/Vasectomy	4	5.0%
Injections	9	12.0%
Pill	19	26.0%
IUD	0	0.0%
Condom	7	9.0%
Exclusive Breastfeeding	12	16.0%
Other	23	31.0%

Total 54 100.0%

**Q39. Distribution of Mothers by Foods or Other Items
Good to Prevent Pregnancy Anemia
(Multiple Answers Possible)**

	Number	Percent
Does not know		
Yes	16	5.0%
Proteins rich in iron		
Yes	175	58.0%
Leafy green vegetables		
Yes	232	77.0%
Other		
Yes	149	50.0%

**Q40. Distribution of Mothers by Visit to any Health Site
While Pregnant with the Child**

	Number	Percent
ANC/PNC care		
Yes	283	94.0%
No	17	6.0%

Total 300 100.0%

90

Q41. Distribution of Mothers by Who Tied and Cut the Cord

	Number	Percent
Who		
Yourself	15	5.0%
Family member	52	17.0%
TBA	77	26.0%
Health professional	153	51.0%
Other	2	0.6%
Does not know	1	0.3%

Total 300 100.0%

Q.42 Distribution by Child Ill with Fever in the Last Two Weeks

	Number	Percent
Yes	196	66%
No	102	34%

Total 298 100%

Q.43 Distribution by Treatment When Child had the Fever

	Number	Percent
Yes	184	94%
No	12	6%

Total 196 100%

Q.44 Distribution By Treatment When Child had the Fever
(Multiple answers possible)

	Number	Percent
Chloroquine		
Yes	105	57%
Fansidar		
Yes	30	16%
Paracetamol		
Yes	39	21%
Other		
Yes	80	43%

Total YES: 254

91

**Q.45 Distribution by from whom Mother Seeks Advice
When Child Ill with Fever**

	Number	Percent
Health Center/Clinic Yes	161	53%
Hospital Yes	50	17%
Village Health Worker Yes	80	27%
Relatives or Friends Yes	29	10%
Self Yes	22	7%
Other Yes	11	4%

B. Discussion and Recommendations:

Age Distribution

In Malawi age determination for mothers may be a problem. The interviewers were carefully trained to establish the correct age of mothers using a historical calendar. For under two children age determination is not a problem.

The mean age of children in this sample was 10.75 months. 175 (53%) of children are between 0-11 months and 125 (42%) are between 12-23 months. The high percentage of children under 12 months may be due to the fact that many mothers are spacing births less than two years apart.

The mean age of mothers in the survey was 27.5 years. The range in mother's age was 14 to 46 years. 21.8% of the mothers surveyed were over the age of 35 years and 8.4% were under 19 years old. WHO and UNICEF state that the risks of child-bearing are greatest when the woman is under 18 years old or over 35 years old.

Family Planning has been recently placed as one of the highest priorities for the Malawi MOH. SC/Malawi should continue to emphasize birth spacing at least two years apart when developing its Family Planning interventions. Pregnancies below the age of 18 or above the age of 35 should be strongly discouraged to reduce the dangers of childbearing.

Socio-Economic Characteristics

31% of the mothers in this sample did not attend school. 68% of the mothers in our sample attended primary school and were able to read; 1% attended secondary school.

This question was adapted from the standard questionnaire to provide only three options instead of the four original ones. This change may have induced the high percentage of mothers that were able to read (69.3%). Survey and field staff believe that the percentage of mothers that attended primary school is quite high for these rural areas, but probably much less than 69% are actually able to read. This question should be refined for the next KPC survey by adding an option "primary, does not read" or by adequately adapting the question.

The State of World's Children (UNICEF 1993) reports the Malawian national female adult literacy rate as 18% (data from 1970). During the debriefing session the representative from the Malawi Women Community Affairs stated that this is the most recent national rate for women's literacy; she also acknowledged the importance of including literacy interventions in health programs and collaboration between government and PVOs.

Survey participants from the Community Development Services recommended that Child Survival activities should include a Literacy intervention given the strong relationship demonstrated in several studies about the level of education of the mother and improvements in child survival and women's health. The CS 5 project did not have a literacy intervention; adult learning methodologies such as drama groups for the HIV/AIDS prevention intervention have been very well accepted by community members. The Child Survival 9 project will include a Literacy component. Since not all the women in the target population will be reached by the literacy intervention SC/Malawi should continue to reach the group of women that are not able to read by training VHPs or other community members in counselling techniques and/or use of adult learning methodologies (e.g., role plays, songs, etc).

Collaboration with the government and other institutions could be one of the key approaches during all the phases of the literacy intervention.

82% of the mothers in this sample answered that sales of agricultural products was their income generating activity. Agricultural products for sale would probably be one of the main activities for an IGA intervention within the Malawian context in this area. Further exploration with qualitative assessments would be required to better define an economic development intervention for SC/Malawi.

Income generation activities (IGAs) was not an intervention for the CS 5 project. Survey and field staff discussed the importance of income generating activities for health programs. On the other hand some project staff recommended that realistic goals should be set in terms of having both literacy and IGAs at the same time. Past experience with SC/Malawi IGAs suggests that future IGA programs call for detailed planning, implementation, monitoring and evaluation. Periodic technical assistance is also highly recommended.

Breastfeeding/Nutrition

The Malawian MOH and SC breastfeeding messages emphasize mainly that mothers should introduce foods in addition to breastmilk between four to six months of age, that children breastfeeding should continue until the second year of life and that infants should start breastfeeding as soon as possible after birth. SC/Malawi project staff stated that exclusive breastfeeding was not heavily emphasized as part of the health education messages. Currently, a MOH district level workshop is taking place on breastfeeding, including exclusive breastfeeding. A staff member from the Malawi MOH stated that only very recently exclusive breastfeeding messages have been included in some programs, but in the near future exclusive breastfeeding will be part of the national policies.

Breastfeeding practices are good with the exception of exclusive breastfeeding. 91% of the mothers declare they breastfeed their children and 86.1% of the mothers started breast-feeding during the first 8 hours after the delivery. However, exclusive breastfeeding below four months of age was reported in 13% of this sample.

SC/Malawi could continue their current health education messages on breastfeeding and include in future programs exclusive breastfeeding for the first four months of life as one of the key messages. The importance of giving colostrum as soon as possible after birth, care for breasts/nipples, and allowing frequent sucking to stimulate production could also be emphasized. SC/Malawi health staff could also receive refresher trainings on Breastfeeding. Collaboration with the MOH and other institutions will be essential to strengthen the breastfeeding intervention.

Mother's knowledge about proper age to start weaning was considered low: 26.3%. 60.3% of mothers stated that weaning should start earlier than four months. During the CS5 Midterm evaluation the knowledge of families and VHPs was considered inadequate and there were recommendations to strengthen this area. More intensive health education was

conducted since the MTE by providing refresher trainings to the VHPs and families and by using the MOH booklets. Recommendations from the field discussion and debriefing in Lilongwe included: to review the health education messages and strategy used until presently; to conduct qualitative assessments including Rapid Assessment Procedures and anthropological studies that would guide an Information, Education and Communication (IEC) strategy; to coordinate with other local institutions and MOH to clarify what are their main messages on weaning and to reach a constructive consensus based on the state-of-the-art; to request technical assistance as needed to strengthen the nutrition interventions.

Knowledge about giving foods enriched with calories, vitamin A and iron was considered moderate. SC/Malawi should continue to emphasize the promotion and encouragement of mothers to provide adequate foods of good nutritional value that are locally available at low cost. Dr. Gretchen Berggren had recommended in the past that SC/Malawi should explore collaboration with the Bunda College, where Dr. Beatrice Mitumini has conducted extensive work on nutrition in Malawi and the use of locally available foods at low cost. SC/ Malawi could further explore the possibility of such a collaboration.

Vitamin A

Only 18% of mothers know which vitamin would prevent night blindness, but the levels of knowledge about which foods contain Vitamin A to prevent night blindness was considered moderate to good. SC/Malawi had a Vitamin A program in the past. The CS 5 project did not have specific objectives for Vitamin A but health education messages about which foods contain Vitamin A were still emphasized. The CS 9 will have a Vitamin A intervention and SC/Malawi should strengthen staff training and the technical quality of this component.

Growth Monitoring

238 children out of the 300 (79.0%) children in the sample had a growth monitoring card. Of the children with growth monitoring cards, most of them had been weighed in the four months preceding the survey (71% of 238). The SC/Malawi DIP objective stated that "by August of 1992, 60% of 0-35 month children will attend at least 4 GM sessions a year in Mkhota and 70% will do so in Mbalachanda".

SC/Malawi should continue to encourage mothers to safeguard the cards, to continue training VHPs and to continue working in strong collaboration with the MOH to ensure that all the children under two years old are weighed and that weights are recorded in the GM cards.

Diarrheal Disease

A high percentage of children in this sample had diarrhea during the last two weeks (50%). Project staff stated that this is not considered the high season for diarrhea. Field and debriefing discussion about possible explanations for this high percentage generated the following: it could be recall bias, misunderstanding during training session about the diarrhea definition, a desire from mothers to obtain any secondary gain by stating that the child has been sick recently or the presence of a culturally common trait (especially observed in the southern areas of Malawi "that nothing is perfect" and if someone is asked about something bad (in this case a disease) this person would answer affirmatively in order to "please" the interviewer. Next KPC surveys should pay very close attention in the way this question is answered and to translation aspects.

38% of children in the survey were given more breastmilk than usual when the child had diarrhea and 27% were given the same as usual. 38% were given more fluids than usual during diarrhea, and 11.3% were given the same as usual. A relatively high percentage (23.3%) stopped fluids completely. For semisolid foods 29% were given more than usual and 17% the same as usual. SC/Malawi could stress through its health education messages the importance of giving more fluids and continued feeding during a child's diarrhea. Further Rapid assessment procedures and anthropological studies will provide guidance for the health education strategy.

The MOH and SC/Malawi emphasize the use of ORS and locally available fluids. The use of Sugar-salt solution is no longer part of the MOH recommendations for diarrhea. 28% of mothers whose children had diarrhea used ORS packages and 8% used infusion or other fluids. 14.0% of mothers used medicine for their child's diarrhea. SC/Malawi should continue to work in collaboration with the MOH to ensure the logistic availability of ORS and diarrhea case-management.

The knowledge about signs and symptoms that would cause seeking advice or treatment for diarrhea was considered low to moderate: 12% of the mothers in the sample knew that dry mouth, sunken eyes, and decreased urine output are important symptoms of their children's diarrhea. Diarrhea of prolonged duration was identified as a danger sign of dehydration by 21% and "weakness" was given by 20% of mothers. The knowledge about what important actions should be taken if a child has diarrhea was higher: 54% reported take the child to the hospital/health center, 54% to give the child more to drink than usual and 24% to give the child smaller, more frequent feeds. SC/Malawi should continue to stress and

train project staff and community members on the importance of the above signs and symptoms and actions to take when a child has diarrhea. Further review of the health education strategy is recommended.

Acute Respiratory Illness

Forty-three percent (43%) of surveyed children (128 children) had been ill with cough or difficult breathing in the last two weeks. Out of these children 63% (80 out of 128 children) had symptoms compatible with Pneumonia. 96% (64 out of 78 cases) of the mothers whose children had ALRI sought treatment when their child was ill.

The knowledge about signs and symptoms of respiratory illness that would cause the mothers to take their child to a health facility was considered good. 51% and 68% reported that they would take their child to a health facility if they had respectively fast/difficult breathing or cough.

The DIP objective stated that: " by August of 1992, 80% of mothers in Mkhota and 90% of mothers in Mbalachanda will be able to recognize the signs and symptoms of mild, moderate and severe pneumonia and the need for obtaining treatment without delay and to refer to nearest health center." The discussion in the field and in the debriefing session considered that the ARI intervention was quite successful, especially considering the high percentage of mothers who sought treatment when the child was ill with a respiratory problem.

SC/Malawi should continue to strengthen the ARI component of its health programs by reinforcing the MOH referral systems, by continuing training VHPS in the treatment of ARI, and continuing education of SC/Malawi staff about the state-of-the-art in ARI according to WHO guidelines, literature reviews and coordination and/or collaboration with academic institutions.

Immunisations

78.3% (235 out of 300) mothers had immunization cards for their child, and 9.3% stated that of the they had lost their child's card. 86% of the 300 mothers with children aged 12-23 months reported that their child received at least one vaccination.

The DIP objective stated that: "By August 1992, 75% of the 0-11 months and 1-4 year old children and all enrolled expectant mothers in villages will be fully immunized against the six killer diseases in Mkhota; and 85% of the above target group in Mbalachanda will be immunized according to the MOH guidelines."

Antigen-specific immunization coverage rates for 12-23 month age group are the following: BCG, 84%; OPV1, 82%; OPV2, 78%; OPV3, 68%; DPT1, 82%; DPT2, 78%; DPT3, 70%; Measles, 60%. These percentages represent population based coverage rates for surveyed children 12-23 months of age (125 children), as recorded by immunization card.

The dropout rate (DPT1-DPT3/DPT1) was 15% and the overall dropout rate was 29%.

The rate of children fully immunized was 52%.

National immunization coverage rates are: BCG, 100%; DPT3, 86%; OPV, 84% and Measles, 81%. The fact that in this survey the calculations are based on children with cards, while the MOH uses card, history and BCG scar may contribute to SC/Malawi's lower immunization coverage rates. During the debriefing discussion one suggestion from the USAID/Malawi Health representative was to use card and history in the next KPC survey.

Additional efforts with innovative health education strategies and stronger coordination with the MOH could be placed to reach more children for all the antigen-specific immunizations with especial focus on the Measles immunization. Refresher trainings for health staff are recommended. VHPs, TBAs and other community leaders could be trained to counsel mothers and reinforce the health education messages.

Overall knowledge of mothers about timing and purpose of immunizations is considered quite good. 46% of the mothers in the sample knew that a child should be immunized against Measles at nine months of age and 15% stated 10 months (MOH health centers use 9 and 10 months as a correct age). Therefore, more than a half of the mothers knew the correct age according to MOH guidelines.

50% of mothers answered that a pregnant woman needed to be vaccinated against Tetanus to protect both mother and newborn. 72.6% stated that a pregnant woman needs more than two TT vaccinations to protect the newborn against Tetanus and 15.6% stated two injections were needed to protect a newborn against tetanus. SC/Malawi could continue to reinforce these health education messages about the timing and benefits of immunization for both mother and child.

Maternal Care

Seventy two percent (72%) of mothers had a TT immunization card; 14% of TT immunization cards were lost. Of those mothers with cards (187 out of 300), most had received two or more TT injections. This represents a coverage of 62% of mothers with TT vaccine.

In Malawi most of the TT immunization cards do not have a space for prenatal visits. For future SC/Malawi maternal health programs, stronger collaboration with the MOH is recommended and further exploration to develop a more comprehensive maternal card that could eventually be adopted by the MOH could be explored. SC/Malawi could learn from the experience from SC/Bolivia and SC/Bangladesh MotherCare projects about their maternal health cards and other materials that could be adapted to the Malawian context.

Mother's knowledge of appropriate maternal nutrition was quite good. 77% of the mothers in this sample stated that good foods to prevent anemia were leafy green vegetables and 58% stated proteins rich in iron.

A high percentage of the mothers (94%) visited a health site while pregnant. 51% of deliveries were attended by a health professional and 26% by traditional birth attendants. While most of the deliveries were attended by health professionals, a good percentage are still attended by TBAs and 17% by family members. The CS 9 program will have a stronger maternal health component. It is recommended that besides the KPC baseline survey other qualitative assessments (such as focus groups, anthropological studies, case studies) be conducted to develop the maternal health component.

SC/Malawi should strongly collaborate with MOH, local institutions and academic institutions in the implementation phases of the maternal health component for CS9.

66.3% of the mothers in the sample (excluding the pregnant women) did not want to have a child in the next two years. Among the mothers who wanted to space their next child, a high percentage (58%) are not using a modern method to avoid/postpone the pregnancy. The Modern Contraceptive Usage is 22%. Modern Contraceptive Usage is the percent of mothers of children less than 24 months who desire no more children in the next two years, or are not sure, who are using a modern contraceptive method. (The numerator is 39 and the denominator is 177). Among those using a modern method pill usage was the highest, 26%. The alternative "other" was 31% and among those 31% (23) of women the majority, 70%, were practicing abstinence.

Recently the Malawi MOH has begun placing strong emphasis on Family Planning. Mass media campaigns (radio) have been launched this year and other interventions are in the planning phases. SC/Malawi will have a Family Planning component within the CS9 project. SC/Malawi could strengthen the Family Planning component of the next CS project by collaborating with the MOH and other local institutions (e.g., by ensuring that contraceptives are available, options are available, quality of Family Planning services

is acceptable and adequate, health education messages are culturally acceptable, etc.).

Malaria

The CS5 DIP objective states: "By August 1992, 80% of families in Mkhota and 95% of families in Mbalachanda will be able to recognize the signs and symptoms of Malaria; have access to Chloroquine; and be competent to treat cases of Malaria correctly using MOH guidelines; and be able to refer to the nearest Health Center as well as know how to control breeding of mosquitos".

66% of the mothers surveyed (196 out of 198) stated that their child had been ill with fever in the last two weeks. From those, 94% (184 out of 196) treated the child for fever during that period. 57% gave the child Chloroquine, 16% gave Fansidar and 79% gave Paracetamol. 53% of the mothers seek advice from the health center and 27% from the VHP when the child has fever.

The MOH recommends the treatment of any fever for children as a case of Malaria. A high percentage of mothers in this sample stated that they treated their child with Chloroquine for the fever. Fansidar is now available at low cost in Malawi, as is Chloroquine. The lowest percentage of mothers treated their children with Fansidar for their fever.

During the debriefing session the USAID/Malawi Health representative acknowledged the USAID local mission interest in the use of mosquito impregnated bed nets for Malaria prevention. SC/Malawi staff should further discuss this possibility. Pregnant women, especially primiparas, could specially benefit from a mosquito impregnated bed nets program since recent studies have suggested that they are at higher risk if they get Malaria in the first pregnancy.

C. Implications of the final data

These data provide useful information in terms of assessing the knowledge and practices of mothers of children under two years old targeted by the CS 5 project. The results may also be used as lessons learned for future health program planning for SC/Malawi other CS Field Offices. Results should be widely shared with government institutions, local NGOs, USAID/Malawi, UNICEF, other PVOs, Johns Hopkins University CSSP and other relevant organizations in Malawi and internationally.

The CS 5 KPC Final Survey results should be discussed during the CS 5 Final Evaluation in August, 1993 to lead to a more comprehensive evaluation of the DIP, such as to what

extent the DIP objectives were accomplished, to document lessons learned and to provide recommendations for future health programs in SC/Malawi. This report should be attached as an appendix to the CS5 FE report.

D. National Data

Immunization levels from this survey can not be statistically compared to the national figures because the project immunization coverage is based on the immunization card and at national levels the immunization coverage is based on card, history and BCG scar. Please refer to the section "IV.B./Immunization Discussion" for more details.

The current BCG coverage nationally is 100.0%; DPT3 is 86%; OPV is 84% and for Measles 81% (Source: oral communication from Malawi MOH staff).

For the Family planning activity the national contraceptive prevalence rate is 7% (source: UNICEF, 1993: data from 1980-1992) while the Modern Contraceptive Usage is 22%. The fact that in this sample the mothers surveyed are of children under two years old may bias the sample to affect contraceptive rates. Differences in methodologies may also lead to very different results. More recent data on contraceptive prevalence is not available currently.

V. FEEDBACK SESSIONS/ARRANGEMENTS

There was one feedback session held in the Mkhota impact area with survey and field staff.

Another feedback session was held in Lilongwe and attended by: the Field Office Assistant Director, Mr. Joseph Matope; the CS5 Program Manager, Mr. Stan Jere; the Team Leader for CS 5 Final Evaluation, Dr. Lynne Franco; the USAID/Malawi Health Officer, Mr. Ken Sklaw; the UNICEF Assistant Head of Health Representative, Mr. Alfred Mwenifumbo; the Malawi Women and Community Affairs representative, Ms. Hendrinah Givah; and the SC/Westport representative, Dr. Loren Galvao.

The KPC methodology was seen by many of the survey participants as a very cost-effective, "hands-on" participatory approach for PHC programs. The hand-tabulation and analysis in the field was seen by many of the survey participants as a very positive way to actually understand basic epidemiological concepts and the process of data analysis. The MOH participant in the survey as Survey Supervisor requested detailed information on this methodology such as the Manual that is in the development phases by the JHU. The UNICEF/Malawi representative

emphasized the importance of continued discussion with the MOH about the KPC methodology.

Participants in both debriefing sessions provided strong input and valuable recommendations.

VI. SURVEY COSTS

The following are the costs for the CS5 Final KPC Survey:

1. Preparation of Activities: (survey tools, materials, questionnaires)	\$ 525.
2. Survey Training	\$ 400.
3. Travel, Fuel and Food	\$1080.
4. Data Collection (Interviewers and Supervisors)	\$ 380.
5. Miscellaneous	\$ 140.
6. Report writing	\$ 70.
Subtotal:	\$2595.
7. Travel costs for survey trainer	\$1318.69
8. Airfare costs for survey trainer	\$3000.
Total travel costs for survey trainer	\$4318.69

VII. REFERENCES:

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2. 1982. Henderson, R.H. & Sundaresan, T. "Cluster sampling to assess immunization coverage: A review of experience with a simplified sampling method," Bulletin of the World Health Organization. 60 (2): pp. 253-260
3. 1989. UNICEF, UNESCO & WHO. *Facts For Life - A Communication Challenge*. UNICEF, New York NY
4. 1993 UNICEF "The State of the World's Children"

Appendix 1: English questionnaire

6. Have you ever breast-fed (name of child)?
1. yes []
2. no [] ___ go to 8
7. After the delivery, when did you breast-feed (name of child) for the first time?
1. during the first hour after delivery []
2. from 1 to 8 hours after delivery []
3. more than 8 hours after delivery []
4. do not remember []
8. 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) cow milk, goat or formula?
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 []
- d. Are you giving (name of child) carrot, squash, mango or papaya?
1. yes []
2. no []
3. doesn't know []
- e. Are you giving (name of child) leafy green vegetables, such as spinach?
1. yes []
2. no []
3. doesn't know []
- f. Are you giving (name of child) meat or fish?
1. yes []
2. no []
3. doesn't know []
- g. Are you giving (name of child) lentils, peanuts, or beans?
1. yes []
2. no []
3. doesn't know []
- h. Are you giving (name of child) eggs?
1. yes []
2. no []
3. doesn't know []
- i. Are you adding honey or sugar to (name of child)'s meals?

- 1. yes []
- 2. no []
- 3. doesn't know []

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

- 1. yes []
- 2. no []
- 3. doesn't know []

9. 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 []

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

- a. doesn't know []
- b. add oil to food []
- c. give carrots and/or dark green leafy vegetables []
- d. give food rich in iron []
- e. other (specify) _____ []

11. Which Vitamin prevents "night blindness"?

- 1. Vitamin A []
- 2. doesn't know or other []

12. 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 []

Growth Monitoring

13. Does (name of child) have a growth monitoring/promotion card?

- 1. yes [] (must see card)
- 2. lost card [] ---> go to 15
- 3. no [] ---> go to 15

14. Look at the growth monitoring card of the child, and record the following information:

Has the child been weighed in the last four months?

- 1. yes []
- 2. no []

Diarrheal Diseases

15. Has (name of child) had diarrhea during the last two weeks?
1. yes
 2. no ---> go to 21
 3. doesn't know ---> go to 21
16. 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 not breastfed
17. During (name of child)'s diarrhea, 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
18. During (name of child)'s diarrhea, 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
19. 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 _____

20. 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) _____
21. What are 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 the general 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) _____

Respiratory Illness

22. Has (name of child) been ill with cough or difficult breathing in the last two weeks?
- 1. yes
 - 2. no _____ go to 26
23. Did (name of child) experience rapid and difficult breathing (dyspnea) when ill?
- 1. yes
 - 2. no _____ go to 26
 - 3. doesn't know _____ go to 26
24. Did you seek advice or treatment for (name of child)'s when ill with these respiratory problems?
- 1. yes
 - 2. no _____ go to 26

1/28

25. From whom did you seek advice or treatment for (name of child) when ill with difficult breathing and/or cough?

- a. general hospital []
- b. health center/clinic []
- c. private clinic/doctor []
- d. pharmacy []
- e. village health worker []
- f. traditional healer []
- g. traditional birth attendant []
- h. relatives or friends []
- i. other []

26. What are the signs/symptoms of respiratory infection that would cause you to take (name of child) to a health facility?

(multiple answer possible; record all answers)

- a. doesn't know []
- b. fast or difficult breathing []
- c. chest indrawing []
- d. loss of appetite []
- e. fever []
- f. cough []
- g. other []

Immunizations

27. Has (name of child) ever received any immunizations?

- 1. yes []
- 2. no []
- 3. doesn't know []

28. At what age should (name of child) receive measles vaccine?

- 1. specify in months [___/___]
- 2. doesn't know [___] (99)

29. 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 []

30. 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 []

31. Do you have an immunization card for (name of child)?

- 1. yes [] (must see card)
- 2. lost it [] ---> go to 33
- 3. never had one [] --- go to 33

109

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

	(dd/mm/yy)		(dd/mm/yy)
BCG	--/--/--	DPT 1st	--/--/--
		2nd	--/--/--
OPV 1st	--/--/--	3rd	--/--/--
2nd	--/--/--	Measles	--/--/--
3rd	--/--/--		

Maternal Care

33. Do you have a "TT" vaccination card?
1. yes (must see card)
 2. lost it ---> go to 35
 3. no ---> go to 35
34. Look at the "TT" vaccination card and record the number of TT vaccinations:
1. one
 2. two or more
 3. none
35. Are you pregnant now?
1. yes ---> go to 39
 2. no
36. Do you want to have another child in the next two years?
1. yes ---> go to 39
 2. no
 3. doesn't know
37. Are you currently using any method to avoid/postpone getting pregnant?
1. yes
 2. no ---> go to 39
38. 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. condom
 6. exclusive breast-feeding
 7. other
39. 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) _____

40. 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 []
41. At the 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 []

Malaria

42. Has (name of child) been ill with fever in the last two weeks?
1. Yes []
 2. No [] ----go to 45
 3. Does not remember [] ----go to 45
43. Did (name of child) receive any treatment for the fever?
1. Yes []
 2. No [] ----go to 45
 3. Does not remember [] ----go to 45
44. What treatment was (name of child) given for the fever?
(multiple answers possible; record all answers)
- a. Chloroquine []
 - b. Fansidar []
 - c. Paracetamol []
 - d. other (specify) []
45. When (name of child) had the fever from whom did you seek advice or treatment?
(multiple answers possible; record all answers)
- a. Health center/clinic/post []
 - b. General Hospital []
 - c. Village health worker []
 - d. Relatives or friends []
 - e. Self []
 - f. Other (specify) []

END OF QUESTIONNAIRE

Appendix 2

Appendix 2: Chicheva Questionnaire

CHICHEWA QUESTIONNAIRE

P.V.O. CHILD SURVIVAL KNOWLEDGE PRACTICE AND COVERAGE GENERIC QUESTIONS

INTERVIEW DATE :

INTERVIEWER'S NAME :

SUPERVISOR'S NAME :

IMPACT AREA : E. VILLAGE : F. CLUSTER No.

1. Dzina ndi zaka za mayi

Dzina Zaka

2. Dzina ndi zaka za mwana wosachepera zaka ziwiri

Dzina

Tsiku lobadwira Tsiku / Mwezi / Chaka

Miyazi ingati

MAPHUNZIRO NDI NTCHITO YA MAI

3. Kodi munaphunzila kulekeza kalasi yanji ?

1. Palibe

2. Pulaimale

3. Munachita maphunziro a sekondale kapena kuposera pamenepe

4. Kodi mumachita ntchito zANJI zomwe zimakubweletserani ndalama ?

(Mayankho ambiri ndi oloedwa, lembani onsewo)

(a) Palibe

(b) Mumagulitsa zokolera kumunda

(c) Mumagulitsa nsitolo, mumagulitsa malonda m'mbali mwa msewu

(d) Mumagwira ntchito ya tikiti

(e) Zina

BREASTFEEDING / NUTRITION

5. Kodi mukuyamwitsa (Tchulani dzina la mwanayo)

1. Inde Pitani ku No. 7

2. Ayi

6. Kodi munayamwitsako (Tchulani dzina la mwanayo)

1. Inde

2. Ayi Pitani ku No. 8

7. Kodi munayamba kuyamwitsa (Tchulani dzina la mwanayo) koyamba atangobandwa nthawi yanji ?

1. Mu ora yoyamba atangobandwa

2. Ora yoyamba mpaka ora ya 8 atangobadwa

3. Maora oposa 8 atangobadwa

4. Sakukumbukira

2. Ayi
3. Sadziwa
- (b) Kodi mwana wanu (dzina) mukumupatsa mkaka wa ng'ombe kapena wa mbuzi kapena mkaka wogula ku sitolo ?
1. Inde
2. Ayi
3. Sadziwa
- (c) Kodi mwana wanu (dzina) mukumupatsa zakudya zolimbirapo monga phala ndi zina zotere ?
1. Inde
2. Ayi
3. Sadziwa
- (d) Kodi mwana wanu (dzina) mukumudyetsa zakudya monga kaloti, mango kapena papaya ?
1. Inde
2. Ayi
3. Sadziwa
- (e) Kodi mwana wanu (dzina) mukumudyetsa ndiwo za masamba monga mpiru ?
1. Inde
2. Ayi
3. Sadziwa
- (f) Kodi mwana wanu (dzina) mukumudyetsa nyama kapena nsomba ?
1. Inde
2. Ayi
3. Sadziwa
- (g) Kodi mwana wanu (dzina) mukumudyetsa zakudya monga nyemba ndi mtedza ?
1. Inde
2. Ayi
3. Sadziwa
- (h) Kodi mwana wanu (dzina) mukumudyetsa mazira ?
1. Inde
2. Ayi
3. Sadziwa
- (i) Kodi mumamutallira mwana wanu shuga ku phala ?
1. Inde
2. Ayi
3. Sadziwa
- (j) Kodi mumamutallira mwana wanu mchere wa Aidini ku chakudya ?
1. Inde
2. Ayi
3. Sadziwa

9. Kodi ndi nthawi iti imene mayi ayenera kuonjezera zakudya zina ndi zina kwa mwana oyamwa ?
1. Awonjezere pakati pa miyezi 4 ndi 6
 2. Awonjezere miyezi 4 isanakwane
 3. Awonjezere miyezi 6 kapena kupyola apo
 4. Sadziwa
10. Kodi zakudya zowonjezera mkaka wa mmawele umene mwana akuyamwa ziti ? (Lembani mayankho onse)
- a. Sadziwa
 - b. Kuonjeza mzifuta ku chakudya
 - c. Kumpatsa zipatso monga mango kapena maungu
 - d. Kumpatsa matsamba monga bonongwe, ntollro
 - e. Zina ndi zina
11. Ndi mavitamin ati amene angaletse kusaona bwino usiku ?
1. Vitamin A
 2. Sindidziwa
12. Ndi zakudya ziti zomwe zimathandiza kuletsa khungu kwa ana ? (Lembani onsewo)
- a. Sakudziwa
 - b. Ndiwo za kudimba
 - c. Zipatso monga mango
 - d. Nyama / nsomba
 - e. Mkaka wa mmawele
 - f. Mazila

KHADI LA SIKELO

13. Kodi mwana wanu ali ndi khadi yasikelo ya wana ?
1. Inde Muone khadilo
 2. Lidatayika Pitani ku No. 15
 3. Ayi Pitani ku No. 15
14. Onani khadi la mwanayo ndipo onani ngati mwanayo wakhala akuyesedwa miyezi inayi yapitayi
1. Inde
 2. Ayi

KUTSEKULA M'MIMBA

15. Kodi mwanayo (dzina) anadwala matenda otsegula m'mimba sabata zapitazi ?
1. Inde
 2. Ayi Pitani ku No. 21
 3. Sadziwa Pitani ku No. 21

115

1. Kuposa nthawi zonse
 2. Monga mwa nthawi zonse
 3. Kochepa kusiyana ndi nthawi zonse
 4. Kusiyiratu osayamwitsa
 5. Mwana anasiya kuyamwita
17. Nthawi imene mwana wanu amatsegula m'mimba kodi mumamupatsa madzi a zipatso m'malo mwa mkaka wa mmawere ?
(Muwengereni mayi mayankho awa) :
1. Kwambiri kusiyana ndi masiku onse
 2. Monga mwa nthawi zonse
 3. Mochepera kusiyana ndi nthawi zonse
 4. Kusiyiratu
 5. Mowillikiza mkaka wa mmawere
18. Nthawi imene mwana wanu (dzina) amatsegula mmimba kodi mumamupatsa zakudya monga phala ?
(Mutchule mayankho kwa mayi)
1. Kuposa nthawi zonse
 2. Monga mwa nthawi zonse
 3. Mochepera kusiyana ndi nthawi zonse
 4. Kusiyiratu
 5. Kuyamwitsa mkaka wa mmawere mowirikiza
19. Pamene mwana wanu amadwala ndi chithandizo chanji chimene mudamupatsa ?
(Lembani mayankho onsewo)
- a. Palibe
 - b. Mankhwala a O R S
 - c. Shuga ndi mchere zosungunura
 - d. Madzi a ntapula
 - e. Zakumwa zina
 - f. Mankhwala a mmimba a kuchipatala
 - g. Zina ndi zina
20. Kodi ndi zizindikiro ndi zisonyezo ziti zimene mumaziona kuti mukafune malangizo ndi mankhawala a kutsegula mmimba kwa mwana wanu ?
(Meyankho ambiri; lembani onsewo)
- a. Sadziwa
 - b. Kusanza
 - c. Kutantha thupi
 - d. Mkamwa kuwuma, kusiya kukodza kawirikawiri
 - e. Kutsegula mopitirira, pafupifupi masiku 14
 - f. Chimbudzi cha magari
 - g. Kuafuna kudya
 - h. Kufooka kapena kutopa
 - i. Zina ndi zina

(Mayankho ambiri; lembani onsewo)

- a. Sadziwa
- b. Kutengela mwana kuchipatala
- c. Kumupatsa zakumwa mowirikiza
- d. Mupatseni chakudya chochepa koma pafupi pafupi
- e. Osamupatsa za madzimadzi
- f. Osamupatsa zakudya
- g. Zina ndi zina

CHIFUWA / CHIBAYO

22. Kodi (dzina) wakhala akudwala chifuwa kapena anali kulephera kupuma bwino pa masabata awiri apitawa ?

- 1. Inde
- 2. Ayi Pitani ku No. 26

23. Kodi (dzina) wakhala ali ndi vuto lokanika kupuma mowirikiza ?

- 1. Inde
- 2. Ayi Pitani ku No. 26
- 3. Sindidziwa Pitani ku No. 26

24. Kodi mumafuna malangizo kapena mankhwala pamene mwana wanu amadwala matenda olephera kupuma bwinowa ?

- 1. Inde
- 2. Ayi Pitani ku No. 26

25. Kodi malangizo kapena mankhwala munazipeza kuti pamene mwana wanu amadwala chifuwa ?

- a. Ku chipatala
- b. Chipatala cha ana
- c. Chipatala cha pulayiveti
- d. Ku sitolo ya mankhwala (famase)
- e. Kwa a zaumoyo a kumudzi
- f. Kwa sing'anga achikuda
- g. Kwa anamwino a kumudzi
- h. Achibale ndi abwenzi
- i. Kwa ena

26. Zizindikiro za mchifuwa zomwe zinakupangitsani kupita ndi mwana wanu ku chipatala (Mulembe mayankho onse)

- a. Sindikudziwa
- b. Kupuma mwaliwilo
- c. Nganga kulowa mkati
- d. Kosafuna kudya
- e. Malungo
- f. Kutsokomola
- g. Zinango

ERA

27. Kodi (Dzina) analandirako katemera wina aliyense?

- 1 Inde
- 2 Ayi
- 3 Sadziwa

28. Kodi mwana ayenera kulandira katemera wa nthomba ali ndi miyezi ingati ?

- 1. Nnanani miyezi
- 2. Sadziwa

29. Perekani chifukwa chenicheni chimene mayi woyembekezera ayenera kulandira katemera wa kafumbata

- 1. Kuteteza mayiyo ndi mwana ku matenda a kafumbata
- 2. Kuteteza mayi yekha ku matenda a kafumbata
- 3. Kuteteza mwana yekha ku matenda a kafumbata
- 4. Sadziwa

30. Kodi mayi wa pakati ayanera kulandira katemera wa kafumbata kangati kuti mwana amene adzabadwe atetezedwe kumatendawa ?

- 1. Kamodzi
- 2. Kawiri
- 3. Koposa kawiri
- 4. Palibe
- 5. Sadziwa

31. Kodi muli ndi khadi la katemera la mwana wanu ?

- 1. Inde Onani khadi
- 2. Lidatayika Pitani ku No. 33
- 3. Palibe Pitani ku No. 33

32. Onani khadi la katemera ndipo lembani masiku amene mwanayo analandilira katemera pa malo ali mmusiya.

BCG / /

OPV 1st / /

2nd / /

3rd / /

DPT 1st / /

2nd / /

3rd / /

MEASLES / /

MATERNAL CARE

33. Kodi muli ndi kadi ya katemera wanu ?

- 1. Inde Onani Khadi
- 2. Lidatayika Pitani ku No. 35
- 3. Palibe Pitani ku No. 35

34. Muone ndikulemba makatomera wa kafumbata amone analandira ?

1. Limodzi
2. Ziwiri mwina kuposa
3. Pallibe

35. Kodi mull ndi pakati tsopanoli

1. Inde Pitani ku No. 39
2. Ayi

36. Kodi mukufuna kukhalanso ndi mwana mu zaka ziwiri zilikubwerazi ?

1. Inde Pitani ku No. 39
2. Ayi
3. Sindidziwa

37. Kodi mukutsata njira yolera kuti musakhale ndi pakati ?

1. Inde
2. Ayi Pitani ku No. 39

38. Kodi ndi njira iti yolelera imene inuyo kapena a kunyumba kwanu mukutsata ?

1. Kutseka kubeleka
2. Jakison
3. Mapilitsi
4. Lupu
5. Kondomu
6. Kuyamwitsa basi
7. Zinanso

39. Ndi zakudya zANJI zofunikira mayi wa pakati kuti magari asachepe mthupi wake ?
(Lembani mayankho onse)

- a. Sadziwa
- b. Proteni wokhala ndi iron (mazira nsomba nyama ndiwo za kudimba zokhala ndi iron
- c. Ndiwo za kudimba zokhala ndi iron
- d. Zina

40. Kodi nthawi imene munali ndi pakati pa mwanayu munali kupita ku sikelo ?

1. Inde
2. Ayi

41. ...so ndani ?

1. Nokha
2. M'modzi wa m'banja lanu
3. T. B. A. (M'zamba)
4. Wa chipatala
5. Enanso (monga).....
6. Sindidziwa

MALUNGO

42. Kodi mwana wadwalapo malungo milungu iwiri yapitayi ?

1. Inde
2. Ayi Pitani ku No. 45
3. Sindikumbukira Pitani ku No. 45

43. Kodi mwana analandilapo mankhwala chifukwa cha malungo ?

1. Inde
2. Ayi Pitani ku No. 45
3. Sindikumbukira Pitani ku No. 45

44. Mwana analandila mankhwala anji chifukwa cha malungo ? (Tchulani mayankho onse)

- a. Kololokwini
- b. Fansida
- c. Panadolo
- d. Ena (Mtchule)

45. Pomwe mwana anadwala malungo munamufunsa ndani za chithandizo ? (Tchulani mayankho onse)

- (a) Chipatala chaching'ono
- (b) Chipatala chachikulu
- (c) A polomotala
- (d) Abale kapena abwenzi
- (e) Nokha
- (f) Ena - tchulani

END OF QUESTIONNAIRE

Appendix 3

Appendix 3: Chitumbuka Questionnaire

CHITUMBUKA QUESTIONNAIRE

P.V.O. CHILD SURVIVAL KNOWLEDGE PRACTICE AND COVERAGE GENERIC QUESTIONS

- A. INTERVIEW DATE :
- B. INTERVIEWER'S NAME :
- C. SUPERVISOR'S NAME :
- D. IMPACT AREA : E. VILLAGE : F. CLUSTER No.
-

1. Zina na vyaka vya mama

Zina : Vyaka

2. Zina na vyaka vya mwana wa vyaka viwiri

Zina :

Deti lakuwira Deti / Mwezi / chaka

Myezi yilinga

KUSAMBIRA NA NTCHITO YA MAMA

3. Kasi sukulu muli kufika kalasi uli ?

1. Nditiye kusambira

2. Pulaimale

3. Sekondale

4. Mukuchita ntchito yakusangilapo ndrama ?

(Mulembe mazgoro ghose)

(a) Pallije

(b) Kuguliska vyakufuma m'munda

(c) Kuguliska musitolo panji m'mseu

(d) Kugwila ntchito ya pamwezi

(e) Vinyake

KONKESKA NA KURYESKA

5. Mwana sono wakonka ?

1. Inya Lutani ku No. 7

2. Yayi

122

6. Mwana mull kumonkeskapo ?

1. Inya _____
2. Yayi _____ Mulate ku No. 8

7. Wakati wababiwa mwana uyu pakajumpha nyengo uli mundamuwonkiske ?

1. Wakayamba pandajumphe ola?
2. Panyake ola mpaka 8 hours
3. Panyake pakajumpha ma ola 8
4. Wangakumbuka cara

8. (a) Kasi mukumupa maji panyake dawali mwana ?

1. Inya
2. Yayi
3. Nkumanya ia

(b) Kasi mukumupa inkaka wa ng'ombe panyake wamuchitini ?

1. Inya
2. Yayi
3. Nkumanya chara

(c) Kasi mukumupa mwana vyakurya ngati bala mthibi ?

1. Inya
2. Yayi
3. Nkumanya chara

(d) Mukumupako mwana karoti, mango panyake papayi ?

1. Inya
2. Yayi
3. manyi

(e) Kasi mukumupako mwana mphangwe ngati kamuganje ?

1. Inya
2. Yayi
3. manyi

(f) Mukumupako nyama panji somba ?

1. Inya
2. Yayi
3. manyi

(g) Mukumupako mwana bala skawa or nchungu ?

1. Inya
2. Yayi
3. manyi

(h) Mukumupako masumbi ?

1. Inya
2. Yayi
3. manyi

(i) Kuchakulya cha mwana mukuskazgako shuga ?

1. Inya
2. Yayi
3. manyi

(j) Muchere uwo mukuwika mu chakulya muli IODINE ?

1. Inya
2. Yayi
3. manyi

9. Mama wangayambe pauli kumupa vyakulya vinyake mwana ?

1. Wayambe pakati pa mwezi yinayi na sikisi.
2. Wayambe yindakwane myezi 4
3. Wayambe pa myezi panyake kujumpha
4. Manyi

10. Mwana wakonka wakwenera kumupaso vyakulya uli ? (Lembani mazgoro ghose)

- a. Manyi
- b. Vyakulya vya mafuta
- c. Vyakulya ivyo muli Vitamin A
- d. Vyakulya ivyo vikupeleka ndopa
- e. Vinyakeso

11. Ndi ma Vitamin uli agha ghakuvwila kuti muone makora na usiku ?

1. Vitamin A
2. Nkumanya ghanyake chara

12. Ndi vyakulya uli umo muli ma Vitamin A ghakuvwila kulekesha kuleka kuona makora usiku ?
(Lembani mazgoro ghose)

- a. Nkumanya chara
- b. Mphangwe ziwisi
- c. Vipaso vya chikasu
- d. Nyama / Somba
- e. Mukaka / bele
- f. Chimkati cha sumbi

124

13. Kasi mwana wali na kadi yasikelo ?

1. Inya (Muone kadi)
2. Walkusowa Lutani ku No. 15
3. Yayi Lutani ku No. 15

14. Wonani Kadi yamwana kuli muone usange walutako ku sikelo myezi 4 yajumpha

1. Inya
2. Yayi

PAMTIMA

15. Kasi mwana walwalapo pamtima wasabata wawiri wajumpha ?

1. Inya
2. Yayi Lutani ku No. 21
3. Manyi Lutani ku No. 21

16. Apa mwana wakawa na pamtima mukumonkeskanga (zunulani mafumbo ghose kwa mama)

1. Kuluska madazi ghose
2. Chimozi
3. Pachoko chomene
4. Kulekalathu kuwonka
5. Mwana wakonka chera

17. Kasi mwana mukumupa maji ghanandi kuluska bele (zunulani mazgoro kwa mama)

1. Kuluska kale
2. Chimozi
3. Pachoko waka
4. Kulekalathu konkha
5. Konkha bele pera

18. Mukamupangako vyakutiya ngati bala apa wakawa na pamtima (zunulani mazgoro kwa mama)

1. Kuluska kale
2. Chimozi
3. Pachoko waka
4. Kulekalathu konkha
5. Konkha bele pera

19. Mukamupa munkhwala uli wakuchilika pamtima ?
(Lambani mazgoro ghose)

- a. Palle
- b. ORS
- c. Shuga na mchere
- d. Msuzi wa nkhove
- e. Vyakumwa vinyake
- f. Munkhwala wa pamoyo
- g. Vinyake

125

20. Vimanyikwilo uli lvyo vingamuchiskani kupenja uwilo ku mwana wa pamtima (Lembani mazgoro ghose)

- a. Manyi
- b. Kuukula
- c. Phungo
- d. Komila lulimi maso kunjila kuleka kutunda kawirikawiri
- e. Pamtima pa madazi kujumpha 14
- f. Ndopa muchimbuzi
- g. Kuleka kukhumba kurya
- h. Kupulika vyakulema
- i. Vinyake

21. Usange mwana winu wali na pamtima mukwenela kuchitachi ?
(Lembani mazgoro ghose)

- a. Nkumanya chara
- b. Kuluta naye ku chipatala
- c. Kumupu vyakumwa vinandi kuluska kale
- d. Kumupa chakurya chakuchepa pafupipafupi
- e. Kumupa vyakumwa chara
- f. Kumupa vyakulya chara
- g. Vinyake

CHIFUWA

22. Kasi mwana walwalapo kukhosomola na befu wasabata wawiri wajumpha ?

- 1. Inya
- 2. Yayi Lutani ku No. 26

23. Apa mwana wakawa mulwali wakachitanga befu nakutondeka kuthuta makora ?

- 1. Inya
- 2. Yayi Lutani ku No. 26
- 3. Manyi Lutani ku No. 26

24. Apa mwana wakashwa mukapenja uwilo chifukwa chatenda agha ?

- 1. Inya
- 2. Yayi Lutani ku No. 26

25. Mukuluta nkhu kupenja uwilo nyengo ya uwali wa mwana

- a. Chipatala chikulu
- b. Chipatala chichoko
- c. Pulaiveti
- d. Chirani Store
- e. Polomotala
- f. Sing'anga
- g. T. B. A.
- h. Wabale / Wabwezi
- i. Wanyake

- l. ... rara
- b. Kuthuta luwiroluwiro
- c. Nganga kunjila na kufuma
- d. Kukhumba kurya yayi
- e. Malungo
- f. Kukhosomola
- g. Vinyake

KATEMERA

27. Mwana uyu wali kupokerapo katemera wali yose ?
1. Inya
2. Yayi
3. Manyi
28. Mwana wakwenera kupokera katemera wa Measles pa myezi yilinga ?
1. Myezi yilinga
2. Manyi
29. Chifukwa uli ni chinthu chakuziwa kuti mama wanthumba wapokera katemera wa kafumbata ?
1. Kuvikilira mama na mwana ku matenda chondondondo
2. Kuvikilira wa mama pera
3. Kuvikilira mwana pera kumatenda ghandondondo
4. Manyi
30. Mama wakwenera kupokera makatemera a mama ghalinga
1. Yimoza
2. Ziwiri
3. Kujumphu ziwiri
4. Palije
5. Nkumanya chara
31. Muli na kadi ya katemera wa mwana ?
1. Inya (Muone kadi)
2. Wali kusowa → Lutani ku 33
3. Wandapokerepo → Lutani ku 33
32. Muwone kadi na kulemba makatemera musu umu.
- BCG / /
- OPV 1st / /
- 2nd / /
- 3rd / /
- DPT 1st / /
- 2nd / /
- 3rd / /
- MEASLES / /

33. Kasi mull na kadi ya katemela winu ?

1. Inya (muwone kadi)

2. Lutani ku No. 35

3. Yayi Lutani ku No. 35

34. Muwone kadi na kulemba makatemera gha chondondo agho wall kupokera

1. Yimoza

2. Ziwiri panji kujumpha

3. Palije

35. Kasi mull munthu muheni soori ?

1. Inya Lutani ku No. 39

2. Yayi

36. Kasi mukukhumba kuwa na mwana munyake vyaka viwili vikwiza ?

1. Inya Lutani ku No. 39

2. Yayi

3. Kumanya chara

37. Sono mukuchita ntowa ull kuti muleke kutola nthumbo pafupipafupi ?

1. Inya

2. Yayi Lutani ku No. 39

38. Ndi nthowa ull iyo mukuchita munyumba kuti muleke kuwa na wana

1. Kukaka nziowa

2. Jekisoni

3. Matabuleti

4. Lupu

5. Kondomu

6. Konkaska bele pera

7. Vinyake

39. Vyakulya ull lvyo nviweni ku mama wa pakati kuti ndopa ziwe zinandi ? (Lembari mazgoro ghose)

a. Nkumanya chara

b. Vyakulya ngati masumbi, somba or nyama

c. Mphangwe ngati ndi Bondokotwe

d. Vinyake

40. Panyengo yapakati ya mwana uyu mukalutako ku chipatala chilichose kusikelo ?

1. Inya

2. Yayi

1. Imwe mwekha
2. Mnyinu mnyumba yinu
3. T. B. A.
4. Nurse / Midwife
5. Wanyake (mbanjani)
6. Manyi

MALUNGO

42. Kasi mwana walwalapo malungo wasabata wawiri wajumpha apa ?

1. Inya
2. Yayi Lutani ku No. 45
3. Nkukumbuka chara Lutani ku No. 45

43. Kasi mwana walikupokelapo munkhwala chifukwa cha malungo ?

1. Inya
2. Yayi Lutani ku No. 45
3. Nkukumbuka chara Lutani ku No. 45

44. Mwana wapakokera munkhwala uli chifukwa cha malungo ? (Lembani mazgoro ghose)

- a. Kololokwini
- b. Fansida
- c. Panadolo
- d. (Ghanyake) Zunulani

45. Apa mwana wakaiwala mukamufumba njani vya chowwilo ? (Lembani mazgoro ghose)

- a. Chipatala chichoko
- b. Chipatala chikulu
- c. Apolomotala
- d. Abale panji abwenzi
- e. Mwekha
- f. (Wanyake)

END OF QUESTIONNAIRE

Appendix 4

Appendix 4: Training Schedule

130

TRAINING AGENDA

DAY 1
July 10, 1993

Focus: Training of Supervisors

Time **Activity**

2:30 Arrive in Mkhota Impact Area

3:00-3:20 Introductions of Supervisors and Interviewers
Welcome (Stan Jere and Loren Galvao)

3:20-3:40 State purpose & objectives of the K & P
survey (LG)

3:50-4:00 Present time frame of the survey activity,
analysis of results, report writing and
feedback to community and staff (LG)

Session for Supervisors

4:00-4:30 Read the questionnaire (SJ)

4:30-5:30 Explain purpose of each question (SJ)

5:30-6:30 Review role of supervisors/Assignments (SJ)

DAY 2
July 11, 1993

Focus: Training of Supervisors and Interviewers

Time **Activity**

8:30-9:00 Review day before and Introductions (SJ)

9:20-10:30 Read questionnaire and explain purpose of each question

10:30-10:45 Break

10:45-11:45 Review questions and how to code/mark
responses

11:45-1:00 Review consistency of language, and the
presentation of the questions. Group
exercise, prepare lexicon

1:00-2:00 Lunch

2:00-3:00 Sampling methodology, sample size and household selection
Starting point (LG)

131

3:00-3:45	Role -plays
3:45-4:00	Break
4:00-5:00	Role-plays/Clarifications on the questionnaire
5:00-5:30	Review role of supervisors and interviewers/ Review check list
5:30-6:00	Site Assignment Preparation for Field-test

DAY 3

July 12, 1993

Time	Activity
9:00-1:00	Field test/Each supervisor and interviewer completes at least 3 surveys in test area.
1:30-3:30	Discussion/Review field activities, each team member presents constraints and lessons learned.
3:30- 4:00	Pending issues/ Wrap-up
4:30	Leave to Mbalachanda Stan Jere,Interviewers (8) and Supervisors (5)

Appendix 5

Appendix 5: List of Clusters

List of 30 Clusters
Malawi Child Survival 5
Final KPC Study

<u>Cluster #</u>	<u>Village</u>	<u>Population</u>	<u>Area</u>
<i>Mbalachanda Impact Area</i>			
1	Chigowo	244	Yakuwata
2	Kaidoke	139	Kapando
3	Wombwe	331	Zaro
4	Agripa Jere	529	Chamalika
5	Kavleva	368	Madede
6	Thateya	294	Euthini Centre West
7	E. Mangeni	300	Euthini West
8	Silia Tegaa	469	Mzambazi
9	Chikhota	598	Kam'bunga
10	Mgada	209	Kanyanhunde
11	Uwabe	486	Mchinkhula
<i>Mkhota Impact Area</i>			
12	Chaima	2362	Chaima
13	Longwe	1433	Chaima
14	Makanda	1003	Chaima
15	Santhe	678	Santhe
16	Zotere	455	Santhe
17	Nyemba	467	Chamkana
18	Katukula	500	Mkhota
19	Chipozi	758	Mkhota
20	Mshanga	333	Sakali
21	Dzuwa	587	Sakali
22	Tonde	1566	Tonde
23	Mwakhundi	655	Tonde
24	Chilowa	980	Tonde
25	Kaluzi	270	Tonde
26	Kalama	1091	Tonde
27	Kasiya	1032	Madzanga
28	Mkuwira	1810	Chateka
29	Galangombe	363	Matiga
30	Utabwalero	206	Matiga

**APPENDIX D:
PERSONS CONTACTED DURING THE EVALUATION**

SAVE THE CHILDREN MALAWI FIELD OFFICE

Kenneth Riodes, Field Office Director
Joseph Matope, Assistant Field Office Director
Stanley Jere, Health Manager

SAVE THE CHILDREN MKHOTTA IMPACT AREA

Tobias Manda, Impact Area Manager
Rose Kaulimba, Child Survival Coordinator
MacDonald Mtekama, Health Project Supervisor
Martin Saka, Health Information System Clerk
Irine Chapinga, Community Health Supervisor
Ruthness Mwale, Community Health Supervisor
Hanna Mbewe, Community Health Supervisor
Catherine Msemba, Community Health Supervisor
Prisca Wankani, Community Health Supervisor
Anne Kantogo, Community Health Supervisor
Julianna Mtaya, Community Health Supervisor
Jean Ngwira, Community Health Supervisor
Esmie Piusom, Community Health Supervisor
Mary Banda, Community Health Supervisor
Regina Kaphesi, Village Health Promoter
Anne Mkunthiwa, Village Health Promoter
Mailles Mwale, Village Health Promoter
Elube Peter, Village Health Promoter
Vaidesi Ngondo, Village Health Promoter
Eunisi Mang'ombe, Village Health Promoter
Adalaida Berenado, Village Health Promoter
Estere Nkhome, Village Health Promoter
Ruthe Banda, Village Health Promoter
Maria Jeremam, Village Health Promoter
Likisha Madalasi, Village Health Promoter
Agnes Mbewe, Village Health Promoter
Evenes Kataika, Village Health Promoter
Victoria Chitenje, Village Health Promoter

SAVE THE CHILDREN - MBALACHANDA IMPACT AREA

Ruth Manjolo, Health Project Supervisor
Geoffry Banda, Health Information System Clerk
XXXX, Bookkeeper
Judith Kandinda, Community Health Supervisor
Christine Kumenda, Community Health Supervisor
Olive Nyangulu, Community Health Supervisor
Rose Chipeta, Community Health Supervisor
Alice Jere, Community Health Supervisor
Elizabeth Bota, Community Health Supervisor

Nancy Banda, Community Health Supervisor
S. Chiwinga, Village Health Promoter
Lincy Nyirenda, Village Health Promoter
Olin Phiri, Village Health Promoter
Judith Mhango, Village Health Promoter
Collina Ntandala, Village Health Promoter
Anna Wunda, Village Health Promoter
Olivina Chadewa, Village Health Promoter
Agnes Mkandawire, Village Health Promoter
Rosilina Nkoma, Village Health Promoter
Judith Nyirenda, Village Health Promoter
Mrs. Mvula, Village Health Promoter
Victoria Mkiialipi, Village Health Promoter
K. Zimba, Village Health Promoter
Egifeld Nkosi, Village Health Promoter
Margaret Tembo, Village Health Promoter
Fanny Tao, Village Health Promoter
Irine Nyirongo, Village Health Promoter

MINISTRY OF HEALTH STAFF

Dr. Thomas Huggett, District Health Officer, Mzimba District
Dr. E. Ratsma, District Health Officer, Kasungu District
Mr. Tasaukadala, District Health Inspector, Kasungu District
A.D. Tabulo, Medical Assistant, Mkhota Health Center
M. Malunga, Enrolled Nurse Midwife, Khongoni Health Center, Mkhota
S.S. Makhayura, Medical Assistant, Santhe Health Center, Mkhota
Edith Matinga, Enrolled Nurse Midwife, Kholo Health Center, Mkhota
Z. Disi, Health Assistant, Euthini Health Center, Mbalachanda
Geoffry Chirwa, Health Inspector, Mbalachanda Health Center
Lomaleye Longwe, Senior Medical Assistant, Mbalachanda Health Center
J.B. Makwakwa, Medical Assistant, Madede Health Center, Mbalachanda
Agnes Nyirongo, Nurse Midwife, Madede Health Center, Mbalachanda

MINISTRY OF WOMEN AND CHILDRENS AFFAIRS AND COMMUNITY SERVICES

Mairness Bvulumende, Community Development Assistant, Mkhota
B.M. Chunga, Community Development Assistant, Mkhota
Wickson Bvulumende, Community Development Assistant, Mkhota
Maxwell Kalemba, Community Development Assistant, Mkhota
Godrey Chaba, Community Development Assistant, Mbalachanda

CHRISTIAN HEALTH ASSOCIATION OF MALAWI

Sister in charge of Health, Mzambasi Rural Hospital, Mbalachanda