

World Vision Relief & Development, Inc.

**WVRD/Uganda FY93
MID-TERM EVALUATION
Bundibugyo and Masindi Child Survival Project
Bundibugyo and Masindi Districts, Uganda
October 31, 1995**

Grant No.:FAO-0500-A-3025-00

Beginning Date:September 30, 1993

Ending Date: September 30, 1996

Submitted to:

**PVO Child Survival Grants Program
U.S. Agency for International Development
1515 Wilson Blvd., Room 729, SA-8
Rosslyn, VA 22209**

PVO Headquarters Contact:

**Lawrence Casazza, MD, MPH
World Vision Relief & Development, Inc.
220 I Street, N.E.
Washington, D.C. 20002**

Field Project Contact:

**Project Manager Name: Johnson Ngorok
World Vision/Uganda
15 B Nakasero Road
Kampala
Uganda**

Table of Contents

<i>List of Acronyms</i>	
<i>Executive Summary</i>	
<i>Introduction</i>	<i>Page 1</i>
<i>Objectives of the Mid-term Evaluation</i>	<i>Page 1</i>
<i>Accomplishments</i>	<i>Page 3</i>
<i>Effectiveness</i>	<i>Page 7</i>
<i>Relevance to Development</i>	<i>Page 8</i>
<i>Design and Implementation</i>	<i>Page 9</i>
<i>Sustainability</i>	<i>Page 19</i>
<i>Recommendations</i>	<i>Page 20</i>
<i>Conclusion</i>	<i>Page 22</i>
 <i>Tables</i>	
<i>Table 1. Summary KPC Surveys</i>	
<i>Table 2. Training Summary</i>	
<i>Table 3. Project Personnel</i>	
<i>Table 4. Community Volunteers</i>	
<i>Table 5. Training Program</i>	
<i>Table 6. Sustainability</i>	
 <i>Appendices</i>	
<i>Appendix I Evaluation Program</i>	
<i>Appendix II List of Key Informants</i>	
<i>Appendix III List of Group Discussions</i>	
<i>Appendix IV Questionnaire Guidelines</i>	
<i>Appendix V High Risk Categories</i>	
<i>Appendix VI Health Messages</i>	
<i>Appendix VII HIS Forms</i>	
<i>Appendix VIII Results of Pre and Post Test Curricula</i>	
<i>Appendix IX Pipeline Analysis</i>	

List of Acronyms

ARI	Acute Respiratory Infection
CBFP	Community Based Family Planning
CDD	Control of Diarrheal Diseases
CHW	Community Health Worker
CDW	Community Development Worker
c s	Child Survival
CSP	Child Survival Project
CSSP	Child Survival Support Program
DES	District Executive Secretary
DHSP	District Health Services Project
DIP	Detailed Implementation Plan
DMO	District Medical Officer
EPI	Expanded Program for Immunizations
FP	Family Planning
GTZ	German Government Aid Program
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HUMC	Health Unit Management Committee
IGA	Income Generating Activity
KPC	Knowledge, Practice and Coverage
NGO	Non-governmental Organization
MCH	Maternal and Child Health
MOH	Ministry of Health
ORS	Oral Rehydration Solution
PDC	Parish Development Committee
PDW	Parish Development Worker
RC	Resistance Council
TBA	Traditional Birth Attendant
T T	Tetanus Toxoid
UNEPI	Uganda National Expanded Program for Immunizations
US AID	United States Agency for International Development
VHC	Village Health Committee
VIP	Ventilation Improved Pit (latrine)
WHO	World Health Organization
WV	World Vision
WVRD	World Vision Relief and Development

Introduction

In 1993 the United States Agency for International Development granted World Vision Relief and Development, Inc. (WVRD) a three year centrally funded grant to implement a Child Survival project in Uganda. The USAID award of \$953,728 was matched with \$362,291 of World Vision matching funds for a total project budget of **\$1,316,019**. This grant allowed World Vision/Uganda to continue the Child Survival activities begun in the Bundibugyo District in 1989 through a previous USAID Child Survival grant, and to expand these activities to cover the population of children under five and their mothers in a county of Masindi District.

The mid-term evaluation took place in both the Masindi District and the Bundibugyo District. Although both districts are located in Western Uganda, the evaluation team had to return to Kampala to travel from one district to the other because seasonable rains made some of the unpaved roads extremely difficult to negotiate or impassable even for four wheel drive vehicles.

Previous to the implementation of Child Survival activities in Masindi, World Vision/Uganda had collaborated with the World Bank and the Government of Uganda on a broad-based primary health care program that had been established in two counties in the district. In the original proposal it was intended that the Child Survival project would cover the same two counties, Kibanda and Buliisa, but because of budgetary restrictions activities included in the DIP were limited to Kibanda county only. Kibanda county is divided into four parishes - Masindi Port, Kigumba, Kiryandongo, and Mutunda. The population in the district consists of many different ethnic groups, all of which are mainly involved in small-scale agriculture.

In Bundibugyo, Child Survival activities are carried out in Ntoroko county, which shares its Western border with Zaire. Ntoroko county is divided into three sub-counties that differ significantly in both physical features and cultures. Karugutu, located in the Ruwenzori mountains, is populated by small-scale cultivators, while the income of people of Ntoroko, which borders Lake Albert, comes from fishing. The population of Rwebisengo - a vast plain - are largely nomadic cattle keepers.

The overall aim of the Bundibugyo and Masindi Child Survival Project is to reduce morbidity and mortality among children 0-59 months and of women of child-bearing age.

Objectives of the Mid-term Evaluation

The evaluation objectives were based on the Evaluation Guidelines

as described in the Mid-term Evaluation Guidelines for CS-IX Projects. These were as follows:

1. to describe the accomplishments of the project as stated in the DIP;
2. to determine the effectiveness of the project in meeting the accomplishments as stated in the DIP;
3. to describe the steps that have been taken to enable families in the project areas to utilize Child Survival services and participate in the activities that have been implemented by the project;
4. to analyze the project design and implementation activities, and identify both positive and negative effects in terms of meeting project objectives;
5. to develop recommendations.

Mid-term Evaluation Team Members

Ms. Helga M. Morrow, Team Leader, Consultant, USA
Dr. Larry Casazza, Director, International Health, WVRD, DC
Ms. Lilian Katusabe, Project Associate, Bundibugyo
Mr. Adoniya M. Kyeyune, Executive Secretary, Uganda
Community Based Health Care Association
Dr. Stella Neema, Medical Anthropology, MISR/CHDC, Kampala
Dr. Johnson Ngorok, CSP Project Coordinator, WVRD, Masindi
Dr. Miriam Sentongo, MCH/FP Ministry of Health, Kampala
Mr. William Ssajjabi, Program Associate, Masindi

Mid-term Evaluation Methodology

The Mid-term Evaluation process had five distinct components to obtain the information that is summarized in this report: mid-term KPC surveys carried out by World Vision field staff in both the Masindi and Bundibugyo Districts; group discussions carried out in sub-centers in both districts; interviews with key informants; direct observations during outreach immunization, health education and growth monitoring sessions, and reports and other documents available at World Vision offices in Kampala, Karugutu and Masindi. (See Appendices I, II, and III for the evaluation program of activities, list of key informants, and list of group discussions) Data from the draft survey reports was made available to the evaluation team and was used by the team to evaluate the effectiveness of some of the interventions. Prepared questionnaire guidelines were used during the group interviews, key informant interviews, and discussion groups. In total well over 435 people participated in the two evaluations. (see Appendix IV)

1. Accomplishments

Technical reviewers of both the project proposal and the detailed implementation plan (DIP) noted that some of the objectives were overly ambitious, consequently reductions for some of the objectives were made. As the table below shows, five of the Masindi project objectives have surpassed the mid-term target, others are met or are slightly below and four objectives are considerably below the revised DIP targets. For Bundibugyo, eight objectives were surpassed, four were slightly below mid-term target and three are considerably below target.

1.1 Accomplishments **and** Constraints: Immunizations

In both the Masindi and Bundibugyo Districts, the CS project supports UNEPI activities at both static and outreach centers by providing transport, supporting logistical arrangements and the cold chain, training MOH and project staff, and obtaining and transporting the vaccines used during the immunization sessions. Members of the evaluation team observed outreach immunization sessions in both districts, and were impressed with the response of the communities to such visits. In the Kitwara Parish, Masindi District the immunization team, comprised of two project staff and two MOH staff, boarded an old tractor to make the 15 mile trip to an outlying village, while the team was able to reach the site in one hour using a four wheel drive vehicle. Rains had made the small dirt roads, which at two points were

Nevertheless, on reaching the site well over one hundred women, a few men and approximately one hundred and fifty children had assembled in the shade of a large tree. In Bundibugyo, members of the team made a three hour hike straight up a mountain in front of the Karugutu, WV field office to observe MOH and project staff providing services to and interacting with approximately fifty mothers, a few men and seventy children who had gathered there. Xswamped by

Although the mid-term targets for fully immunized children less than twelve months were not fully met in either district, the positive effects of the EPI program are evident. Mothers report that their children are not dying of the "**six** immunizable diseases" anymore and that this has increased their needs for family planning. As the KPC survey findings show, messages regarding tetanus toxoid vaccinations are reaching mothers and mothers are acting accordingly. Mid-term targets in both districts for tetanus toxoid immunizations were surpassed.

The team observed that in both districts mothers and their children were provided with quality services. All immunizations were recorded on cards as well as in the immunization record books. Moreover, the techniques were well done and the busy sessions ran smoothly. In summary, the outreach sessions were remarkable demonstrations of the powerful response to social mobilization generated by the CHWs and the PDWs working in collaboration with MOH programs. In fact, the CHWs noted that the people now expect and request the outreach activities to occur regularly.

1.2 Accomplishments and Constraints: CDD

The project's CDD program includes the education of mothers on appropriate nutritional management of diarrhea and administration of home-available fluids or ORS, the construction and use of pit latrines and the construction and protection of shallow wells. During discussions with mothers, the team learned that the health education sessions and home visits carried out by the CHWs and PDWs on CDD have had an impact on the health of families. Mothers report that their compounds are cleaner now and that their children suffer less from diarrhea. The team visited sites where the wells were constructed and talked with the persons responsible for maintaining the wells. The pumps for the wells and the accessories were donated by UNICEF, the communities contributed by providing local materials and digging the well, and the CS project provided cement, stones and transport for the local materials and paid for the technical laborers.

In June/July a cholera outbreak occurred in Rwebisengo and Karugutu areas of Bundibugyo district, killing more than thirty people. Project staff worked with the MOH, the local leaders and the District Medical Officer (DMO) to bring the outbreak under control. Massive educational campaigns were conducted in markets, parishes, police barracks, churches and schools. More than thirty such meetings were held. In addition, the project obtained IV fluids and ORS sachets for distribution to the stricken areas, and project staff participated in the care of the sick and the purchase of medications. During the teams discussion with the DMO and local officials, the roles of the project's staff in assisting to bring the cholera outbreak under control were lavishly praised.

1.3 Accomplishments and Constraints: Nutrition

During outreach sessions and home visits **CHWs** and PDWs discuss the importance of exclusive and prolonged breastfeeding, and it appears that those messages are having an impact. In both districts mid-term nutrition objectives were surpassed by

considerable margins. In Masindi, the weights were precisely marked on the cards in the mothers' possession and during "exit interviews" with about twenty-five mothers, the team learned that mothers had indeed been informed about the growth curve. Nevertheless, the team noted that many of the children fail to thrive and that more emphasis needs to be placed on informing mothers about the preparation of specific, locally available foods, and nutritious frequent feedings, especially for children who are anorectic or are recovering from an illness. The issue of food security does not appear to be a problem in the areas that the team visited, as there is an abundance of beans, sim-sim, fish and vegetables.

In Bundibugyo, although the children were carefully weighed, graphs were often not plotted and little counseling was done. CHWs in this district will also be advised to increase emphasis on adequate food preparation of locally available nutrient rich foods. Although food security did not appear to be a problem in one of the areas visited, in both Rwebisengo, the cattle herding area, and in Ntoroko, the fishing community, there is virtually no small scale agriculture and food security is a serious problem, especially during the rainy season.

1.4 Accomplishments and Constraints: Maternal Care

Perhaps the greatest achievement in this area is the awareness of family planning that has been created, both as a result of parents seeing fewer of their children die, but also because of the messages that have been passed on to families. Perhaps the greatest constraint of the project is its inability to meet the ever increasing demand for family planning services. Community based family planning workers have been trained in Bundibugyo, but it is not clear how effective this new group of workers will be. In both districts TBA training goals have been met and it appears that the TBAs are referring some mothers to the health units. The CS project provides iron and folic acid when MOH stocks run out. In both areas, however, serious constraints to adequate maternal care remain.

In Masindi, TBAs have been trained to request transport from WV staff for mothers who are on a "high **risk**" registry if emergencies arise. Project personnel were not aware of the fact that obstetrical emergencies can occur among women with "no risk factors". Changes in this policy will be made to accommodate all women presenting with obstetrical complications. The policy of a "high **risk**" registry was implemented after it was noted that there was abuse of the transport system. Further complicating maternal care in the Masindi district is the vast number of different ethnic groups and the different birth practices of

these groups, resulting in mothers seeking assistance with births only from TBAs of their own tribe. As the majority of TBAs only assist with an average of one or two births a month at the most (some do none), the amount of effort that has gone into training TBAs needs to be examined.

One effect of training **TBAs**, as reported by mothers, has been that TBAs used to provide their services for free, but with the training they are demanding payment. The TBAs interviewed by the team vehemently deny that they charge to assist with deliveries. For the majority of births a family member or neighbor is present to assist the mother with the births, yet the messages presented to families do not reflect this situation. The report from the John Hopkins/Child Survival Support Program work on the maternal care curriculum was shared by WV headquarters staff with the field staff, and will be used to effect changes in the maternal care program.

In all the health centers and the hospital visited by the team, the reported number of births is extremely small, averaging 4-10 per months. This under-utilization of static health facilities was found in both districts for all services. Reasons provided by the MOH staff and project personnel were: difficulties with transport to the site, periodic shortages of drugs and supplies, and the attitude of some of the staff. It was also noted that the staff in some of the outreach health facilities spend more time doing their private businesses, such as pharmacies, than they spend time in the clinics. Particularly, in Masindi - one of the pilot districts of the district health services project (DHSP) - the DMO is aware of the problem and intends to retrain all health staff as soon as implementation of new health services scheme begins in October, 1995.

Although the number of births attended by a professional or a trained TBA is higher in Bundibugyo, the same difficulties with transport exist. TBAs in Ntoroko reported that it costs at least Shillings 5000 (US\$1.00 = 1000 shillings) to transport a mother to the nearest health center where she may or may not find adequate care. Very few women in this fishing community have the means to pay such transport costs, thus their chances of receiving adequate care when complications arise are minimal, unless other means can be found to bring maternal care services and women who need them closer together.

1.5 Accomplishments and Constraints: **AR1**

It was the intent in both districts to provide project staff with the training they would need to train others on the AR1 algorithm developed by WHO, and also to train MOH staff. In Masindi, only

project staff have received the training, while in Bundibugyo both project and MOH staff have been trained. The MOH in Masindi has delayed the training of MOH staff on this AHI algorithm until all senior staff have attended the National ARI Program training at Makkeri. The team was unable to determine whether the MOH staff in Bundibugyo actually uses the algorithm to diagnose and treat childhood **ARI**.

1.6 Accomplishments and Constraints: HIV/AIDS

Findings from the KPC surveys indicate that in both districts more than 90% of the mothers report that they have adopted an appropriate measure to protect themselves against HIV, well-surpassing mid-term targets set forth in the DIP. Although verification is not possible, the information does have important implications, i.e. that educational messages regarding one mode of HIV transmission are being heard. The method of self protection most frequently mentioned by mothers is that they each remain faithful to one partner. The project has trained community counselors for all areas. The counselors provide counseling services and support to AIDS patients and their families. In both districts, the project's HIV/AIDS coordinators have organized community activities such as youth drama competitions, song contests and school plays. The counselors also see patients with AIDS and their families and provide them with counseling and support services. Men report an increase in condom use, but they also expressed the fear that their wives may have other sexual partners when they spend nights away from home when bringing produce to the market.

In general, the team noticed a high level of awareness of HIV/AIDS in both project areas, and a verbal commitment to avoid multiple sexual partners. Furthermore, both men and women expressed a very strong desire to be tested for HIV infection. Testing before marriage is recommended by the church leaders in Bundibugyo, and if tests produce positive results, marriage is indefinitely postponed or canceled. Although the project does not have an AIDS orphans component, the plight of those orphans is evident everywhere. Not a family interviewed failed to mention the extra burden they carry by taking care of the children of deceased family members. The future of those children does indeed look bleak. Another project accomplishment is its ambitious training and educational program. The table below lists the training sessions completed.

2. Effectiveness

The accomplishments of the CS project in the two districts are

impressive, not only in terms of meeting stated mid-term objectives and outputs, but also in succeeding to mobilize families in even the most isolated and difficult to reach areas. The effectiveness of this CS project can be measured from several different perspectives: feedback received from the mothers, fathers, elders and villages leaders concerning their perceived benefits from the project, the quality and number of people trained to carry out functions that contribute to meeting the objectives of the project, the collaboration on health activities and information shared with MOH personnel, such as the UNEPI, the cholera outbreak in Bundibugyo and the measles outbreak in Masindi, and through discussion with political leaders concerning the effectiveness of the project's activities in meeting their needs.

World Vision's CS project, because of its effective outreach network of paid staff and voluntary workers, its highly workable system of information sharing, its extensive training programs for both project personnel and community members, its management of resources and its commitment to quality performance, is highly visible and prominent, and recognized by the communities they serve as being the reliable health care provider. There is an important lesson learned from this - a successful NGO health program can greatly augment MOH efforts and even decrease demand for MOH services as a result of successful health education and preventive health practices. The community recognition of World Vision may lead to resentment on the part of MOH personnel for their lack of visibility in providing health-care services. In Masindi it was mentioned that W could have a potential role in the **DHSP`s** training program, however, not with a W identity but with the MOH as the primary role model.

3. Relevance to Development

One of the foremost achievements of the WCS is the way in which trained community health workers have been able to pass messages concerning healthy behaviors on to their village members, and the response to these messages of mothers, fathers, village leaders and others. Examples of the way in which community mobilization has increased the ability of families to participate in and benefit from child survival activities and services include: the construction and maintenance of swallow wells - community members donated local labor and supplies and the women cooked the food for the workers; the construction of VIP latrines - families paid Shs 200 each towards the construction; the state in which compounds are now maintained - families have built dish-drying racks, dug pits for garbage, covered latrines with concrete slabs, and constructed animal enclosures; mothers are bringing their children regularly to outreach centers for immunization and

growth monitoring; mothers and fathers are aware of family planning benefits, although lack adequate access to family planning services; community members are aware of HIV infection transmission and modes of prevention, and claim to have changed their sexual behavior; mothers are participating in and demanding more opportunities for income generating activities, such as **goat**, duck and chicken raising, and cooperatives for craft items; mothers state that their children have fewer bouts of diarrhea and that they know how to take care of a child with diarrhea; and there is a demand for health care services and an expressed willingness on the part of the volunteers to continue to provide services without support of W.

Equally relevant to health development, in addition to participation in and demand for services, is political will and commitment, and the means to reach rural and isolated communities with quality services. With major new developments occurring in Uganda's health care system that, including greater autonomy for district health personnel and ability of political leaders to allocate resources, the accomplishments of W's outreach programs and the communities' response to those programs offers evidence that "health for **all**" can be more than just a slogan.

4. Design and Implementation

4.1 Design

There has been no change in the project area or in the size of the impact population since the submission of the DIP. Initially it was the intent of W/Uganda to implement child survival activities in the Bundibugyo district and in two counties of the Masindi district - Kibanda and Buliisa counties. Because of budgetary limitations, however, activities in the Masindi district were limited to the Kibanda county only. In the Bundibugyo district child survival activities began in September 1989; thus, the current project is an extension of those activities.

The geographical split of the CS project has presented some important lessons learned. The lesson here is that CS interventions **as** designed by this project are incredibly labor intensive and require on the spot personnel with management skills. Although it was known when the proposal was written that communication and transportation between the two districts would be very difficult, it appears that the managerial and logistical costs of such a split were considerably underestimated. This may well have important budgetary implications for the remaining life of the project.

4.2 Management and Use of Data

Except for reports from the two HIV/AIDS counselors which contain information on changing attitudes of persons infected with HIV and the effects of counseling, the project has concentrated on collecting quantitative rather than qualitative data. Methods used for quantitative data collection include:

1. KPC surveys - baseline and mid-term
2. Routine health information system monitoring.

Health information in both districts is collected, compiled, aggregated and disseminated at many levels. At the village or community level, the **CHWs, TBAs**, and community counselors keep separate registries on: immunizations, high risk children as identified during growth monitoring sessions (see Appendix V), mothers identified as high risk (see Appendix VI), births, deaths, home improvement, new family planning acceptors, and **HIV/AIDS** clients. (See Appendix VII for forms) At the subcounty level, the information is passed on to or checked by the **respective** area coordinators, who aggregate the data for submission to the project **associates**. At the district level, the program associates share the information with the project's HIS coordinator and the project coordinator. The HIS coordinator reviews and analyzes the data on a monthly basis and presents the results of his findings to the project associates and the area coordinators. The project coordinator uses the data during his monthly meetings with the staff.

Confirmation that the HIS is fully functioning and is used for managerial and monitoring purposes was possible through the group and key informant interviews. Even though the TBAs are illiterate, they proudly showed the team their births registries which in some cases contained the baby's weight and presentation' at birth. Record books maintained by the CHWs are well organized and appear to be up to date. The team observed during growth monitoring and immunization outreach sessions that activities were adequately recorded in the registry books. In addition, at each level, personnel confirmed that their supervisors checked the registries regularly and that feedback was provided.

In Masindi district, the monthly reporting from one of the dispensaries, which the project supports with its immunization outreach program, resulted in the early recognition of a measles outbreak in one of the district's sub-counties. W project personnel assisted the MOH in a massive measles vaccination campaign, which quickly brought the outbreak under control. Similar evidence that the HIS is functioning adequately comes from the Ntoroko county in Bundibugyo. Project personnel were

the first to report a dysentery and cholera outbreak in May-July, 1995, which resulted in ten deaths. Project personnel took an active role in health education and the treatment of the sick.

Health information is shared with the DMO in the districts, the village health unit management committees, and political leaders, such as RC **IIIs**, IVs, and Vs and the DES. The key informants told the team that monthly reports were regularly received and that in general the project kept them well informed. Especially during crises, communities receive information on their health status, and annually are informed of their immunization coverage, latrine protection and family planning acceptors, among others. CHWs share information with families during weekly home visits.

One early lesson learned was that project personnel collected too much information that could not be adequately used or was not necessary. As a result some of the forms were simplified.

4.3 Community Education and Social Promotion

A major emphasis of this CS project has been on training members of the communities to be the health promotion and health practices educators for their own village cohorts, and for these volunteers to reinforce the messages through regular home visits and participation in outreach sessions. Project staff provide actual health services when they collaborate with MOH personnel during immunization and growth monitoring outreach sessions or during HIV/AIDS counseling sessions. All maternal care services are provided by the TBAs or by MOH personnel and not by project staff. The balance between health promotion/social mobilization activities and service provision in this CS project is appropriate.

During the outreach sessions, project personnel and community volunteers hold discussions on a variety of different topics with the people who have gathered there for the services. These topics range from HIV/AIDS prevention to the benefits of family planning, compound sanitation, and income generating opportunities, depending on the size and interest of the group. HIV/AIDS community information/education activities have been especially varied. In both districts project personnel have organized drama and song and dance competitions, met with church and village leaders, held discussions with teachers and students, and mobilized women's groups into action.

The messages used in both districts originate mainly from the MOH. Project personnel have not attempted to design new messages, although they translate the messages into the local languages. Printed materials distributed by the project are

mainly those related to HIV/AIDS or family planning and are not produced by the project. Area coordinators report that during their regular visits with the CHWs they listen to the messages these groups deliver and make corrections if necessary. However, there has been no methodical verification of the adequacy or usefulness of the messages, nor of the manner in which the messages are delivered or received. Project personnel and volunteers report that assessment of learning takes place during the question and answer period that follows each educational activity, and that no formal evaluation of the level of learning has been carried out. However, they point out that the community action is evidence that much learning has taken place: children are being immunized, compounds are cleaner, mothers' practices regarding breastfeeding and management of diarrhea and ARI have changed, and knowledge regarding HIV/AIDS and ways to prevent transmission has increased. The team was able to verify that mothers and other community members are indeed well-informed about how they and their families have benefited from project activities in terms of improved health status and conditions.

4.4 Human Resources for Child Survival

The mix of project personnel and their numbers seem to be appropriate, and there is little or no apparent duplication of project efforts. Neither is there duplication of MOH activities. Rather, the project has collaborated with the MOH in terms of training and outreach sessions. The project serves populations that are hard to reach and have been neglected by governmental services, filling a void with its outreach program and network of trained community volunteers that is difficult to replace or duplicate. Trained CHWs are responsible for between 25-50 families each. These workers carry out most of the health education sessions; they do home visits; they check the compounds for the status of the latrine, the presence of dish drying racks and water sources; they attend outreach sessions and assist with growth monitoring and immunizations; and they encourage mothers to attend antenatal clinics. Each worker was given a bicycle to ease some of their efforts, otherwise they do not receive any remuneration.

Vaccinators assist with immunization and growth monitoring sessions, trace defaulters, fill out the registries and distribute ORS sachets. Their work differs from that of a CHW in that with the extra training they can actually do the immunization, where this is legally sanctioned by the local government.

The community counselors are specifically trained to work with and counsel people with HIV/AIDS and their families. They also

do community mobilization, but specifically related to HIV/AIDS interventions. Attrition of community volunteers in both areas is relatively low. Reasons for the low drop out rates include incentives given to the CHWs and vaccinators, the already recognized status of the **TBAs**, and the status given to the community counselors. The evaluation team notes that another possible reason for the low drop out rates may well be the support project staff gives to the community volunteers in terms of weekly and monthly visits, training opportunities and information sharing. The health educators and the PDWs are the supervisors of the trained community volunteers.

The project's training program is extremely ambitious, time consuming and costly, and well exceeds DIP projected targets. In particular, project staff has undergone numerous training activities, and the evaluation team doubts that this is appropriate management of limited financial resources. The team recognizes that the staff has benefited from the training courses, especially in their roles as supervisors of the community volunteers that are responsible for carrying out some of the functions. Nevertheless, the team is not aware of any training needs assessments that were done to determine whether the courses were necessary to enhance the roles of the staff. In addition, although staff was trained in loan and credit management in Bundibugyo, because of shortage of funds the district does not have a credit officer, and, therefore, no loan scheme has been implemented in the area.

4.5 Supplies and Materials for Local Staff

The most essential resource for each activity and for each worker is transport, whether it is by bicycle, motor cycle, car, truck or by foot. Because of the terrain, the distances and the lack of public transport, without the means to carry out outreach sessions the project is paralyzed. The team, in their discussions with project personnel, both paid and voluntary, all expressed the same constraint - lack of adequate transport. Project personnel in Bundibugyo commented on the one year delay in the arrival of the two four wheel drive vehicles. These vehicles arrived in July of this year, just in time for the mid-term evaluation. Motorcycles ordered for the supervisory staff in Masindi have not yet arrived.

Such delays, which are beyond the control of project staff and more a function of Uganda's bureaucracy in dealing with imported merchandise, do influence project productivity. Even when transport is available, the conditions of the roads make passage at times impossible. The conditions of the roads also lead to the rapid deterioration of tires. The team was informed that

bicycle tires require new inner-tubes every six months. Funds for such replacements are not available. Nevertheless, the team was impressed by the resourcefulness of the staff in both Masindi and Bundibugyo in reaching even the most isolated areas. As discussed earlier in the report, staff in Bundibugyo makes hikes high up in the mountains and in Masindi staff uses an old farm tractor to cross streams to carry out monthly immunization and growth monitoring sessions.

Both in Masindi and in Bundibugyo most of the resources needed for outreach sessions were adequate as long as project personnel used their vehicles to obtain the vaccines from the MOH central depot and provided funds to pay for any transport cost of MOH personnel. Iron and folic acid tablets given to pregnant women during the outreach sessions are supplied by the CS project and seem to be readily available. The lack of an adequate number of weighing scales created unnecessary delays in some of the outreach sessions. MOH personnel in all the dispensaries visited complained of chronic shortages of essential drugs, including chloroquine. The project will supply essential drugs to the dispensaries, but only in times of a crisis. With decentralization, and hopefully, better human resources management, training and supervision, such needs should diminish.

There is serious under-utilization of static health units in all areas visited by the team. Assurance alone that adequate supplies and materials are available is not going to solve the problem. MOH staff need to be retrained, they need to be paid and they need adequate supervision; only then will they be able and willing to focus on providing quality health care services. The CS project staff and volunteers continue to benefit from a well managed support system, and the results of this effort, in terms of the quality of services provided, are evident.

TBAs complained that their supply of gloves was inadequate and that they needed rubber boots for safety during deliveries. Similarly, dispensary staff complained of chronic shortages of gloves and disposable needles and syringes, but it was never the intent of the project to be the supplier of such products.

Most of the HIV/AIDS educational material has been supplied by German Government Foreign Assistance program in the local language in Masindi and in Bundibugyo from the MOH. Both HIV/AIDS counselors stated that their supplies and materials were inadequate for the expressed needs. Because condom demands have increased significantly, supplies run out periodically. Also chronically short in supplies are educational materials in local languages, flip charts and wooden models of a penis..

In summary, adequate and readily available transport continue to be problems for the outreach workers, as are the shortages in educational materials. Given the current budget limitations, it is unlikely that these problems will be easily resolved.

4.6 Quality

The team used group and key informant interviews and observation techniques to determine the quality of services and educational activities carried out by project staff and volunteers. Data from the mid-term KPC survey indicates that mothers are receiving messages and are, for several of the interventions, acting accordingly. Particularly, mothers are acting on messages related to tetanus toxoid immunizations for themselves, exclusively breastfeeding their infants, growth monitoring and protection against HIV. Mothers could name the six immunizable diseases that kill their children; they know the value of sanitation and clean compounds; they know how to properly treat their children with diarrhea; they have learned about the importance of family planning and accept the need for it; and they want to improve their status by participating in income generating activities. Families have responded to the health messages and support from CHWs by keeping their compounds clean, covering pit latrines, digging garbage pits, and building and using dish drying racks.

The quality of services provided by outreach workers was observed in the way mothers and other community members were treated during outreach sessions, the way children were weighed and the way immunizations were administered. Nevertheless, improvement is possible, particularly in the area of nutrition. Nutritional advice is not adequately provided during growth monitoring sessions. Although mothers seem to know the implications of a growth curve, they are not acting on that knowledge. The team observed that children are surviving, but they are not thriving, even when food is abundantly available. Project personnel need to focus more on educating mothers on the value of feeding their children locally available nutritionally rich foods, the preparation of these foods, and frequency of feedings. With the success the project has had in keeping children alive, attention must now be given to keeping children healthy and happy.

To determine the level of knowledge of the **CHWs**, TBAs and other local voluntary staff, the team asked them questions related to specific topics, such as, "When should a pregnant woman be referred to a health center?" In general, the team found these workers to be knowledgeable, except for problems related to obstetrical complications. TBAs used risk factors to determine which mothers to refer to health centers, and they failed to name

such signs and symptoms as fever, headaches, blurred vision, prolonged labor and hemorrhage. Revisions in the training of the CHWs and TBAs is necessary, and the issue of emergency transport needs to be addressed where the project provides those services.

It was not appropriate for the team to observe individual HIV/AIDS counseling sessions, however, the team did carry out interviews with the district counselors and with the community counselors and was impressed with their knowledge and communication skills. As mentioned earlier in the report, the counselors have successfully involved community members in HIV/AIDS awareness programs and this appears to have increased the demand for condoms. Also, the youth and the adults talk about the need for remaining faithful to one sexual partner and for simple and cheap HIV screening.

4.7 Supervision and Monitoring

Supervision and monitoring follow the same paths as the HIS. Community volunteers, which include the community counselors, **CHWs, TBAs**, vaccinators and water technicians receive regular visits from the health educators as in Bundibugyo, or from the PDWs as in Masindi. Depending upon the availability of transportation, both supervisors and those being supervised agree that these visits occur between every two weeks to at the most every two months. Health educators and PDWs receive monthly visits from the area coordinators, and the area coordinators are supervised at least monthly by the program associates. Supervisory visits coincide with collection of monthly reports, and they occur during outreach sessions. Each category of worker interviewed concurred that supervision was carried out on a regular basis, and that their supervisors were supportive and helpful. They stated that supervisors shared important information with them, and that they learned new techniques and about new ideas during the visits. The supervisors do not use checklists, rather they use information from monthly reports to comment on the performance of the workers.

Senior project personnel, such as the program associates and the project coordinator were selected for their posts by a panel in Kampala, and submit an annual performance self-evaluation form. Job upgrades are based on this self-evaluation, which is discussed with the immediate supervisor.

The team believes that the managerial system of the project which includes the way information is collected, shared and disseminated, the training of staff and **volunteers**, the various levels of project personnel - each with distinct responsibilities

- and the supervisory or support system all contribute to making this CS project very successful, and that there is no need to make any changes.

4.8 Headquarters Support

Headquarters staff has made several site visits and has provided support to the project during the writing of the proposal and the DIP, during the baseline KPC and in preparation for the mid-term evaluation. In addition, headquarters staff made it possible for the project coordinator to attend a CSSP training of trainers course on the KPC survey in Baltimore, MD. WV headquarters staff has also come Uganda to provide clarification on the USAID contract requirements and a finance officer visited to discuss financial issues. Information obtained from CSSP organized workshops is shared with the field staff and is distributed to the district offices, Project staff informed the team that the support received from headquarters has been timely, appropriate and adequate and that no changes are needed.

4.9 Use of Technical Support

The only technical support needed by the project has been in relation to the KPC survey and that was accomplished by the training of the project coordinator and by visits from headquarters staff. Technical support for the remainder of the project relate to the imminent changes that will take place in the Masindi district during the decentralization process. Part of the World Bank/Uganda Government changes in health care services will focus on quality assurance as an integral component of health services management. If WV has any role to play in the upcoming health services program in Masindi, staff will need to become familiar with quality assurance principles and its management tools.

4.10 Counterpart Relationships

The major counterpart organization in both districts is the MOH. The project has involved the MOH in its training programs - as trainers and as participants - outreach sessions are conducted with the support of MOH staff; outbreaks of communicable diseases are brought under control through the combined efforts of project staff in collaboration with MOH staff; the cold chain is supported by the MOH with essential support and services provided by the project; vaccine movement is a collaborative effort between the MOH and the project, as is the provision of essential drugs; transport to the health clinic is provided for emergency obstetric cases in Masindi; and health information is shared with the MOH and all major political leaders.

The project has trained village health management committees, which are part of the political framework in Uganda, in both Masindi and in Bundibugyo. Political leaders have been included in training sessions on HIV/AIDS and income generating activities and loan schemes. The village health management committees are theoretically responsible for supervising the community volunteers. The project **has** helped them to carry out their work. Throughout the mid-term evaluation exercise, the team was **aware** of the close collaboration between the project and the MOH and the good relationships that have been formed. Unfortunately, W may have highlighted its contributions and in so doing overshadowed the services provided **by** the MOH, even if those services would not exist without the support of W. This over-visibility. To some extent W's effectiveness **may have** negative consequences in terms of any future role in the decentralized health care system unless W can adopt a lower profile.

4.11 Referral **Relationships**

Until the quality of the referral facilities is **improved**, the training of dispensary and health facility staff (**currently** part of the project's activities), will have little impact on the services. The project has trained midwives and nurses in the WHO AH1 algorithm and in counseling skills, and has also included them in other training sessions. However, unless those facilities are adequately supplied and staffed for 24 hours a day and seven days a week, they will remain underutilized and inaccessible to most of the people the project attempts to reach. The fact remains that rural governmental services except for some rare exceptions, are in desperate need of total rehabilitation to make a visit there worthwhile. An overhaul of Uganda's health care system has begun, and that is encouraging. Nevertheless, for the project to make greater referral efforts at this time would not result in greater health benefits until these institutional changes have materialized.

4.12 **NGO Networking**

The project operates in areas that are underserved by both governmental and other NGO activities. In Bundibugyo, the project has collaborated with GTZ - a governmental organization - on a number of activities, including the training of health workers and the supply of educational materials but in Masindi only W in collaboration with the MOH provides health care services in the project's target area. Thus, there is no duplication of services or efforts in the two districts served by the project.

4.13 Budget Management

The project is facing major budgetary constraints and is unlikely to be able to continue its current program activities in both districts until the end of the FY96. Project staff note that there are several major reasons for the projected budget short-fall. Firstly, the budget as proposed in the original project proposal was set unrealistically low. Staff apparently did not adequately take into consideration the extra costs involved in having one CS project operating out of two distinctly different districts. This has greatly increased operating costs. Secondly, the value of the dollar since this inception of the project has decreased by 10%. Thirdly, because of its geographical locations, the project has difficulties in retaining personnel, resulting in extra costs to train new staff. The project has also far exceeded training outputs as stated in the DIP. And fourthly, salaries paid to staff are higher than those stated in the DIP budget. NGOs in Uganda conduct periodic salary surveys among themselves to develop a common salary scale for staff, in order to lessen competition based on salaries. The salary scale used to develop the DIP budget did not reflect the current salary scale as used by the **NGOs**. The NGO salary scale does not compare to the scale used by the MOH. A MOH nurse's monthly salary is approximately \$50, while NGOs are likely to pay nurses \$400. (See Appendix IX for Pipeline Analysis)

The project coordinator has proposed five options given the current financial crisis:

1. Reduce the number of staff
2. Reduce the life of the project
3. Reduce the number of activities
4. Seek other sources of funding
5. Cease activities in one district

Headquarters and senior staff members met in Kampala to work out plans for the remainder life of the project, as recommended by the evaluation team. The decision regarding which option is to be selected will be forthcoming in the near future.

As the mid-term KPC indicates, the project has already met some of its end of project objectives and is close to meeting others. It will, however, be very difficult for the project to meet all its final target, even if funding was not an issue.

5. Sustainability

The table that follows is based on the sustainability plan as described in the project's DIP. The table does not reflect mothers' knowledge, practices and determination to keep their

children healthy. The project staff should place greater emphasis on the responsibilities of communities to support those individuals that provide voluntary services. If communities do feel that those services are beneficial, then certainly mechanisms can be found to provide the workers with some form of compensation. There are other sustainability factors that could be exploited. For example, political leaders at many different administrative levels have now a greater awareness of the advantages of outreach services in terms of saving children's lives. It is hoped that this awareness will translate into a greater advocacy for rural populations once W activities cease. Also, project staff need to take advantage of the relationships they have with local political leaders, and explore with them avenues for continuing with these outreach services.

Furthermore, MOH personnel have also been exposed to effective outreach activities, and have learned some important lessons. Whether any of the outreach services will be maintained by the MOH once CS funding ceases remains doubtful for at least the near future, but there are encouraging changes coming. The current World Bank loan supporting decentralization of health services promotes a package very similar to the package of CSP interventions. In Masindi District, one of the three pilot districts for this loan, an on-going dialogue between W, the World Bank and the DMO will determine a role for the CSP team there. This process will be very important to observe as it offers mutual benefit for W and the District Health Team. For the Masindi District Health Office, the CSP experience can serve as a model to be replicated in the remaining sub-centers. For W, it will be instructional to revise its role in the transition phase from central to district-level control. There are many lessons to be learned in the effort to become facilitators and management trainers, rather than co-implementors with the DOH, as the W staff have been in the past. Regardless, the DMOs in both districts are fully aware of the accomplishments of the CS endeavors and have expressed interest in continuing with the immunization sessions, and project staff need to work with the DMOs right now to obtain specific commitments.

6. Recommendations:

1. World Vision, Uganda take immediate decisions concerning the project's projected budget deficit for FY96 in terms of program activities and staffing in both project areas.
2. World Vision, Uganda discuss with staff the steps that will be taken to deal with the projected

budget deficit for FY96 and develop appropriate mechanisms to ensure timely end of project preparations.

3. World Vision directors identify and pursue other possible sources to support the continuation of project activities in both area, e.g. World Bank/ Government of Uganda District Health Services Project.
4. World Vision Staff identify areas of specific expertise that can be marketed for effective participation in the DHSP/STI/AIDS programs.
5. World Vision field staff begin discussions with local and district health authorities regarding specific activities, e.g. immunization outreach activities that will (can) be administered by the Ministry of Health, so that a phased take-over can begin.
6. World Vision field staff with their Program Associates develop a plan of action in collaboration with district authorities, which includes a specific time table for phasing out project activities, and that this plan of action become a formal agreement between World Vision and the authorities of the District Ministry of Health.
7. World Vision field staff in both project areas begin to inform the communities with whom they work about the imminent phasing out of the World Vision role in health activities and of the importance of their initiatives in health activities so that health gains will not be eroded.
8. World Vision field staff explore with the communities ways in which those communities can take on responsibility to support **CHWs, TBAs**, community counselors and vaccinators, so that health activities will be continued.
9. World Vision field staff during supervisory visits with TBAs and CHWs review the causes of maternal mortality and educate these groups about the signs/ symptoms of the specific causes and the most appropriate actions that must be taken in a timely fashion.

10. World Vision field staff during supervisory visits also ensure that appropriate nutritional counseling takes place and where needed referral be carried out in conjunction with the growth monitoring activities.
11. World Vision in planning future activities give equal weight to providing or collaboration in the provision of family planning services as it does to educating communities about family planning
12. USAID considering the extraordinary achievements of this CS project support any budgetary decisions the project needs to make.

Conclusion

World Vision's Child Survival project is located in two districts in western Uganda that have difficult terrain and a very poor road network. The beneficiary population is composed of many different ethnic groups, each of which has its own cultural beliefs and values, and economic means. Common to all groups in both districts is that they are underserved by the government health system, difficult to reach and they are poor. Yet, many of the project's mid-term targets have been achieved or surpassed, in spite of some of these constraints, and the project's impact is evident. Children are receiving their immunizations in time, mothers' breastfeeding habits have improved, compounds are clean, pit latrines are covered, and springs and wells are protected. Everyone interviewed commented on the positive outcomes of **WV's** presence in the area. This is due to the project's style of operation, which could serve as a model for other Child Survival projects. The project has filled a major void in Uganda's current health care system, but it can not be sustained without continuing financial support. The project's outreach program has maintained high standards; the challenge is in finding ways to maintain the precious gains that have been made.

TABLES

**Summary of KPC Survey Findings per Objective For Masindi (M) and
Bundebugyo (B)**

Table 1.

Intervention	objective	Baseline	Mid-term Target	Mid-term Achievement
Immunization	Increase % of children who are fully immunized before first birthday	M. 41% B. 52%	M. 60% B. 70%	M. 56% B. 58%
	Increase % mothers who received two or more TT	M. 44% B. 55%	M. 60% B. 70%	M. 87% B. 91%
CDD	Increase % of mothers who continue or increase breastfeeding during episode of diarrhea	M. 57% B. 85%	M. 75% B. 85%	M. 75% B. 67%
	Increase % of mothers who provide same or more other fluids during diarrhea	M. 60% B. 76%	M. 75% B. 85%	M. 70% B. 73%
	Decrease % of children treated with antibiotics or anti-diarrheals	M. 47% B. 65%	M. 30% B. 50%	M. 44% B. 46%
	Increase % of mothers who provide more foods after diarrheal episode	M. 37% B. 14%	M. 55% B. 30%	M. 56% B. 38%
Nutrition	Increase % of children 0-3 months exclusively breastfed	M. 54% B. 30%	M. 60% B. 40%	M. 70% B. 53%
	Increase % of children who are growth monitored at least quarterly	M. 32% B. 23%	M. 55% B. 45%	M. 69% B. 69%
Maternal Care	Increase % of mothers who are using modern method of family planning	M. 11% B. 23%	M. 16% B. 27%	M. 14% B. 24%
	Increase % of birth attended by professional or trained TBA	M. 41% B. 72%	M. 60% B. 80%	M. 43% B. 75%

ARI	Increase % of mothers who know at least 2 signs of respiratory infection requiring referral	M. 13% B. 9%	M. 30% B. 30%	M. 26% B. 39%
	Train 80% of MOH on WHO ARI algorithm	M. 0% B. 0%	M. 50% B. 50%	M. 0% B. 100%
HIV/AIDS	Increase % of mothers who can name at least 3 modes of transmission of HIV	M. 15% B. 4%	M. 40% B. 40%	M. 26% B. 37%
	Increase % of mothers who have adopted an appropriate measure to protect themselves against HIV	M. 46% B. 54%	M. 60% B. 70%	M. 92% B. 95%
IGA	Provide management training to 10 community based groups in each district	M. 0% B. 0%	M. 100% B. 100%	M. 100% B. 0%

Training Summary Table:. Masindi (M) & Bundibugyo (B)

Table 2.

Trainee	Course	Expected # to be Trained	Actual # Trained
(M) CHWs/ vaccinators	Immunization techniques/practices	NA*	36
(B) CHWs/ vaccinators	Immunization techniques/practices	NA	13
(M) CHWs - new	Initial Training	50	68
(M) CHWs	Refresher	NA	184
(M) TBAs	Initial Training	30	116
(B) TBAs	Refresher	NA	64
(M) Community Counselors	Initial Training	NA	54
(B) Community Counselors	Initial Training & Second Phase	NA	20
(M) Project Staff	WHO/ARI Algorithm	2	5
	HIV/AIDS Counseling	NA	17
	Micro Enterprise	NA	19
(B) Project Staff	WHO/ARI Algorithm	2	6
	HIV/AIDS Counseling	NA	10
	Micro Enterprise	NA	6
(B) MOH Staff	WHO/ARI Algorithm	NA	4
	HIV/AIDS Counseling	NA	4
	Immunization techniques/practices	NA	2
(B) CDWs	Micro Enterprise	NA	13
(M) Women's Groups	Micro Enterprise	10	42
(M) EPI/CDD/Cold Chain Technician	EPI/CDD/Cold Chain Management	NA	2
(M) Water Source Committee	Water Source Management	10	15
(M) Community Based FP Providers	FP/Maternal Health	NA	36
(M) Community Leaders	HIV/AIDS Awareness	NA	634
(M) PDC	Micro Enterprise	NA	12
(M) Clients	Micro Enterprise	10	38

NA* No number available from DIP

Category and Number of Project Personnel

Table 3.

Category Worker	Number	
	Masindi	Bundibugyo
Project Coordinator	1	same person
Program Associate	1	1
Area Coordinator	4	3
HIS Coordinator	1	same person
PDW	12	
Finance Officer	1	1
HIV/AIDS Counselor	1	1
Health Educator		6
EPI/CDD Technician	1	1
Driver	2	3
Secretary	2	1
Bookkeeper	2	1
Security Guard	2	2
Store Keeper	1	1
Receptionist	1	1
Porters		3

Category and Number of Community Volunteers in Place

Table 4.

Category	Number of Community Volunteers	
	Masindi	Bundibugyo
CHWs	184	78
TBAs	70	64
Community Counselors	84	20
Family Planning Providers	36	
Vaccinators	36	20

Child Survival Training Program Summary

Table 5.

Type/#/Dates	Training Topics	Topic Hours	Training Method
CHWs (36) 7/10-15 '94	immunization techniques, cold chain maintenance	30	group discussion, presentations, field trip, observation and demonstration
CHWs (184) held quarterly	refresher course on immunizations, ARI , MC, nutrition, etc.	12.5	discussions, field visit, shared experiences
TBAAs (116) 7/24-29 '95	maternal care, high risk, antenatal care, hygiene, anatomy, pregnancy, stages of labor, etc.	25	group discussion, presentations, observation and demonstration
TBAAs (64) 6/27-7/1 '94	Refresher course	13.5	group discussion, presentations, observation and demonstration, field visit
CBFP (36) 2/6 '94 - 2/24 '95	introduction FP methods, counseling, maternal care, recruitment, FP supplies, etc.	64	group discussion, presentations, observation and demonstration, role play
Community counselors (54) 2/7 '94 - 2/19 '95	facts, answers and questions re. HIV/AIDS, counseling techniques, team building	49	role play, discussions, exercise interviews
Community counselors, staff (34) 9/26- 10/4 '94	facts, answers and questions re. HIV/AIDS, counseling techniques, team building	25	role play, discussions, exercise interviews
Community counselors (20) 3/127 - 4/3 '95	facts, answers and questions re. HIV/AIDS, counseling techniques, team building	49	role play, discussions, exercise interviews
Project staff (19) 4/18 - 26 '94	business management, credit management	55	case studies
Project staff, community (19) 9/27 - 10/14 '94	business management, credit management	55	case studies
Project staff (17) 4/4 - 9 '95	facts, answers and questions re. HIV/AIDS. counseling techniques, team building	27	role play, discussions, exercise interviews
Community leaders (634)	facts, answers and questions re. HIV/AIDS	5.5	role play, discussions

Water source committee (15 5/18 -20 '95	safe water chain, water borne diseases, fund raising, maintenance	9	discussions, presentations, demonstrations
Women's groups (42) 3/7 -10 '95	good business guidelines, WV loan policy, business management	22.5	discussions, presentations, case studies
Loan clients (38) 1/31- 2/3 '95	good business guidelines, WV loan policy, business management, roles and responsibilities of members	8	discussions
Cold chain technician (2)	Refrigeration principles, vaccine logistics, electric circuits	48	discussions, demonstrations
Project, MOH staff (10) 2/26-3/4 '95	ARI case management	33.5	discussions, presentations, demonstrations, slides
Project staff (5) 11/30 - 12/6 '94	ARI case management	33.5	discussions, presentations, demonstrations, slides
Vaccinators (15) 2/26 - 3/4 '95	immunization techniques, cold chain maintenance	30	group discussion, presentations, field trip, observation and demonstration
CHWs (68) 5/29 - 3/6 '95	Principles of CS, qualities of good CHW, record keeping, community approach, planning, etc.	28.5	group discussion, presentations, field trip, observation
PDCs (12) 11/7 - 23 '94	Credit management and principles, responsibilities of group members. forms and terms	22.5 in each of three centers	group discussion, presentations, case studies

Sustainability Indicators

Table 6.

End of Project Objective	Steps Taken	Steps Needed
665 CHWs and TBAs trained in CSP interventions	468 CHWs and TBAs trained or have attended refresher courses	Train 197 more CHWs and TBAs
20 women's IGA groups established and trained	10 women's IGA groups established and trained	Establish and train 10 more women's IGA groups
10 protected wells/springs	10 protected wells/springs	Determine how many other wells or spring need protection
7 active HUMC	7 active HUMC	
10 water source committees	15 water source committee members trained	
80% of communities represented by VHC	VHCs in both districts participate in selection of CHWs	Determine how many communities there are and what % of VHC are actively involved
MOH staff in dispensaries trained	MOH staff in both districts have participated in ARI and HIV/AIDS training	Continue to involve MOH staff in training exercises, both as facilitators and participants

HIGH RISK GROUPS

INTERVENTION	HIGH RISK GROUPS -	STRATEGIES
<p>EPI Children and Mothers who are</p>	<p>10 months ^{children} who have not completed immunisation</p> <ul style="list-style-type: none"> - Immunisation defaulters - Pregnant women who have not received at least 2 TTs 	<ul style="list-style-type: none"> - use of immunisation register to find defaulters and institute follow up. - Education at ARC - Checking on EPI cards during unit visit and taking the opportunity to immunise.
<p>CDD Children who are presenting</p>	<p>3 moderate to severe dehydration.</p> <ul style="list-style-type: none"> - blood or mucus in the stool - malnutrition - AIDS - multiple infection - prolonged diarrhoea more than 2 weeks 	<ul style="list-style-type: none"> - education of CHWs/TBAs on mothers and the need for referral. - continue the job training of dispensary based staff of proper management of high risk diarrhoeal diseases cases.
<p>NUTRITION Children who have the following</p>	<ul style="list-style-type: none"> - growth faltering - Low birth weight (Less 2.5kg) - measles - persistent diarrhoea - CM defaulters 	<ul style="list-style-type: none"> - children with growth faltering will be noted in the CHWs' registers. - Home visits and education of mothers with children who are faltering. - referral of a child with persistent diarrhoea.
<p>MATERNAL CARE with</p>	<ul style="list-style-type: none"> - pregnant women less than 18 or more than 35 yrs. - women with more than 4 pregnancies - mothers with complication in pregnancy, previous scar malposition, hypertension, haemorrhage, anaemia etc 	<ul style="list-style-type: none"> - education on maternal health to mothers. - high risk registers at parish and availability of transport ORT for obstetrical emergencies
<p>ARI Children presenting with</p>	<ul style="list-style-type: none"> - fast breathing - difficult breathing - chest indrawing - inability to drink less 2 months, inability to feed more than 2 months. - sicker 	<ul style="list-style-type: none"> - education of mothers on signs of referral. - training of MOH staff at health units on proper management of a child with complicated ARI. - supplementary antibiotics for management of ARI to ensure that they don't go out of stock.
<p>HIV/AIDS Target Groups</p>	<ul style="list-style-type: none"> - youth - commercial sex workers - long distance truck drivers - Bar/hotel maids. - soldiers - medical professionals (midwives, surgeons) - TBAs 	<ul style="list-style-type: none"> - targeted education.

N.B All children 0-5yrs are at risk and mothers in CSA.

HEALTH MESSAGES**IMMUNISATION:**

1. Polio Disables children:
immunise your child 4times against polio.
2. Measles killsr
Immunise your child at nine months.
3. An **un immunised** child may beoome under nourished, disabled or die:
Immunise your child on schedule.
4. A sick child can easily get measles:
Immunise even sick children.
5. A child may appear healthy yet he is not growing well:
take your child for growth **monitoring** at least once amonth.

MATERNAL CARE:

1. Close **deliveries** pose a threat to the mother's life:
Space your children by use of **Family** planning.
2. Too many children are a burden to the parents:
Produce only the children you **can** be able to look after.
3. Pregnant mothers are prone to **many** problems.
Go for check ups **regularly** in **ANC**.
4. Pregnancy mothers fall sick more easily:
Take more body building energy giving and protective foods
more **than usual**.

AIDS:

1. AIDS is mostly got through sex with an infected person:
Stick to one faithful partner or use a condom, when in doubt.
2. **Pregnancy lowers** body immunity
Avoid getting pregnant if you are HIV positive.
3. An HIV positive mother is likely to pass HIV to her **un** born child:
Avoid getting pregnant if you are **HIV** positive.
4. AIDS disease **con't** be acquired through casual contacts
Look after AIDS patients.
5. AIDS can also be **acquired** through use of unsterile **instruments:**
Avoid use of unsterile instruments (needles) and quack Doctors.
6. **It** is difficult to physically detect **HIV** infection:
 - (a) **go** for HIV test in nearest hospital.
 - (b) when ready to marry, both of you should go for HIV blood test.
7. **Drunkardness** may induce to unprotected sex:
Avoid getting **druck**.
8. HIV takes **long** to show off:
Trust nobody but yourself.

CDD:

1. **Diarrhoea** can lead to dehydration:
use **ORS salt** sugar solution or home available fluids during episode of diarrhoea.
2. Scattered faeces increase diarrhoea **cases:**
Construct and use a **latrine**.
3. Diarrhoea may lead to **malnutrition:**
continue breast **feeding** and with other foods during diarrhoea episodes.
4. Diarrhoea removes **fluids** and food from the body:
Give an extra meal every day to a child recovering **from** diarrhoea for **atleast** two weeks.
5. Diarrhoea is **common** in **un immunised** children:
Have your child **fully immunised** before its one year old.
6. Flies carry germs:
Cover food and latrines.
7. **Dirty water** causes diarrhoea:
Drink safe or boiled water.
8. Dirty fingers cause diarrhoea:
wash hands before **eating** and breast feeding.
9. Dirty fingers cause diarrhoea:
Wash hands **after** using latrines.

IGAS:

1. **Poverty is one** of the major cause of ill health
Develop an Income Generating Activity.
2. Stealing, robbery, lust is **un** health:
Develop.

NUTRITION:

1. **Malnutrition** leads to retarded growth, eat
a balanced diet.
2. **Lack** of balanced diet makes a child dull:
3. Avoid blindness by eating **fruits**.
4. Avoid **goiter** (neck **enlargement**) by eating iodonised salt
5. Food imbalances **results** to malnutrition
eat all foods.