APPLYING LESSONS-LEARNED TO DEVELOPING SUSTAINABLE CHILD SURVIVAL AND MATERNAL CARE SERVICES WITH THE AGRICULTURAL ESTATES OF PRESS COMPANY IN KASUNGU, MALAWI

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MID-TERM EVALUATION REPORT

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ACRONYMS

ANC	Ante-Natal Consultation
ARI	Acute Respiratory Infection
BCC	Behavior Change Communication
CBDA	Community Based Distribution Agent
CDD	Control of Diarrheal Diseases
CHC	Community Health Committee
CHAPS	Community Health Partnership Initiatives
CS	Child Survival
E/32	Estate 32
E/81	Estate 81
EPI	Expanded Program for Immunization
DHO	District Health Officer
DHMT	District Health Management Team
FGD	Focus Group Discussion
FP	Family Planning
HIS	Health Information System
HIV/AIDS	Human Immuno-deficiency Virus/Acquired Immuno-Deficiency Syndrome
HSA	Health Surveillance Assistant
IEC	Information, Education and Communication
IMCI	Integrated Management of Childhood Illnesses
IS	Information Systems
KCSP	Kasungu Child Survival Project
KPC	Knowledge, Practices, and Coverage (survey)
MCH	Maternal and Child Health
MIS	Management Information System
MTE	Mid-Term Evaluation
MT/KPC	Mid-Term Knowledge, Practice and Coverage (survey/report)
MOHP	Ministry of Health and Population
NGO	Non-Governmental Organization
ORDP/GMV	Oral Reydration Distribution Point/Growth Monitoring Volunteer
ORS	Oral Rehydration Salt/Solution
PAL	Press Agriculture Limited
PSI	Population Services International
RHO	Regional Health Officer
SC/US	Save the Children/USA
SP	Sulfadoxine-Pyrimethamine
STD	Sexually Transmitted Disease
TBA	Traditional Birth Attendant
T4T	Training for Transformation
U/5	Under fives Clinics
UNICEF	United Nations International Children Emergency Fund
URC	University Research Corporation
VHC	Village Health Committee

MID TERM EVALUATION REPORT

of the

Child Survival and Mother Care Project

Implemented by

Project HOPE

in

Kasungu, Malawi

in partnership with

Press Agriculture Limited
(PAL)

and

The Ministry of Health and Population

Submitted by
Bonnie L. Kittle
October 2000

Executive Summary

The Kasungu Child Survival Project is being implemented in the Kasungu District of Malawi by Project HOPE in partnership with Press Agriculture Limited and the Ministry of Health. This four year project, which was initiated in 1998, seeks to reduce maternal and child mortality and morbidity among 30,000 people living on 34 tobacco and coffee estates and in 22 villages surrounding the estates. This goal will be achieved by implementing activities in the following intervention areas: control of diarrheal disease, immunization, breastfeeding, vitamin A and iron folate, Acute Respiratory Infection, malaria, family planning/maternal health and HIV/AIDS/STDs.

A participatory, mid-term evaluation of the project was conducted in August – September 2000 with assistance from an outside consultant. The team identified several important accomplishments. These include: strong working relationship developed between the partners; increased access to health services; expanded coverage of health services; improved quality of care provided by MOH and PAL health facilities; capacity strengthened among 537 health care providers and community volunteers.

These accomplishments were achieved despite frequent stock-outs and chronic shortages of drugs and vaccines; initial challenges in determining the best way to collaborate with project partners; high turn-over in the position of the DHO; restructuring within PAL during the first year of the project; inflexible MOH policies; and unstable tobacco market.

The first two years of the project have focused on creating and reinforcing the capacity of partners and health caregivers. To this end the project has trained 15 health surveillance agents, 537 community volunteers and two Medical Assistants. Two assessments have also been carried out (one to assess the institutional capacity of PAL to support and maintain the health delivery system, and another to assess the quality of care among MOH and project health care providers) which will guide capacity building activities during the second half of the project.

The project's prospects for sustainability are unusually high. This is because the partner organization is able to employ and support the key health care providers, the Medical Assistants and the Health Surveillance Agents. PAL senior management is also highly motivated to see the health delivery system succeed. Furthermore, the present District Health Officer is also very cooperative and understands the benefits of this project to the DHMT.

The evaluation team has reviewed and assessed every aspect of the project and has identified many things that could be done to further ensure achievement of the project objectives. Some of the most important recommendations include:

- Project partners, including representatives from various levels of PAL management, need to dedicate some time together to develop a detailed sustainability plan and exit strategy. To increase the effectiveness of this exercise, it should be done "off site" away from distractions, and the work guided by an experienced facilitator who is

somewhat familiar with the project and Press Agriculture. Once the plan is developed and agreed upon, the Steering Committee should monitor its execution on a quarterly basis.

- PAL should plan to hire a senior clinical officer to coordinate and oversee all health activities and to supervise Medical Assistants and HSAs.

- The PAL Project Contact person and the KCSP Manager should develop a tentative budget for health services on the estates. This should include the elements necessary to support implementation of IMCI (essential drugs, supplies and equipment in adequate quantities) in the two clinics (E/32 and E/80), an inter-estate emergency evacuation plan and on-going support for HSAs (spare parts for bicycles etc). This proposed budget should then be submitted to the PAL senior management and Board for review and modification if necessary and then adopted as part of PAL's operational budget.

- The staff, with additional Technical Assistance, should develop a BCC strategy. Given the attention this would require, and that it should be considered a capacity building activity for the staff, it would be most effective if this exercise was undertaken off site (away from the office).

- The project should organize a workshop with the project staff, the PAL medical assistants and the PAL contact person to develop a practical supervision plan. The details of the plan (who supervises whom, the frequency of supervision, the protocols to be used, the logistics required to implement the plan, training needed to develop skills etc) should be worked out to each participant's satisfaction.
  This plan should then be presented to the Steering Committee for approval and reports regarding its execution should be made at each subsequent meeting.

Chapter One Summary

A. Program Description

The Kasungu Child Survival Project (KCSP) is being implemented by Project HOPE in partnership with Press Agriculture Limited (PAL) and the Ministry of Health and Population (MoH). This four-year project seeks to reduce maternal and child morbidity and mortality on 34 targeted estates of Press Agriculture in Kasungu District of Malawi, targeting a total population of 30,000. This goal will be achieved by: 1) improving the quality of case management of priority conditions at the health facility level and increasing the number of prevention clinics; 2) developing a cadre of community health promotion staff (called Health Surveillance Assistants – HSA) on estate payrolls that provide community education and organization; 3) strengthening community capacity by developing/ strengthening community health committees (CHC); 4) training traditional birth attendants (TBA); and 5) providing caretakers at the household level with the knowledge and practices to maintain good health and manage disease episodes in mothers and young children.[1]

The project is implementing activities in each of the eight technical areas cited below at the level of effort as indicated. The objectives related to each of these interventions are cited in Chapter Two, Section A.

Control of Diarrheal Disease	10%;
Immunization	10%
Breastfeeding	10%
Vitamin A and Iron Folate	10%
Acute Respiratory Infection	10%
Malaria	10%
Family Planning/Maternal Care	20%
HIV/AIDS/STDs	20%

B. Main Accomplishments

- The Project has provided a forum for the development of strong, mutually beneficial working relationship between PRESS Agriculture, the District Health Management Team and Project HOPE.

- The project has provided a forum for direct communication between Estate Managers and laborers regarding health issues beyond emergency transport. The project has re-enforced the Estate Manager's understanding of the link between healthy laborers and

[1] Project proposal, pg. 1

lower absentee rates due to illness, which has resulted in improved support for health activities among PAL middle management.

- The project has increased access to health services on 34 estates serving a population of approximately 30,000 people, by training Medical Assistants, Health Surveillance Agents and various community health volunteers.

  More specifically, the project has:
  - Increased access to family planning services through the training, supplying and supervision of 34 Community Based Distribution Agents (CBDA).
  - Increased access to diarrhea disease control and growth monitoring services through the training, equipping and supporting of 29 ORDP/GM volunteers;
  - Increased access to immunization services through the training and support of Health Surveillance Agents and Medical Assistants;
  - Increased access to safe motherhood services through the training and support of 19 traditional birth attendants.
  - Increased access to STD/HIV/AIDS prevention information and methods through the training and support of 9 drama clubs and the provision of condoms for distribution;

- The project has laid the foundation for permanently improving the quality of care on Pal estates by conducting an Institutional Capacity Assessment and a Health Services Assessment; by providing capacity building opportunities for health care providers; and furnishing supplies and equipment to the Kasungu District Hospital, and three estate clinics. Quality of care has also been up-graded by linking estate health care providers with the district hospital particularly with regard to the provision of essential supplies and vaccines.

- The project has helped expand the coverage area and facilitated the work of the District Hospital by helping to establish a comprehensive health delivery system on the 34 estates.

- In collaboration with the District Health Office, the project has trained a total of 537 people in 26 separate training events, for a total of 6,154 person-days of training.

C. Progress made in Achieving Program Objectives

In July 2000 Project Staff carried out a mid-term KPC Survey to assess progress being made toward achievement of the program's objectives. The evaluation team reviewed the draft KPC survey report but concluded that the data needs to be re-calculated. Specific data regarding progress toward achievement of objectives will be provided in the mid-term KPC report, which will be prepared and provided by Project HOPE. Achievement of outcomes are provided in this report and serve as indicators of progress.

D. Main Constraints, problems and areas in need of further attention

The biggest constraint to achievement of the project's objectives is frequent nation-wide stock-outs and chronic shortages of essential supplies and vaccines. During the life of the project there have been long term stock-outs of ORS packets, condoms, BCG and DPT vaccines and contraceptives. Even when commodities are in stock, usually the supply can not meet the demand. The solution to this problem lies outside the scope of this project, but it is important to communicate this issue to the UNICEF representative so that person is aware of the impact of the situation on the project and the health service delivery system as a whole.

Collaboration with PAL has been unnecessarily encumbered by (PAL) senior management's hesitancy to delegate authority to someone at the operational level. Until July 2000, official contact between the project and PAL was limited to senior management. This was not very efficient and led to some delays in decision-making. This situation has been addressed with the designation of a PAL/Project liaison person who is authorized to make some operational decisions in consultation with the project manager.

Some aspects of the project are also inhibited by MOH policies. The policies that most effect the project concern training. MOH policies require there to be a certain number of trainees per course, and that a MOH certified trainer conduct the course. There also has to be a specific trainee/trainer ratio. While these policies exist to maintain quality, they also sometimes retard progress. For example, when the project wants to recruit and train an HSA (to replace one who has left) or to train a Medical Assistant, this can only be done when an "official" course is being conducted and there is enough space to enroll the proposed trainee. It could take months for the right set of circumstances to fall into place and in the meantime serves are not being provided.

And finally, the future of the estate-based health delivery system depends on, and is sometimes hampered by the status of the world tobacco market. PAL's ability to financially support the health delivery system is related to the sale and price of tobacco in Malawi. Thus, for example, when cash flow is tight and two requisitions are being considered for payment, as the newest and least well understood component of PAL, the one relating to the health services is more likely to get postponed until a later date. This was the case with a drug order for E/32.

E. A summary of the capacity-building effects of the program

The capacity-building efforts of the project thus far have accomplished the following:

- Training of 15 HSAs has increased access to health services on 34 estates;
- Training of 537 community health volunteers has empowered approximately 30,000 people to take charge of and better maintain their health, especially that of their children;
- Training of professional health care providers (Medical Assistants) has improved the quality of health care delivery and increased access though outreach activities;

- Implementation of the health services assessment has identified strengthens and weaknesses in health care delivery so that future capacity building efforts can be more focused and effective;
- Implementation of the Institutional Capacity-Building Assessment (The Development Report) has paved the way for strengthening PAL's ability to sustain the health delivery system initiated by this project.

F. Prospects for Sustainability

The activities and services initiated and supported by the KCSP are very likely to be sustained at the end of the project for two reasons: PAL senior management has demonstrated its commitment to seeing the health delivery system succeed, and an effective link between health care providers on the estates and the DHMT has been established.

PAL's commitment is apparent through their financial support of the Medical Assistants and HSAs, and their provision of accommodation, office space and other benefits, such as training. PAL has recruited nurse/midwives to increase and improve services to women and children and has pledged to expand their health facilities to include maternity units. It has put an ambulance at the service of estate residents to better ensure emergency transportation, and maintains and supports two health clinics. These investments are evidence of PAL's intentions to see the health services not only continue, but also expand and improve.

The District Health Office recognizes the Medical Assistants and HSAs on the estates as "official" health care providers, and as such the DHO and his team support their work as they do their own personnel. Replenishment of stocks and supplies are ensured by the DHMT; the DHMT has agreed to supervise the Medical Assistants and TBAs and training and refresher courses are organized by the Ministry. This link, along with the support from PAL, should ensure the continuation of health activities after the withdrawal of Project HOPE.

G. Priority Recommendations

Program Related

1. Finding
The MOH trains it's Health Surveillance Agents to provide a variety of services in eight technical areas of primary health care. Given this policy, and the insistence of the DHO at the time, HOPE felt that it also had to include all of the 8 interventions in its proposal. While the integrated approach may be effective in the long term, it is unlikely that significant progress in any of the technical areas will be achieved in the relatively short timeframe of the project given the relatively low level of effort attributed to each intervention.
Recommendation:

The Program Manager should review the Public Health literature and confirm the primary (top 3-4) causes of infant and child morbidity and mortality in the Kasungu area. He should then orient his staff and as much as possible the HSAs to focus the majority of their time and energy on these technical areas.

2. Finding
Under-five clinics have not been taking place in the Western Area of Press Agriculture, due to poor leadership and lack of motivation on the part of the Medical Assistant.
Recommendation
The Project Manager and the PAL contact person (Ben Mwage) should meet with the Area Development Manager from the Western Area and the Medical Assistant and organize for under-five outreach clinics to be re-initiated in a similar fashion as is being done in the Eastern Area. Progress should be monitored by the Project and results shared with PAL's Human Resources Manager.

3. Finding
The number of CBDAs (including HSAs) is too few. The demand for their services far out weighs their numbers. Requiring HSAs to assume the role of a CBDAs has over burdened them. They can not carry out their tasks effectively.
Recommendation
The project should recruit and train enough CBDAs so that there is one per estate (which might mean training a few extra). HSAs who now serve as CBDAs should revert to their role as HSA and CBDA supervisor only.

Community Mobilization

4. Finding
Project designers did not understand the role that PAL middle management (Area Development Managers, Operations Managers, and Estate Managers) would need to play for the success of the project. Their role was not defined in the proposal and PAL senior management did not adequately inform middle management about the project or their responsibilities to it. While most of the Estate Managers seem to understand the benefits of having a health delivery system on their estates, the lines of authority, and roles and responsibilities of these managers toward the project are still not clear. In some cases this has hindered project implementation and achievement of project objectives.
Recommendation

- Press Agriculture needs to include the Project Manager in (part of) the monthly meetings with the ADMs, OM and Estate Managers. The purpose of his participation would be to clarify and define the Manager's role in the project. To do this, the Project Manager would only need to attend the part of the meeting concerning health services.
- Each time there is training event or an activity, all of the estate managers should be clearly briefed as to the reason for the activity and how it will help improve the health of the workers and their families. They should be invited to "graduation/certification" events and installation of new health volunteers. Their role as partners with the project should be solidified.

- PAL should set up a system to recognize and provide an award to those estates that have the highest health status achievement among laborers. For example, best child immunization coverage; highest rate of family planning use; highest rate of condom use; highest attendance at outreach clinics etc.

Behavior Change Communication

Finding
Although a good part of the project depends on health education, there is no detailed and comprehensive BCC strategy. As a result, the staff, HSA's and community volunteer's activities are not coordinated and key barriers to behavior change may not have been identified. The staff does not appear to have the necessary experience in BCC strategy development to develop one on their own.
Recommendation:
The staff, with additional Technical Assistance, should develop a BCC strategy. Given the attention this would require, and that it should be considered a capacity building activity for the staff, it would be most effective if this exercise was undertaken off site (away from the office).

Finding
Each of the project's eight interventions has from 8 – 22 messages. While all of the messages are important to each intervention, they can not all be considered "key messages". If the HSAs give equal importance and time to each message, they are unlikely to produce the desired behavior changes during the life of the project.
Recommendation:
The project staff should go through the list of messages in the DIP and identify those that are linked to the specific objectives (revised at the time of the MTE). These should be separated out from the rest of the messages (put at the top of the page and framed, for example) and identified as the "key" messages of the project. The reason for this should be discussed with the HSAs during a regular quarterly meeting, at which time the HSA's should be instructed to give these messages high priority when they are planning their schedule of health talks. These messages should be given more emphasis and communicated more frequently.

Strengthening Local Partners/Sustainability

Finding
At present there is no one who is technically qualified to supervise and oversee the functioning of the estate health services (clinics and the work of the Medical Assistants). Consequently, there is a lack of quality control, support for clinic staff, and coordination of activities. Furthermore, valuable assets, such as the ambulance are not being used effectively.
Recommendation
PAL should plan to hire a senior clinical officer to coordinate and oversee all health activities and to supervise Medical Assistants and HSAs.

Finding
At present PAL does not have a line item in its budget designated for health service provision. As a result, planning for improvements in quality of care (implementation of IMCI, for example) is very difficult and occasionally there are inadequate financial resources to support quality service provision (adequate supply of drugs, supplies such as gloves and equipment such as a refrigerator).
Recommendation
The PAL Project Contact person and the KCSP Manager should work together to develop a tentative budget for health services on the estates. This should include the elements necessary to support implementation of IMCI (essential drugs, supplies and equipment in adequate quantities) in the two clinics (E/32 and E/80), an inter-estate emergency evacuation plan and on-going support for HSAs (spare parts for bicycles etc). This proposed budget should then be submitted to the PAL senior management and Board for review and modification if necessary and then adopted as part of PAL's operational budget.

Finding
The project staff consistently considers sustainability issues when making programmatic decisions and the detailed implementation plan identifies some key elements required for long term continuation of the project. At present, however, the project partners have not joined forces to develop a detailed sustainability plan that includes objectives, strategies and a plan of action. Without such a plan there can not be a cohesive and comprehensive effort among the partners to ensure the long-term viability of the health activities.
Recommendation
Project partners, including representatives from various levels of PAL management, need to dedicate some time together to develop a detailed sustainability plan and exit strategy. To increase the effectiveness of this exercise, it should be done "off site" away from distractions, and the work guided by an experienced facilitator who is somewhat familiar with the project and Press Agriculture. Once the plan is developed and agreed upon, the Steering Committee should monitor its execution on a quarterly basis.

Supervision

Finding
The supervision plan presented in the DIP has not been respected and supervision at all levels is weak. Neither the Medical Assistants nor the HSAs have received training in supervision as planned (with the exception of specific CBDA supervision training), nor have the proposed protocols been developed. Project trainers, instead of Medical Assistants are supervising HSAs, and HSAs are not effectively supervising community health volunteers. The continued provision of high quality health care depends on regular supervision.
Recommendation
- The project should organize a workshop with the project staff, the PAL medical assistants and the PAL contact person to develop a practical supervision plan. The details of the plan (who supervises whom, the frequency of supervision, the protocols

to be used, the logistics required to implement the plan, training needed to develop skills etc) should be worked out to each participant's satisfaction.

- This plan should then be presented to the Steering Committee for approval and reports regarding its execution should be made at each subsequent meeting.

Health Information System

Finding

Evidence from the field suggests that not all HSAs are using the same sources of information for their monthly reports and that some confusion exists in the way reports should be completed. As a result, the consistency of the data is in doubt.

Recommendation

- The HIS Specialist and project trainers should write a protocol for the completion of the HSA monthly report and each of the other data collection instruments used by community health volunteers. This should include where the information should come from – the specific source/document, how often, how to calculate it, if necessary.
- This protocol should be reviewed with all HSAs during a regular quarterly meeting and modified to reflect reality if necessary.
- Checking the statistics should be a part of regular supervision activities of the conducted by trainers of HSAs.

Chapter Two Assessment of Progress

A. Technical Approach

1. Brief Overview of the Project

Please refer to Chapter One, The Summary for a description of the project.

2. Progress Report by Intervention Area

The Detailed Implementation Plan (DIP) for the KCSP contained a total of thirty-nine (39) objectives associated with the eight interventions cited in Chapter One. Upon recommendation of the DIP reviewers, this number was subsequently reduced (and some objectives modified) to twenty-two (22). The revised objectives were presented in the first annual report. The original objectives were never compared to the revised list of objectives, however, and no explanation for the modifications was provided in the annual report. Since this evaluation contains further comments and recommendations regarding the objectives, each of the following sections pertaining to a specific intervention begins with a table that shows the modifications and the evaluator's comments.

Diarrheal Disease Control

There are six strategies related to the control of diarrheal disease. These include: improving water quality; establishing ORS distribution points; growth monitoring; HSA distribution of ORS sachets; HSA referral of at-risk children; and health facility services.

Water Quality: In an attempt to get at the root cause of most diarrheal disease, the project has focused much of its attention on improving access to potable water. Many of the CHCs, with organizational help from the HSA and provision of cement from the estate, have built aprons around the compound pump to reduce the chances of contamination. They have also chlorinated some wells. Campaigns to dig rubbish pits, build latrines and conduct compound-wide clean-up campaigns have resulted in noticeably cleaner neighborhoods, according to residents, estate managers and Area Development Managers. Unfortunately, however, since most laborers get their water from a pump that comes directly from the estate's dam (also used for irrigation), these efforts alone are not likely to improve the quality of water or reduce diarrheal disease noticeably. Furthermore, individual chlorinating, filtering and boiling are not practical or environmentally sound solutions.

Although many estates have borehole wells, which produce potable water, not all estate managers allow their laborers access to this water source. If PAL would adopt a policy obliging estate managers to make water from the borehole well available to laborers (just for drinking), this would greatly increase access to potable water and more likely result in a reduction in diarrheal disease.

Diarrheal Disease Control		
DIP OBJECTIVES	REVISED OBJECTIVE	MTE COMMENTS
Increase from 18% to 30% the percent of mothers that breastfed their child more than usual during a diarrheal episode.	eliminated	
Of women already giving fluids to children <4 months of age, increase from 13.3% to 50% the percent giving the same or more fluids during a diarrheal episode.	eliminated	
Of women already giving solid or semi-solid food, increase from 75% to 85% the percent giving the same or more solid or semi-solid foods during a diarrheal episode.	eliminated	
Increase from 66.5% to 75% the percent of women that have prepared ORS for treatment of diarrhea.	Maintained and unchanged	Depending on how the BL data was calculated this objective could be more specifically formulated. "the % of mothers who prepared ORS for their child with diarrhea during the past two weeks".
Increase from 47.9% to 75% the percent of women who have prepared ORS that can correctly describe its preparation.	eliminated	
Increase from 35.8% to 75% the percent of women who have prepared ORS that can correctly describe how to administer ORS.	eliminated	
Increase from 12% to 40% the percent of women that can name at least 3 danger signs of diarrhea that would cause them to seek advice or treatment.	Increase from 33% to 70% the % of mothers who recognize a danger sign or symptom of diarrhea and seek care within 24 hours.	There is no question in the BL or MT KPC surveys that indicates when (what time delay) the mother took the child with diarrhea for treatment. Furthermore, by combining two objectives into one the project has decreased its chances of achieving either one.
Increase from 12% to 40% the percent of women that can name at least 3 important actions a mother should take when a child is experiencing diarrhea.	eliminated	
Increase from 11% to 40% the percent of women who can name at least 3 ways to prevent diarrhea.	Increase from 11% to 70% the % of mothers/ caretakers who can name at least 3 practices that they can undertake to prevent diarrhea.	Since there are many possible correct responses to this knowledge objective – many of which would be less effective, the indicator for this objective should specific that the desired responses should include exclusive breastfeeding, hand washing before eating and after defecating.

ORS Distribution Points - The project has trained 29 Oral Rehydration Distribution Point (ORDP) Managers who are responsible for stocking and distributing ORS sachets to parents of children with diarrhea. ORDP Managers are also supposed to teach mothers how to make the solution correctly and advise mothers regarding appropriate nutritional management of a child during and after a bout of diarrhea. To facilitate this the project supplied each ORDP Manager with a basin, cup, spoon, apron, towel and, eventually, ORS packets. Each ORDP Manger was also given a notebook to track ORS distribution and some visual aids (mostly posters) to help with education.

Because an ORDP Manager is not an "official" MOH position, the project trainers had to develop a special training curriculum for this purpose. The initial training took place in October (5 days) 1999, and a 3-day refresher course was offered in July 2000. Although the title implies that there is a specific "point" from which ORS packets will be distributed, in fact the ORDP Managers keep the ORS packets at home where mothers can access them. The DIP indicates that a total of 34 ORDP Managers would be trained (one for each estate). However, because laborers who work on 34 different estates actually live on 30 compounds, by training 29 CBDP managers the project has almost completely covered the estate-based population.

As part of the ORDP Manager's training the participants were taught to maintain registers in which they list the names of all children under age five living in their compound and track the number of ORS packets distributed. This register is also used to track the immunization status of each child as well as his/her receipt of Vitamin A. The mid-term evaluation team found that seven out of the ten ORDP Managers interviewed had these notebooks. While a systematic review of the notebooks was not conducted by the team, some irregularities were noted by some team members that puts into question the credibility of the data collected through these instruments. Irregularities included not registering newborns, not desegregating the different doses of antigens, and not recording birth dates. This finding also puts into question the quality of supervision provided to the Community Health Volunteers by HSAs and project staff.

The work of the ORDP Managers has been seriously restrained by a nation-wide stock-out of ORS packets. As a result, ORDP Mangers had no supplies of ORS packets following their initial training. ORS packets were only made available to ORDP Managers in July 2000, a full 9 months following their training. To their credit, project staff took the occasion to provide a refresher course to ORDP Managers and to re-launch this activity.

Growth Monitoring – In addition to serving as ORDP Mangers, these community health volunteers have been trained as Growth Monitoring Volunteers (GMV) as well. GMVs assist HSAs during under-fives (U/5) clinics, which are conducted once a month in each of five outreach locations in the Eastern Area of Press Agriculture and weekly at the two estate clinics (on E/80 and E/32). Outreach U/5 clinics were initiated in the Western Area, but after only two clinics they were curtailed. Initial investigation into the problem suggested that the barrier was transportation, but discussions with the Medical Assistant

(MA) at E/80 revealed that the true problem is lack of motivation on the MA's part to do field work and his feeling that a vehicle is necessary. As a result, access to immunization and growth-monitoring services for laborers living in the Western Area is seriously limited and coverage is probably not as high.

As part of their training, in addition to completing the Road to Health Chart, which the mother keeps, GMVs were taught to maintain a register of all the children in her compound who are under age five. This list is used during U/5 clinics to identify the growth pattern of each child weighed (gained weight – upward arrow; stayed the same – horizontal arrow; and lost weight- downward arrow), and to indicate which children are faltering and in need of advise. Unfortunately, the register does not include a place to record what (if any) follow-up services were provided. This oversight severely reduces the usefulness of the data collection instrument by omitting a means to determine if any follow-up action was taken.

In March 2000, a Health Services / Quality of Care Assessment was carried out by URC's Quality Assurance Project. For this assessment three GMVs were observed weighing 31 babies at U/5 clinics and their skills were evaluated. The study found that while many aspects of the growth monitoring went well (reporting the weight to the mother, recording and interpreting the weight correctly), in general, the counseling skills of the GMVs, especially when faced with a growth faltering situation, were very weak. The assessment also identified a number of missed opportunities for immunization, Vitamin A administration, referral for treatment or check-ups, malnutrition counseling or treatment/rehabilitation etc.[2] These findings put into question the effectiveness of growth monitoring as a means to address diarrheal disease, or even to help increase vaccination coverage and Vitamin A consumption.

The DIP does not identify the source of the weighing scales needed to monitor growth. It was assumed that UNICEF via the District Health Office would provide them, as is often the case. In reality, gaining access to scales has been a problem. Scales were not available following the training of GMVs and when they did come there were too few for each compound to have one. They were therefore given to each HSA who shared them between estates. As a result, thus far growth monitoring has taken place only as part of the monthly U/5 outreach clinics and at the Estate Clinic, and not on individual compounds as originally planned. Recently, additional scales have been procured by the project and it is expected that monthly weighing on estate compounds will begin.

HSA Distribution of ORS Sachets and HSA Referral of At-Risk Children - Fifteen Health Surveillance Assistants (employed by PAL) have been trained by the project, and according to the DIP they are also supposed to provide ORS packets, demonstrate its use and provide information on nutritional management of diarrhea. While all HSAs interviewed for the project had a supply of ORS packets, it's not clear to what extent the HSAs directly supply ORS to mothers or through the intermediary, the ORDP Manager. The health information system used by the project does not distinguish between

[2] "Health Services in Kasungu District, Malawi: Results of a Systems Assessment", URC, Quality Assurance Project, April 2000

distribution of ORS packets by the HSA or the ORDP Manager, which makes it difficult to assess each person's level of effort and their relative effectiveness.

While the evaluation team did not ask the HSAs if they had had occasion to refer an at-risk child, nine out of the ten ORDP Managers interviewed reported having referred a child to a nearby clinic for treatment. This occurred most frequently during the months prior to the arrival of the ORS packets.

Health Facility Services – Laborers residing on the 34 estates targeted by the project and community members living in the villages surrounding the estates can receive health care services from the two clinics supported by PAL (as well as from MOH clinics in the area). One clinic is located on E/80 in the Western Area, while the other is located on E/32 in the Eastern Area. As part of the MOH program and with support from the project, the two Medical Assistants who staff the PAL clinics have recently been trained in IMCI protocols. With this training it is expected that diarrhea case management will be standardized and the quality of care improved.

The project has also helped to promote the IMCI approach to MOH clinicians working in health centers surrounding the estates by hiring a nurse who has been trained as an IMCI trainer. Her participation in the IMCI training has strengthened the MOH's training capacity.

Immunizations

EPI		
DIP OBJECTIVES	REVISED OBJECTIVES	MTE COMMENTS
Increase from 66% to 80% the percent of children 12 to 23 months of age that are completely vaccinated.	Maintained and unchanged	
Decrease from 21.2% to 20% the dropout rate for immunizations.	Maintained and unchanged	This objective is not specific enough. The antigen that will be monitored needs to be mentioned. Given the total number of objectives and the existence of the preceding objective, the project should consider eliminating this objective.

To achieve the EPI objectives the project has undertaken four activities: Immunization Tracking System; Steering Committee Support; Establish Cold Chain and Community-based immunization Activities.

Immunization Tracking System – The Immunization Tracking System is the register kept by the ORDP Manager. As described above, this is a list of all the children under age five who live in a compound. This list is used to track children's immunization status and

specifically to identify children who have not yet completed their vaccination schedule. Furthermore, in May 2000 the project decided to have the HSAs maintain a family register, which also tracks immunization coverage. Only about half the HSAs had these registers at the time of the evaluation, however.

While it appears from the MTE team's interviews that most ORDP/GMVs maintain a register, it also appears that some inconsistencies exist among the documents which may compromise them as data collection instruments or tools to help increase immunization coverage.

Steering Committee[3] *Support* – According to the DIP, the Steering Committee's role vis-à-vis EPI activities is to help resolve issues related to the cold chain and vaccine supplies. Representatives from the Project, PAL, the DHO and UNICEF are members of the Steering Committee. During the first two years of the project the Steering Committee has only met twice, once in April 2000 and again in July 2000. UNICEF was not present at either meeting.

The minutes of the July meeting (there are not minutes from April meeting) show that while immunization coverage in the project area was reported by the Project Manager to have declined since the beginning of the project, and that the shortage of antigens was likely to blame, no discussions ensued regarding how to solve this problem. From this, one could deduce that the committee does not consider itself in a position to resolve this problem (since it is a nation-wide problem), or that the presence of UNICEF, a major vaccine donor, would be needed to enlighten the discussion. Furthermore while the problem of lack of refrigerator in clinic E/32 was apparently brought up during the first Steering Committee meeting, the minutes for the July meeting do not show any discussion of this problem even though it is a major barrier to immunization coverage in the Eastern Area, and the DHO, himself, is in a position to resolve this problem. From this it appears that the Steering Committee has not been effective in supporting the EPI efforts of the project.

Establish Cold Chain – In November 1999 the project arranged for the two PAL-employed Medical Assistants and the 15 HSAs to attend a 5-day Cold Chain Maintenance and Vaccination Coverage training. The project also arranged for two studies to be conducted (a Health Services Assessment by URC - and an Institutional Capacity Assessment by The Development Center), both of which assessed immunization services, identified some weaknesses and made helpful recommendations. At the time of the mid-term evaluation, E/32 clinic was still without a refrigerator, despite recommendations from both of the afore-mentioned studies to rectify this problem. When presented with this problem as part of the MTE interview the DHO said that he had two spare refrigerators at least one of which could be made available to the PAL clinic.

Community-based Immunization Activities – As mentioned above, HSAs with assistance from the Medical Assistants have established several Under-fives (U/5) outreach clinics. One of the main activities of these clinics is childhood immunizations and TT

[3] See section B – Cross cutting Issues – for more information regarding the Steering Committee

vaccinations for women of reproductive age. This work is well established and regular in the Eastern Area despite the absence of a refrigerator but has been discontinued in the Western Area for the reasons described previously.

The major constraint to achieving the immunization objectives at this point is availability of vaccines. At various times during the past 18 months there have been nation-wide stock-outs of BCG, DPT and polio vaccines. A chronic shortage of road to health cards used to record immunizations also hampered achievement of this objective.

In an effort to better understand and address the immunization coverage issue, project staff conducted a study on Immunization Status and the Reasons for Dropouts. Not surprisingly the two reasons most commonly cited by mothers for not completing the vaccination schedule were unavailability of vaccines and lack of time to attend U/5 clinics. However, these "most common" reasons were only cited by 23% of the women, indicating that neither is a widespread problem. Interestingly enough, the staff's recommendations do not include an attempt to address the vaccine or health card availability problem (by investigating the possibility of inefficient ordering of supplies or by soliciting the help of the Steering Committee). Furthermore, their answer to women being too busy to attend U/5 clinics is to get Estate Managers to release them from their work. This latter recommendation suggests that project staff do not understand that in an agri-business environment health activities need to be scheduled as much as possible around the schedule of the farming activities.

Breastfeeding

BREASTFEEDING		
DIP OBJECTIVES	REVISED OBJECTIVE	MTE COMMENTS
Decrease from 41.9% to 25% the percent of mothers that state that a child should begin receiving fluids or foods in addition to breast milk earlier than 4 months of age.	eliminated	
Increase from 11% to 25% the percent of mothers that exclusively breastfeed to 4 months of age.	Maintained unchanged	The percentage shown at baseline for EBF is not stated exactly as EBF in the KPC survey report. The source of data needs to be checked.

Three activities are being undertaken to achieve the above objective. These include Qualitative Data Collection and Analysis, Baby Friendly Environment; and Emphasis Education on Exclusive Breastfeeding.

Qualitative Data Collection - In order to gather additional information regarding breastfeeding habits among mothers living in the target area, the project carried out a qualitative assessment of cultural, practical and knowledge barriers to successful, exclusive breastfeeding using a tool developed by Project HOPE's CHAPS project. The

results of the study were to be used to create breastfeeding messages that relate to the beliefs of the target population.

Despite the project staff's good intentions, the results of the study are of little real value to the project. This is primarily due to the lack of professional guidance in the use of focus group discussions (FGD) and particularly in the analysis of the data. This lack of guidance led to unfounded and misleading conclusions. For example, the study was mistakenly used to determine the level of exclusive breastfeeding. (This had already been determined by the KPC survey.) Project staff mistakenly used percentages to represent results, which is not a valid way to reflect FGDs findings. And though FGD were conducted with different target audiences, the report of the findings combines these group's responses, thereby loosing the benefit of separate discussions. And finally, the findings from the survey did not particularly inform the choice of health messages. The messages added to the original list provided in the DIP are generic messages regarding the value of breastfeeding and are not particular to the project's target audience.

On the positive side, all the project staff who participated in the focus group discussions learned a lot about breastfeeding, a topic that none had been too familiar with prior to this. It provided an opportunity to get to know the target groups, since all of the project staff are from other parts of the country and many of the project's beneficiaries come from the South of the country. Any finally, though the staff still needs to learn a lot about conducting FGD and especially about how to analyzed and use the results, it is clear that this was a positive learning experience for them all.

Baby Friendly Environment – This activity will only take place when PAL constructs maternity units adjacent to the two estate clinics. At that time the project will train maternity staff in baby friendly protocols.

Emphasis Education on Exclusive Breastfeeding - The DIP specifies that the TBA will be the point person to promote exclusive breastfeeding, presumably since she has more contact with pregnant women than anyone else. As in many other cultures, however, the traditional role of a TBA in Malawi is to deliver the baby, not to provide antenatal care or advice prior to the delivery. Consequently the assumption that the TBA is the best or only person to promote this behavior may not be well founded.

By training TBAs, the project has promoted the expansion of the TBA's traditional role to include counseling and participation in antenatal consultations. The latter takes place when, as part of the MOH policy, trained TBAs assist midwives in fixed facilities to conduct antenatal consultations once a week. Because the evaluation team did not look into this specific issue, it is not certain, however, that this "assistance" includes counseling particularly regarding exclusive breastfeeding.

In addition to TBA's promotion of exclusive breastfeeding, Community Based Distribution Agents (CBDA) also receive training in exclusive breastfeeding as a family planning method.

Experience from programs world-wide has shown that breastfeeding habits are among the most challenging to influence. With this understanding and an analysis of the activities proposed by the KCSP, the MTE concludes that the three activities proposed here are not likely to result in increased exclusive breastfeeding. More specific and focused approaches will need to be adopted such as breastfeeding support groups as promoted by Linkages and used successfully in other African countries.

Vitamin A and Iron Folate

VITAMIN A / IRON FOLATE		
DIP OBJECTIVES	REVISED OBJECTIVES	MTE COMMENTS
Increase from 35.3% to 75% the percent of children older than 6 months of age that received vitamin A supplementation in the last 6 months previous to the survey.	Maintained unchanged	
Increase from 12.7% to 40% the percent of mothers that can name at least 3 foods that contain vitamin A.	eliminated	
Increase from 25% to 75% the percent of women who can document receiving 2 antenatal visits during their last pregnancy.[4]	Increase to 75% the % of women receiving iron folate at every pre-natal visit.	This data was not collected at BL nor at mid term. The MTE team recommends that a mini-survey be conducted as soon as possible to collect this information and that it be used as baseline.

To achieve the objectives related to these micro-nutrients, the project has proposed four activities. These include Qualitative Data Collection and Analysis; Vitamin A and iron folate distribution, gardens, and Vitamin A and iron folate stocks.

Qualitative Data Collection and Analysis - In March 2000 a Malawi-based nutritionist carried out a nutrition study in the project zone. The report of the study had only been received in August, however, and the staff had not had time to review it. Though the DIP links the study to the Vitamin A intervention, project staff report that it did not focus on Vitamin A per se, but on nutrition in general, as they are considering developing activities to address malnutrition among children on the estates. While the report provides interesting and useful information, three of the four primary recommendations are beyond the scope of this project and Project HOPE as an organization since they focus on agriculture interventions. Furthermore, given the exceptionally large number of interventions and activities already undertaken by the project and the already over-extended staff, increasing nutrition activities is not advisable at this time.

[4] It was assumed that women would have received iron folate supplies during these visits. Unfortunately iron folate data was not specifically collected at baseline.

Vitamin A and Iron Folate Distribution - Vitamin A capsules are provided to children bi-annually during U/5 clinics, and midwives (and some TBAs) distribute iron folate tablets to pregnant women during antenatal consultations. A one-month's supply is usually provided at each visit. TBAs also have a supply of Vitamin A, which they provide to mothers after the delivery.

During U/5 clinics the receipt of Vitamin A and iron folate is recorded by the HSA on the child's Road to Health card. TBAs, however, do not regularly record the provision of iron folate to pregnant women, because most are only marginally literate. As a result, the work of the TBAs in this regard can not be monitored. Furthermore, the supply of iron folate tablets to TBAs is not being tracked, and a there is a possibility that one woman might receive more iron folate tablets than she needs (a supply from the TBA in her compound and a supply from the midwife she sees for the antenatal consultation).

Vitamin A and iron folate are supplied to the project by the district health office (through local MOH clinics). While Vitamin A has been readily available, a stock-out of iron folate disrupted the supply during a 2-month period.

Gardens – At the time the proposal was written, Peace Corps Volunteers were working in the Kasungu District providing technical assistance in gardening. By the time the project got underway, these PCVs had left and no others were reassigned to the district. As a result, this activity has seen no other action, other than to determine, through the Nutrition Study, that 67% of all estate laborers have vegetable gardens, the produce from which they consume themselves.

Vitamin A and Iron Folate Stocks - As mentioned above, while supplies of Vitamin A have been constant during the life of the project, there has been a 2-month stock out of iron folate. The DIP proposes to address this issue by supplying prenatal vitamins through its Gifts-in-Kind match. The Gifts-in-Kind shipments received thus far did not contain any pre-natal vitamins, however, and in any case, this is not a sustainable approach to the problem of maintaining essential drug supplies.

The staff's effort to link the HSAs and community health volunteers into the district health office's re-supply system is an important and effective means to sustain health services. As part of the MOH training protocol, the MOH clinics near to the HAS's estates are informed that HSAs are being trained and that they will need to be re-supplied by the clinic. In this way, those clinics increase their stores of medical supplies (such as vaccines, Vitamin A, and iron folate) so they will be able to re-supply the HSAs and health volunteers operating in their sphere. This is a very positive approach, which goes a long way to ensuring as far as possible the long-term provision of health services on the estates. Unfortunately, until the Ministry's own system's improve, an association with the MOH will probably subject the project to chronic shortages and frequent stock-outs of essential drugs.

Acute Respiratory Infection

ARI		
DIP OBJECTIVES	REVISED OBJECTIVES	MTE COMMENTS
Increase from 63.9% to 85% the percent of mothers who sought treatment for their child's cough, rapid or difficult breathing.	Maintained and unchanged	
Increase from 49.2% to 75% the percent of mothers that sought treatment within 24 hours for children that experienced cough, rapid or difficult breathing.	eliminated	
Increase from 3.7% to 40% the percent of mothers that can name 3 appropriate ways to manage a child with cough, rapid or difficult breathing.	eliminated	
Increase from 25.7% to 40% the percent of mothers that can name 3 danger signs of respiratory infection that would cause them to seek advice.	Maintained and unchanged	

To achieve the ARI objectives the project proposed to implement four activities: emergency transport, case management (IMCI); community-based screening and public education.

Emergency Transport – In April 2000, PAL designated a vehicle to be used as an ambulance, and one ambulance was deemed sufficient for the 34 estates in the catchment area (15,000 + people). The mid-term evaluation team discovered, however, that the ambulance is hardly ever used to transport sick people. Rather, it is used to return deceased laborers back to their home of origin for burial, which is an obligation of each estate. As mentioned in the DIP, estate managers usually use a tractor for emergency evacuations, or, on rare occasions, the estate manager's car. One of the reasons put forth for this by estate managers is that the estate's welfare budget line item is charged for the cost of the ambulance; and some estate managers feel that the cost of ambulance rental is too high (or their welfare budget is insufficient). Furthermore, estates are expected to cover funeral costs of all deceased laborers and their family members, including the transport of the corpse back to its home of origin, and this too, is deducted from the welfare line item. Another barrier to emergency ambulance use could be the lack of means of communication with the Area Development Manager (ADM) at E/80, who is in charge of the ambulance, since only a few of the estates have radios. For these reasons the ambulance is rarely used for it's intended purpose.

Case Management (IMCI) - After the project proposal was written, UNICEF decided to pilot test the IMCI approach in the Kasungu District. As a result, the two medical assistants who staff the PAL clinics on E/80 and E/32 were trained in August 2000 by the MOH to follow the IMCI protocols. This training will enable the Medical Assistants to screen patients for a variety of ailments (including ARI and malaria) and to provide preventive services such as vaccinations, on a systematic basis.

Community-based Screening – According to the DIP, HSAs would be trained to identify signs and symptoms of ARI so they could screen community members and refer suspected cases to the local clinic and/or district hospital. The HAS's initial training covered the signs and symptoms of ARI but not as thoroughly as expected. As a result, in April/May of 2000, the project's IMCI-certified trainer conducted a 6-day refresher course for HSAs and Medical Assistants that included practice diagnosing ARIs by timing a child's breath. (The MOH policy has changed from use of the timer to use of the watch). Following this training, the HSAs report they feeling much more qualified to confirm and refer suspected cases of ARI.

Public Education – Community Health Committee members as well as the other community health volunteers, have been made aware of the signs and symptoms of ARIs through their training and they help to inform other community members through informal talks. HSAs also conduct group and individual health talks to raise awareness regarding signs and symptoms of ARIs and the need for prompt treatment.

Malaria

MALARIA		
DIP OBJECTIVES	REVISED OBJECTIVES	MTE COMMENTS
Increase from 51.7% to 85% the percent of mothers that know that malaria is transmitted by mosquitoes.	Eliminated	
Increase from 14.4% to 40% the percent of mothers that can name at least 3 appropriate ways to treat a fever (presumptive malaria).	Increase from 19.5 to 50% the % of mothers that can name at least 3 ways to correctly manage a child with fever.	The baseline data is different from that shown in the revised objective and no reason for the discrepancy was given; the baseline data report does not give a % for this objective at all.
Increase from 10.8% to 50% the percent of mothers that give SP for a fever (presumptive malaria).	Eliminated	This was the only behavior-based objective related to malaria. Since in the MOH has a policy regarding the provision of SP to pregnant women during antenatal consultations, the MTE Team recommends that an objective related to this behavior be substituted for the malaria prevention objective below.
Increase from 12.7% to 40% the percent of mothers that could name at least 3 signs of severe malaria.	Maintained and unchanged	It is not clear why this objective was maintained when the objective above implies that the mother should treat any fever (mild – severe) with SP.

MALARIA		
DIP OBJECTIVES	REVISED OBJECTIVES	MTE COMMENTS
Increase from 4.3% to 40% the percent of mothers that could name at least 3 appropriate ways to prevent malaria.	Maintained and unchanged	Prevention of malaria among a population that lives near to permanent mosquito breeding grounds (dams on estates) is an unrealistic objective. This objective should be eliminated and replaced with a behavior-based objective as suggested above.

Six activities have been planned to achieve these objectives. These include: Qualitative Data Collection and Analysis; Referral; Emergency Transport; Case Management; Public Education; Environmental Assessment;

Qualitative Data Collection and Analysis – A qualitative study was planned to investigate locally held beliefs about the anti-malaria drug sulfadoxine-pyrimethamine (SP). These beliefs cause people not to seek or respect malaria treatment. This qualitative study is meant to shed light on this issue as well as other traditional beliefs about malaria and its treatment, which would inform the malaria intervention. Preparation for the study has been completed and the study is due to be conducted in the next quarter.

Given the project staff's prior experience with focus group discussions and the difficulties they've faced in analyzing the data and generating valid conclusions; and given the staff's heavy work load, project management should review and reconsider the value of this study. At the very least, technical assistance should be provided to ensure proper study design and data analysis.

Referral - According to the DIP, HSAs, who are taught to recognize signs of severe malaria, will refer people with these signs to the health facility for treatment. While HSAs are in a position to do this, especially on the estates where they live, the more likely scenario is that the sick person would be evacuated as part of the "normal" evacuation procedure. This system involves the compound police, whose job it is to check each house in the compound each morning once the workers have left for the fields to see if anyone is sick. Seriously ill workers (or their family members) seek medical attention themselves or are evacuated with assistance from the estate manager. In any case, HSAs do not have supplies of SP for treatment of presumed cases of malaria, because the MOH does not want HSAs possessing drugs.

Emergency Transport - See the section on Emergency Transport under ARI above.

Case Management – See the section on Case Management under ARI above.

Public Education – See the section on public education under ARI above

Environment Assessment – The DIP refers to an environmental assessment as a very specific activity conducted by HSAs on each estate that would result in a mosquito reduction plan for each compound. While the evaluation team did not hear of a specific assessment or plan, it was clear that the many efforts made on the compounds to improve sanitation were in part to reduce the breeding grounds for mosquitoes. These efforts include renovating the apron around pumps to avoid the creation of stagnant pool of water, which attract mosquitoes. Unfortunately, nearly all of the estates have large dams. These are permanent water sites, hence the presence of mosquitoes year round. Given the presence of the dams and the fact that compounds are usually situated near to the dam, the current environmental improvement efforts are not likely to reduce the incidence of malaria on the estates.

Faced with this dilemma, the project is now considering an impregnated bednet activity to address the malaria problem. PSI has a program funded by USAID that the KCSP could link into, as does the UN Foundation (UNICEF and UNFPA). The plan would be to raise awareness about the nets through the CHC and other community health volunteers and sell the bednets at the clinics and other locations such as the estate manager's office (the nets come with impregnation solution). On the whole this seems like a potentially more effective approach to malaria prevention.

Family Planning and Maternal Care

FP / MATERNAL CARE		
DIP OBJECTIVES	REVISED OBJECTIVES	MTE COMMENTS
Increase from 32.9% to 75% the percent of women who have ever been pregnant that have retained their antenatal card.	Increase from 32.9 to 75% the % of women who retained their antenatal card of their last pregnancy and received at least 2 antenatal visits.	The objective tracked in the BL KPC was only for the first part of the objective (not 2 antenatal visits) (see pg. 16 of BL KPC report). This objective is not particularly strong since one can not be sure what services were received during the ANC(see below)
Increase from 65.5% to 85% the percent of women that have ever been pregnant that can demonstrate at least 3 doses of TTV.	eliminated	Of the first two objectives for this intervention, this is the more meaningful since it tracks the provision of a specific service. The MTE Team recommends that this objective be re-instated and that it replace the one above.
Increase from 35.2%* to 50% the percent of women attended in their last delivery by a trained TBA, midwife, or doctor.	Maintained and unchanged	
Increase from 44%* to 60% the percent of women/couples using a modern method of FP.	Maintained and unchanged	*The baseline data indicated in this objective does not correspond to the findings presented in the BL KPC Report. The actual % was 53.2% (see pg. 18)

The above mentioned objectives will be achieved by implementing the following activities: training of TBAs; training of facility-based mid-wives; constructing estate-based maternity units; distribution of family planning methods; training FP Core Providers; building family planning shelters; peer education; emergency transport and public education.

Training of TBAs - The project originally planned to train 80 TBAs, but this was revised to 40 during the first year and presented in the first Annual Report. Most of the estates have an average of only 22 births in a year and it was thought that one trained TBA per estate would suffice.

Thus far the project has trained 19 TBAs. They follow a four-week MOH training course that includes practical sessions conducted at a health facility. The project's nurse is one of the certified trainers. The TBA training prepares them to conduct antenatal consultations, to facilitate a normal labor and delivery, to conduct postnatal consultations and to care for the newborn. While the MOH curriculum is quite comprehensive, it does not emphasize the four delays[5], which have been linked to high maternal and peri- natal mortality. The project nurse may consider including this as a supplementary topic in the next training, and perhaps raising awareness among the other TBA trainers regarding the importance of this new focus.

Following the training TBAs receive a birthing kit which contains some simple equipment, supplies and drugs such as Vitamin A tablets and iron folate. The district health office provides the kits, which it orders from UNICEF. Problems accessing the kits have resulted in TBAs not being given their kits (or the content not being standard) upon graduation from the course. When kits have been provided, TBAs report not having any problems replenishing their supplies through local MOH clinics.

Interviews with TBAs and estate managers reveal a number of positive changes with regard to maternal care. First of all, many TBAs who did not conduct antenatal consultations before are participating in weekly antenatal clinics at nearby MOH facilities. This allows them to follow pregnant women from their estates and help prepare them for the delivery. The TBAs also report that as a result of the training, women accept their advice more readily than before, especially with regard to referrals. Ironically, the result of training TBAs, might be that they end up conducting fewer deliveries because they make more referrals. In fact, five of the six TBAs interviewed reported having referred one or more pregnant or laboring women since their training. Estate managers remarked that these referrals are taking place in a more timely fashion (fewer true emergency cases).

Supervision of TBAs is a potential problem. According to the protocol, the MOH community nurse is supposed to supervise the trained TBAs. However, due to illness and

[5] The four delays include: 1. Delays in recognizing a problem (need to evacuate) 2. Delays in deciding to evacuate; 3. Delays in getting to the health facility; 4. Delays in getting appropriate treatment at the referral facility.

work overload, this has not proved feasible. In the meantime, the project nurse has been trying to maintain a quarterly supervision schedule, using a modified version of the Health Services Assessment instrument. In the future, it might be more practical for the PAL-employed nurses who work out of the two clinics to supervise the TBAs. If this is agreeable to the DOH, then reports from the supervisory visits should be provided to the MOH community nurse.

Training of Facility-Based Midwives - This activity has not taken place as yet because a suitable trainer for this level of caregiver has not been found.

Estate-based Maternity Units - PAL anticipates constructing two maternity units – one for each of the two medical clinics. In an interview with PAL's Chief Executive, it was indicated that construction of the first maternity would begin during the next (Oct. – Dec. 2000) quarter. In anticipation of this, PAL has already hired a nurse midwife, who is currently working in the clinic on E/80, and another nurse will be employed to work on E/32.

Distribution of Family Planning Methods – To increase access to family planning services the project proposed to recruit and train 22 Community-based Distribution Agents (CBDA). The role of the CBDAs is to recruit modern family planning users among the estate compound residents. They are also responsible for providing contraceptive pills, foams and condoms and for referring clients to the clinic for other methods or if the client is experiencing problems. In addition, they are expected to educate the community regarding the advantages of family planning. The CBDAs maintain a fairly complex register of clients developed by the MOH and are required to submit monthly reports to both the project and the DHO via the HSA. A report to the DHO is required to secure additional supplies of contraceptives.

In August 1999, family planning training was provided to 19 CBDAs and 15 HSAs. Initially the HSAs were included in the training course so that they would know the work well enough to supervise the CBDAs. The HSAs also attended a five-day CBDA supervision course. Because five of the CBDAs either did not pass the course, or have dropped out for one reason or another, five of the HSAs now serve as CBDAs so as to maintain the number of CBDAs at 19. The mid-term evaluation team found that this number is insufficient and that asking HSAs to serve a duel role (HSA and CBDA) is over burdensome. Project Staff have also noted that HSAs who serve as CBDAs can not meet the demand for family planning services. More CBD Agents will need to be trained in the second half of the project, to increase the overall number and to reduce the burden on HSAs.

CBDAs are re-supplied by the nearest MOH or PAL clinic. Recruiting new clients is hampered by a shortage of contraceptive pills nation-wide. A shortage means that an agent will be given just enough contraceptives to cover his/her current clients, which means that re-supplying is done every month. There are also problems with stock-outs particularly with the injectable contraceptives, which require has obliged women to

switch to another method in the interim period. Maintaining a constant supply to their clients is a monthly challenge for the CBDAs.

CBDAs are supposed to be supervised monthly by HSAs. They use MOH supervision tools, which are long and complicated (hence the one week training on supervision). Given the workload of the HSAs, supervision of CBDAs is irregular at best. The Medical Assistants at the two PAL clinics are supposed to supervise the HSAs but they are so busy and their means of transportation so unreliable that they rarely, if ever, get out to the estates. Consequently the project trainers supervise the HSAs and CBDAs. However, their workload also prohibits monthly supervisory visits and all of the CBDAs/HSAs interviewed indicated that supervision was occurring on a quarterly basis instead. This situation is unsatisfactory given the complexity of the CBDA's job, the reporting requirements, and the medical difficulties associated with contraceptives and promoting family planning.

Training of FP Core Providers – The project would like both PAL Medical Assistants to be Core Family Planning providers. This means they will be able to provide a full range of FP services. At present only one Medical Assistant is a Core FP provider. The other has more limited capacities with regards to family planning. The project intends to facilitate the training of the other medical assistant in Core Family Planning. At present they are waiting for place in a Core FP Training course to open so he, too, can be trained.

Family Planning Shelters – According to the DIP two family planning (actually they are multi-purpose) shelters are to be built. The shelters, very simple 1-2-room structures, will bring services somewhat closer to some estate residents but will not be staffed permanently or provide additional services. As a result, this activity is not critical to the success of this or any other component of the project.

This activity has been delayed due to increases in the costs of building materials and associated costs (fuel prices have increased substantially) and inadequate project funds to cover the costs of two shelters. Given this, at the time of the evaluation the project was considering building only one shelter. The project has discussed the cost issue with PAL and the two partners are currently considering their options.

Peer Education – The man-to-man peer educator methodology has not been initiated as yet.

Emergency Transport – See previous section on ARI.

Public Education – See section on ARI.

HIV/AIDS and STDS

HIV/AIDS AND STDS		
DIP OBJECTIVES	REVISED OBJECTIVES	MTE COMMENTS
Increase from 21.3%* to 50% the percent of women that can name at least 3 STD symptoms.	Maintained and unchanged	* the baseline data finding was incorrectly recorded in the KPC report. The actual % was 28% (see pg. 20 of KPC report)
Increase from 23.4%* to 50% the percent of men that can name at least 3 STD symptoms.	Maintained and unchanged	* the baseline data finding was incorrectly recorded in the KPC report. The actual % was 20%.
Increase from 32%* to 75% the percent of men who had experienced a STD symptom in the last 12 months that sought treatment at a health facility.	Maintained and unchanged	* the baseline data finding was incorrectly recorded in the KPC report. The actual % was 64.3% (see pg. 20)
Increase from 41.4% to 75% the percent of men who had a STD symptom in the last 12 months that informed their partner(s).	Maintained and unchanged	
Increase from 27.8% to 40% the percent of men that can name at least 4 correct ways of transmitting HIV/AIDS.	Combined with next objective. Increase from 27.8% of men and 14.8% of women to 40% the % of men and women that can name at least 4 correct ways of transmitting HIV/AIDS	Not found in either report – see pgs. 21-22 of BL/ KPC report
Increase from 14.8% to 40% the percent of women that can name at least 4 correct ways of transmitting HIV/AIDS.	See above	
Increase from 19.6%* to 40% the percent of men that can name at least 4 correct ways of avoiding HIV/AIDS.	Combined with next objective. Increase from 19.6% of men and 18.5% of women to 40% the % of men and women that can name at least 4 correct ways of avoiding HIV/AIDS	* the baseline data finding was incorrectly recording in the KPC report. The actual % was 10% for both men and women. (see pg. 22)

HIV/AIDS AND STDS		
DIP OBJECTIVES	REVISED OBJECTIVES	MTE COMMENTS
Increase from 18.5% to 40% the percent of women that can name at least 4 correct ways of avoiding HIV/AIDS.	See above	
Increase from 21.4% to 35% the percent of men that state that they used a condom the last time they had sex with a non-regular partner.	eliminated	This is a very strong objective and corresponds to one of the activities undertaken by the project (condom distribution). Therefore, the MTE team recommends that this objective be re-instated.
Increase from 33% to 50% the percent of women that state that they used a condom the last time they had sex with a non-regular partner.	eliminated	

A total of eight activities have been proposed in order to achieve the HIV/AIDS and STD objectives. These include: Training for Transformation; Qualitative Data Collection and Analysis; Drama Groups; Peer Education; Syndromic Management; Partner Notification; Anti-AIDS youth Clubs; Sharps (syringe) Management.

Training for Transformation (T4T) - T4T is a creative problem-solving process that helps participants identify and solve their problems. All 15 HSAs have been trained in the T4T process and a total of 80 community members (some CHC members) were subsequently trained. A member of the STAFH project was supposed to come and help with the initial training, since that project has had experience with the approach, but in the end the KCSP staff had to manage without assistance. While the approach can be used to address any problem, the problem initially used in the T4T training was HIV/AIDS and STDs. At the end of the training event, the project gave condoms to the participants to distribute in an effort to promote safe sex. Although condom distribution is supposed to be an on-going activity linked to HIV/AIDS and STD prevention, condom distribution by the T4T members is not being tracked by the project.

Interviews with CHC members and T4T trainees suggest that the majority feel that the T4T training was about HIV/AIDS prevention rather than being a generic method to solve problems. And while they say they could use the approach to solve other problems, more will have to be done by the project to firmly establish the T4T problem-solving skills in the community members.

Qualitative Data Collection and Analysis - In the DIP, the project proposes to conduct a study to identify local words and parameters for faithfulness and promiscuity. At the time of the evaluation the project staff anticipated that the study would help the staff understand the different terms that compound residents use for STDs and body parts. This

is deemed necessary because staff do not come from the project area, and because estate residents are also from different parts of the country.

Although the results of the study were supposed to be used as foundation for the T4T activities, and therefore should have been conducted prior to the T4T training, the study has not been implemented yet. Now that the T4T training has been conducted and the HIV/AIDS and STD activities have been initiated, the value of the study is questionable. Furthermore, it is also quite likely, that the HSAs have already learned much about the laborer's attitudes about faithfulness and promiscuity and the terms they use from their daily contact with them. Project staff should reconsider the value of this study.

Drama Groups – The project has trained seven youth and two adult drama groups for a total of 78 people, and six additional groups have been formed and are waiting to be trained. The head school teacher is the supervisor for the youth drama groups and the project trainer is the supervisor of the two adult drama groups. For the evaluation two youth drama groups were interviewed and each group said that they had had five large performances since being trained in 1999 and that attendance ranged from 60 –200 in villages and on estates. Though drama group supervisors are expected to send in reports about performances apparently no one keeps track of attendance.

During interviews with other key informants the drama performances (which cover other themes as well as HIV/AIDS and STDs) were mentioned quite frequently and one estate manager was quite proud that his estate had a drama group. The drama club members interviewed were able to cite the key messages regarding the dangers of AIDS and how to avoid getting STDs.

The evaluation team also interviewed the youth drama club members individually to determine their personal levels of understanding of HIV/AIDS and STDs. The team found that the vast majority of respondents know that STDs can be treated and AIDS is incurable; that STDs can be avoided through abstinence or use of a condom and, that a test is required to confirm HIV infection. They are also able to counsel friends who demonstrate signs of either a STD or HIV. On the other hand, many adolescents think that the symptoms of STDs are the same in men and women; few can name more than three symptoms of STDs; and only 3 out of 18 were able to give complete responses regarding how HIV is transmitted and how to avoid the infection. These results indicate that a refresher course that emphasizes these areas is necessary.

Peer Education – The training for CHC (and T4T people) members included a session on HIV/AIDS and STDs and these members are expected to share this information with community members. As mentioned before, T4T members have condoms for distribution. From the evaluation team's interviews with various informants, it appears that many if not most, people understand that AIDS is a deadly disease and that condom use can help prevent the spread of infection. Despite the apparent prevalence of this information however, HIV/AIDS is still a taboo topic in many circles and people still refuse to name the cause of death when it is known to be a result of AIDS.

Syndromic Management – The Medical Assistant from E/80 has been trained in syndromic management of STDs and will be attending a refresher course conducted by the DHO. The Medical Assistant from E/32 has not yet been trained.

Partner Notification – The MOH's system for notifying partners of exposure to STDs is not currently in place. The project is waiting for the MOH to determine a system, which the project will then adopt and promote.

Anti-AIDS youth clubs - The project has not initiated this activity yet.

Sharps (hypodermic needles) Management - The MOH has conducted a training regarding HIV prevention and one component of that was the proper use and disposal of sharps. One Medical Assistant and all of the HSAs attended that training.

Condom Distribution – Condom distribution for the purpose of HIV/AIDS and STD prevention was not an activity identified in the DIP. Because most people do not consider condoms as a family planning method (other than for backup when there is a stock-out of their preferred method) most of the condoms distributed especially to men are assumed to be used as protection against STDs. In fact, the District Office's Family Planning report (completed by CBD agents) distinguishes between condoms distributed to "non-registered" clients and all others; the non-registered clients being those who use the condoms not for family planning but for STD protection.

The project received a supply of condoms from a local NGO and provided these to HSAs, CBD agents and T4T trainees for community-wide distribution. As mentioned before, however, the distribution of these condoms as a STD protective measure is not being tracked.

3. Technical Approach - Findings and Recommendations

Activity Focus

1. Finding
The MOH trains it's Health Surveillance Agents to provide a variety of services in eight technical areas of primary health care. Given this policy, and the insistence of the DHO at the time, HOPE felt that it also had to include all of the 8 interventions in its proposal. While the integrated approach may be effective in the long term, it is unlikely that significant progress in any of the technical areas will be achieved in the relatively short lifetime of the project given the relatively low level of effort attributed to each intervention.
Recommendation:
The Program Manager in consultation with the DHO should review the Public Health data and confirm the primary (top 3-4) causes of infant and child morbidity and mortality in the Kasungu area. He should then orient his staff and as much as possible the HSAs to focus the majority of their time and energy on these technical areas.

2. Finding

All types of health workers (HSA and community health volunteers) spend a disproportionate amount of time on community sanitation and water activities; activities that are not directly linked to achieving the project's objectives.
Recommendation
Project trainers should review the project objectives with the HSAs and discuss the level of effort required of them to achieve these objectives.

Project Objectives

3. Finding
Following feedback on the Detailed Implementation Plan regarding the number of objectives, the objectives of the project were reduced in number (from 39 to 22) and modified. Some of the changes resulted in weaker objectives or objectives that are more difficult to assess.
Recommendation:

- The original objective for the malaria intervention - increase from 11% to 50% the % of mothers that give SP to their under-five child for a fever (presumptive malaria) - should be reinstated and used to evaluate progress. (Baseline and mid-term data have already been gathered regarding this behavior.)
- The maternal care objective that now tracks the number of antenatal visits, should be replaced with the original objective – increase from 65% to 85% the % of mothers with children < 2 years of age (suggest change from "women who have ever been pregnant") that can demonstrate at least 3 TT vaccinations.
- The objective that is divided into two parts - increase from X to X the % of mothers who recognize a danger sign or symptom of diarrhoea and seek care with 24 hours; should be replaced with one of the original objectives – increase from 12% to 40% the % of mothers with children <2 that can correctly name at least 3 important actions a mother should take when a child is experiencing diarrhea.

4. Finding
The indicators shown in the DIP and Annual Report which correspond to each of the knowledge objectives repeat the objective rather than specifying the facts the target person is expected to know. As a result, the "correct" knowledge that the mother is supposed to have is ambiguous. This ambiguity makes it difficult to establish a clear and effective BCC strategy.
Recommendation
Project staff should review the indicators for the revised objectives and specify the knowledge they expect the target audience to know. For example: the ways to prevent diarrhea, the correct ways to manage a child with fever, the signs of severe malaria, STD symptoms etc.

5. Finding
The project has two means of distributing condoms for use in the prevention of STD/HIV/AIDS and conducts awareness raising campaigns (drama). It also collected baseline and mid-term data regarding the use of condoms during sexual intercourse with

non-regular partner. Despite this, the project has no objective specifically related to condom use.

Recommendation:

Add an objective on the use of condoms by men during last contact with a non-regular partner.

6. Finding

Although the project has an objective related to iron folate intake by pregnant women during pre-natal consultations, data on this was not collected at baseline or mid-term.

Recommendation

- Project staff should conduct a mini-survey (preferably during their monthly data collection exercise) and collect information on iron folate intake among pregnant women.
- The wording of the objective should be revised to read, "increase to 75% the % of women who received iron folate during their last pregnancy."

Diarrheal Disease Control

7. Finding

Despite the fact that many estates have borehole wells that produce potable water, most laborers consume contaminated water from the estate dam, because estate managers deny laborers access to the well water. The project's current approaches are not likely to have a significant impact on improving access to potable water.

Recommendation

PAL senior management adopts a policy requiring estate managers to allow laborers access to the borehole well – at least for drinking water.

8. Finding

A nation-wide stock-out of ORS packets prevented the ORDP Managers from stocking and distributing packets during the first 9-11 months following their training. It is not clear whether the stock-out problem has been permanently resolved at the MOH level.

Recommendation

Future refresher courses for ORDP Managers, CHCs and HSAs, should emphasize the nutritional management of diarrhea as well as the use of local liquids.

9. Finding

Under-five clinics have not been taking place in the Western Area of Press Agriculture, due to poor leadership and lack of motivation on the part of the Medical Assistant.

Recommendation

The Project Manager and the PAL contact person (Ben Mwage) should meet with the Area Development Manager from the Western Area and the Medical Assistant and organize for under-five outreach clinics to be re-initiated in a similar fashion as is being done in the Eastern Area. Progress should be monitored by the Project and results shared with PAL's Human Resources Manager.

10. Finding

The growth monitoring volunteers complete a form during monthly weighing sessions (as part of the integrated (u/5) outreach clinics) which help them identify children whose weight has faltered during the month. The form, however, does not provide a place to indicate whether a home visit is necessary or if a home visit was conducted. This is a missed opportunity to: a) remind the GMV of the importance of follow-up of these children, and, b) to monitor the counseling work of the GMVs.

Recommendation

- The HIS Officer in consultation with project trainers, should modify the Growth Monitoring form used by GMVs so that it contains two more columns; one to indicate children who need a home visit and one to indicate if that visit was conducted. They should also consider including a space for comments and referrals.
- When HSAs supervise GMVs they should consult this form to check if the mothers of children whose weight had faltered had been visited at home and counseled correctly.

11. Finding

The ORDP is responsible for maintaining an immunization record of the compound population. At present the register monitors the location of the delivery (at home, hospital etc), but does not record the type of service provider who delivered the baby (trained TBA, mid-wife or doctor). As a result, an opportunity to monitor progress toward one of the project's objectives (delivery by a trained caregiver) is being missed.

Recommendation:

The family register should be modified to include who delivered the babies born to women on the targeted estates.

12. Finding

The present reporting form does not distinguish between the ORS packets distributed by the ORDP Agent and those provided by the HSA. As a result, project staff can not easily track the work of either agent with regard to ORS packet distribution. A means to monitor the work of the ORDP agent is being missed.

Recommendation

Add on to the monthly HSA report a distinction between ORS packets distributed by ORDP and those distributed by HSA.

13. Finding

Irregularities were noted in the ORDP Mangers' registers that put into question the credibility of the data. Irregularities included, not registering newborns, not separating the different doses of antigens, and not recording birth dates. This finding also puts into question the quality of supervision provided to the Community Health Volunteers by HSAs and project staff.

Recommendation

During each visit to an estate compound, the HSA and Project Trainers should review the data collection instruments used by the community health volunteers (ORDP Managers, GMVs, CHCs, CBD and TBAs) to make sure they are being maintained correctly. If consistent problems are observed a refresher course in data collection and maintenance should be provided.

14. Finding

The Health Services Assessment found that the counseling skills of the GMVs observed, especially when faced with a growth-faltering situation, are very weak.

Recommendation

Since the Assessment Team observed only three GMVs, it is important to determine if this is a widespread problem. To do this, the project trainers should observe a majority of GMVs during U/5 clinics using the same instrument to assess practices. If the results show that counseling is a general weakness, the project trainers should organize a refresher course that focuses on counseling skills.

Immunizations

15. Finding

The clinic located on E/32 that serves the estates in the Eastern Area has no refrigerator. As a result, it can not provide vaccination services on a consistent basis. The district health office has two spare refrigerators, one of which could be made available to this clinic, according to the District Health Officer.

Recommendation

Press Agriculture should contact the DHO and arrange to have the refrigerator installed in the E/32 clinic.

Since the refrigerator in clinic 80 is not permanent, PAL might also ask the DHO to supply a second refrigerator to that clinic so its presence is secured.

16. Finding

Project Staff and many HSAs believe that health activities should take precedence over estate's farming activities. Consequently they do not make much effort to schedule health activities around the farm's schedule and as a result there are conflicts and low turn out at such events as U/5 clinics. Project Staff and HSAs expect estate managers to release women (and sometimes men) to attend health activities while still paying them their regular salary.

Recommendation

- The Project Manger and the Medical Assistants should meet with the Estate Managers and ADMs during a regular quarterly meeting to discuss this issue. An effort should be made to sensitize the estate managers regarding the vaccination schedule, and to identify a time during the day or a day of the week when it would be less disruptive to the farming work for women to attend U/5 clinic. HSAs and Medical Assistants have to be willing to work around the farming schedule, which might mean providing services on the weekend or after the usual work hours.
- Using the feedback provided by the Health Services Assessment, project staff and Medical Assistants should also determine ways to make the U/5 clinics work more efficiently so that women are not delayed so long. (Refer to comments in the URC report)

Breastfeeding

17. Finding
The activities related to the breastfeeding intervention are not likely to achieve the objective.
Recommendation
- The project should assess the importance of this intervention and, given the total number of interventions and the time constraints of its staff, consider eliminating it as a separate endeavor.
- Should it be maintained, project staff should get information from Linkages about initiating breastfeeding support groups and consider initiating these as a more focused and effective way of achieving this objective. (Documents from other CS projects where breastfeeding support groups have been successful (CARE/Niger) might also prove helpful.) Project staff could also consider implementing breastfeeding support groups instead of the mother's clubs (or as a variation on the mother's club theme).

Vitamin A and Iron Folate

18. Finding
The Nutrition Study is of limited value to the project given its wide scope (nutrition, in general) and the project's limited focus on malnutrition in children per se (there are no malnutrition objectives). The recommendations that relate to agriculture are not practical under the circumstances since Project HOPE as an agency has little agriculture/ gardening expertise.
Recommendation
- The project should focus its attention on improving the counseling skills of the GMVs so that when a malnourished child (or a weight-faltering child) is identified appropriate advice is given.
- GMV refresher courses should emphasize the need to actively (through home visits and demonstrations) promote appropriate weaning and breastfeeding practices as a means of preventing malnutrition.
- And finally, should the project (and partners and beneficiaries) consider malnutrition a priority problem, then *in a subsequent project*, the design should include the Hearth Method as the most appropriate means to address malnutrition.

19. Finding
Although PAL has provided an ambulance for use in emergency evacuations, it is rarely used as such. Some estate managers consider the cost of ambulance rental too high – especially considering that the cost of funerals, and transporting corpses of deceased laborers back to their homes, is an accepted obligation of the estate which is covered under the same line item.
Recommendation
During a regularly schedule quarterly meeting of Estate Mangers (to which the Project Manager and Medical Assistants will be invited), the problems related to the ambulance service should be clearly identified from each stakeholder's perspective and discussed. All of the issues related to ambulance use should be aired and, as far a possible, resolved.

The agreed upon means to access the ambulance, the cost of ambulance rental and other details should be documented and distributed to all Estate Mangers, the ADMs, the Medical Assistants and the Project Manager. If a health services coordinator is hired the ambulance should be managed by him/her.

Family Planning and Maternal Health

20. Finding
The MOH community nurse has not been able to supervise the estate-based trained TBAs. While the project nurse is ensuring supervision at present, this is not a sustainable solution.
Recommendation
During the next Steering Committee meeting this issue should be discussed and concurrence for the following plan sought from the DHO. Provided consensus is reached, PAL should modify the job description of its clinic nurses to include supervision of the estate's trained TBAs. The project nurse should accompany the PAL nurses on a couple of supervision visits to introduce her to the TBAs and help her to become familiar with the supervision procedure. A timetable for turning this responsibility over to the PAL nurse should be developed and followed, so that by the end of year 3 of the project the PAL nurses are completely responsible for TBA supervision. This proposal will require ensuring a means of transport to the clinic nurses.

21. Finding
The number of CBDAs (including HSAs) is too few. The demand for their services far out weighs their numbers. Requiring HSAs to assume the role of a CBDAs has over burdened them. They can not carry out their tasks effectively.
Recommendation
The project should recruit and train enough CBDAs so that there is one per estate (which might mean training a few extra). HSAs who now serve as CBDAs should revert to their role as HSA and CBDA supervisor only.

HIV/AIDS and STDs

22. Finding
Although condom distribution is an on-going activity linked to HIV/AIDS and STD prevention, condom distribution by the T4T members and CBD agents is not being tracked by the project.
Recommendation
The project should set up a monitoring system that would track the *number of people* to whom condoms were distributed each month by T4T members, HSAs and CBD Agents.

B. Cross Cutting approaches

1. Community Mobilization

The Kasungu Child Survival Project used four means to mobilize community members around maternal and child health issues. These include, training and support of Health Surveillance Assistants (HSA); formation, training and support of Community Health Committees (CHC) and Village Health Committees (VHC); formation and support of Mothers Clubs; and implementation of Under fives (U/5) clinics.

Health Surveillance Assistants - The project proposed to train 15 HSAs and this was accomplished during the first quarter of the project. Training was a true partnership effort, since both the MOH and project staff facilitated the training, while PAL provided the training venue and housing for the participants. Following the 8-week MOH training, the HSAs also participated in a five-day course on Training for Transformation, facilitated by project staff. As described previously, the goal of this course was to teach HSAs how to get community members actively involved in community development. Later in the project, community members were introduced to the T4T process by addressing the HIV/AIDS and STD problem. In addition to providing specific primary health care services such as immunizations, U/5 clinics, providing health education, the HSAs help to organize and motivate the community (through the CHC/VHC) to carry out such activities as community clean-up campaigns, repair of the community pump and participation in U/5 clinics.

The HSAs are employees of PAL and as such are provided a salary as well as housing. PAL is responsible for maintaining the bicycles initially provided to them by the project, and in some cases they also receive rations (food). According to MOH policy, each HSA is suppose to serve a population of about 2,000 and this was considered when placing the HSAs. While most HSAs serve a smaller estate population than this, when activities in villages neighboring the estates begin, the HSA/Population ration will reach the desired level.

Since being trained, one HSA resigned and another gave notice just prior to the evaluation. In the first case, the HSA from a neighboring estate has taken over for the departed HSA, in anticipation of a new HSA being hired. Unfortunately, the process for hiring a new HSA has been delayed for several months, and the work on the four estates covered by the one HSA has slowed considerably. This situation was exacerbated by the fact that the HSA is at the same time the CBD Agent and that his bicycle was broken and has not been repaired in some months. And finally, his workload was made all the more intolerable by long distances between his estates. This situation, while unusual, has emphasized the need for PAL to designate a Project/PAL link person, to hire a health system coordinator and to establish an efficient process for replacing departed HSAs so that the work continues effectively.

When the project got underway, none of the three partners understood the full implication of placing HSAs on farming estates. Very little if any effort was made to inform the Estate Managers and Area Development Managers about the project and its objectives.

The HS's training did not prepare them to work within the specific context of an estate. HSAs did not initially understand what it meant to be working within a for-profit organization where maternal and child health is not the primary concern, and the training did not help them understand the organizational layout of the estate. Consequently the HSAs did not initially know how to get things done and they did not understand the motivational force of the Area Development Managers or the estate managers, whose cooperation is required to get things done. Likewise, the Estate Managers were not informed of their responsibility vis-à-vis the HSAs and they did not initially understand HSA's role or what they would be doing. As a result, during the first year of the project the Project and HSAs encountered what they interpreted as resistance, even obstruction, of their work.

For example, when the project wanted to form and train CHCs, ten laborers from each estate were selected and requested to participate in a 5-day training course. The Project and HSAs were frustrated when in some cases only half the expected number of participants were released from work to participate. They felt that the Estate Managers weren't being cooperative. From the Estate Manager's perspective, however, the work had to come first and releasing so many people from work at once would compromise their own objectives, especially during peak season. Other incidences of this type occurred before many of the HSAs began to understand the priorities and motivation of the Estate Managers and they began to work and plan activities together. Still some resentment remains on both sides and more and better collaboration is required.

In addition to their standard duties, PAL-employed HSAs are required to supervise the community health volunteers (CBD Agents, and ORDP/GMVs and drama clubs and mothers clubs). The evaluation team found that supervision is irregular, at best, and not systematically implemented. With the exception of supervision of CBD Agents, HSAs have not received specific training in supervision and they have no instruments to facilitate this task.

HSAs are required to make monthly work plans. These are supposed to serve as monitoring tools for the project and a planning tool for the HSA. In reality however, they are effective as neither. This is because most HSAs do not to follow a standard protocol when developing their monthly work plans and they do not report against their work plans. Furthermore, for lack of planning, HSAs who cover more than one estate do not always spend equal amounts of time on each estate, which has caused some resentment among Estate Managers. And finally, some Estate Managers have become exasperated when they don't know where the HSA is at all times. This has led to allegations that the HSAs are not working when they are supposed to be.

Community Health Committees/Villages Health Committees [6]– The formation of Community/Village Health Committees is in line with MOH policy. The ten-member

[6] CHCs differ from VHCs in that CHCs are on estate compounds from among estate residents. These residents form an "artificial" community since there are no traditional ties that bind them together. VHCs, on the other hand, are formed in the villages neighboring the estates where the traditions and customs of a village prevail.

committee serves as the link between individual community members and the HSA. Amongst other things, the CHC members are asked to assist in the selection of community health volunteers such as ORD/GMVs, CBD Agents and TBAs and to promote the healthy behaviors they learn during their 5-day training. The project expected to train one CHC for each of the 34 estates but found that the laborers actually live on a total of 30 compounds. Consequently, 30 CHC were trained during the first year of the project. The twenty VHCs were only trained in July 2000, so work in the villages is about a year behind that on the estates. While the project proposal is quite clear about what activities will take place on the estates, there is less clarity about the activities to be implemented in the villages and the role of the HSAs in those villages. This needs to be more clearly identified.

From discussions with 12 CHCs the mid-term evaluation team found that the CHCs in general have a thorough understanding of their role and they work well with both the HSA and the various community health volunteers. From their responses it appears that the majority of CHCs are involved with educating community members regarding better health and in conducting compound and water-point inspections (for cleanliness). Seven of the twelve CHCs interviewed keep a written record of their activities.

Regarding their efforts to mobilize the community, some members report having difficulty motivating community members to participate in group activities. This is particularly difficult, they say, among the more transient laborers who have less of a stake in the community as a whole. Participation in such activities as U/5 clinics is also difficult they say, because mothers can not get off from work during the day, particularly during peak season time. And finally, some resistance from a few religious groups to the family planning messages have been reported, and one CBD Agent was force to resign under pressure from a particularly influential religious zealot. On the whole, however, religion has not been as serious a constraint as, say, stock-outs of contraceptives. On the positive side, some CHC members report receiving support for their work from Estate Managers. This is evidenced by the provision of materials, such as cement, and transport, help with community mobilization and allowing workers to attend training events and to participate in community work, while remaining on the estate payroll.

Under-5 Clinics - According to the DIP, U/5 clinics would take place both at the two fixed-facility clinics and at each compound on a monthly basis. In reality, U/5 clinics are conducted at each of the two estate clinics on a weekly basis, and, in the East Area, five outreach clinics are conducted per month. Outreach clinics are conducted in an effort to reach mothers and children who live particularly far from the static facilities. As mentioned previously, while this approach has been successful in the East Area, outreach clinics were discontinued in the West Area making it more difficult for mothers to access services.

Mothers' Clubs - Mothers' Clubs were supposed to have been introduced in November 1999, but these have not yet been initiated. The project is waiting to receive materials on Mother's Clubs from the Project HOPE/Haiti Child Survival Project. These materials will need to be translated from Creole into English.

2. Communication for Behavior Change

The BCC approach described in the DIP consists of home visits conducted by HSAs at least once a quarter, community meetings with the general populace, health fairs, evening entertainment activities, and peer education by CHC members particularly on family planning and HIV/AIDS prevention. Furthermore, the first annual report makes reference to integrating IEC messages into a " package of information" rather than separate channels of communication for each intervention.

The mid-term evaluation team found no evidence of a " package of information", and while efforts have been made in each of the areas mentioned above, the project is generally suffering from a lack of a cohesive and comprehensive BCC strategy. The HSAs and all of the community health volunteers are responsible for promoting healthy behaviors but their efforts are sporadic and uncoordinated. The messages that have received the most attention thus far relate to environmental sanitation (constructing latrines, rubbish pits and pump aprons), which are not among the essential messages or behaviors even for diarrheal disease control.

HSAs make home visits, sometimes as frequently as once a month, but these are primarily to check growth and vaccination cards to gather data for monthly reports. Household inspections usually take place at the same time, and reminders are provided to attend U/5 clinics or pre-natal consultations. There were no home visit check lists, however, as mentioned in the DIP, and the monthly reporting form does not collect any information regarding any volunteers' home visits.

During the first year of the project, project staff noticed that HSAs were not conducting health talks as frequently as was expected of them. As a result, when a new monthly report format was developed in year two, a section on health education topics was included. Now HSAs have to report their health education activities. Unfortunately, since the HSAs work is not systematically checked against their work plan or against the previous months' work and their efforts are not a part of a comprehensive strategy, this new format is not likely to have much of an impact.

Of the community health volunteers (CHC members, T4T trainees, ORDP/ GMVs, TBAs and CBD Agents), the CBD Agents are most likely to be active promoters of their messages and behaviors, since their job description admonishes them to recruit a specific number of clients per month. They are also the only type of health volunteer that has easily portable visual aids making it easier to counsel clients individually. TBAs may also be in a position to promote behavior change amongst pregnant women since a good number of them appear to participate in ante-natal clinics at nearby MOH and/or estate facilities. (Their exact role at these clinics is not known however, since the evaluation team did not observe or inquire about this.)

Community meetings do not appear to be held on any regular basis and no records are kept to document these. The project just recently bought a megaphone, which has been used a couple of times to rally participants to such community meetings.

On October 15, 1999, the first, and so far only, Health Fair was held since the project began. The project used the fair to describe the interventions and to report on progress to date. Two drama clubs put on performances and the Acting Chief Executive of PAL gave a speech. Although the Health Fair was considered a success, it took much effort to organize and stage and it was not well attended by Estate Managers. Project staff decided to reduce the number of Health Fairs from one per quarter to two per year (one is each of the two areas, East and West).

In an effort to reach men, who are busy working in the tobacco fields during the day, evening entertainment activities were planned by the project. These were supposed to include the projection of health videos for which the project has purchased a VCR. Thus far, however, no health education videos have been screened. In general this technologically sophisticated method of health education has not been shown to be particularly effective or sustainable. Equipment such as VCRs and TV monitors are costly, difficult to operate under the conditions most often encountered in developing countries and practically impossible to maintain, let alone sustain. The screen of a TV is too small to effectively reach a large audience (most often attracted by the modern technology) and few audience members will be able to understand the dialogue, unless by good fortune, the video is in local language. And finally, videos are generally very passive and don't lend themselves to interactive problem-solving. Given all of this, the evaluation team recommends that evening entertainment focus on presentations of the local drama groups

According to the DIP, CHCs are also supposed to conduct meetings and provide informal peer education to promote behavior change. The evaluation team found that peer education is the most frequent activity of the two and once again compound sanitation is the most frequently conveyed message. Aside from the one T4T training conducted with assistance from project trainers no other sessions had been held to develop "action plans" for addressing other health problems and community health volunteers did not have IEC checklists to help guide their BCC efforts.

The project's first Annual Report includes an annex of the health messages. Each of the eight interventions has from 4 to 22 messages for a total of 82 messages. This is far too many messages to effectively communicate, especially given the strategies being followed. As part of a more thoroughly analyzed and documented BCC strategy, the project should review and reduce the number of messages.

The Ministry of Health's Education Unit is responsible for approving all IEC messages and materials, and the project has acquired many different types of visual aids and BCC promotion materials from this unit. Many of these are exceptionally good. However, the majority of them are posters that are best suited for use in a static facility, and for conveying one message. Very few of the visual aids provided are suitable for small

group work and home visits; the type of health education activities the estate health volunteers and the HSAs are most likely to conduct. Furthermore, most posters do not lend themselves to stories and problem-solving themes, which are effective in engaging the audience and promoting behavior change. Without suitable and engaging visual aids, health promoters find it difficult to attract and hold the attention of their audience. As a result project staff and volunteers have been tempted by less sustainable technologies such as videos.

Project staff expect the effects of their BCC efforts to be reflected in the monthly reports (behaviors) and in the KPC survey results (knowledge and behaviors). They attribute such things as increased participation in U/5 clinics, increased vaccination coverage and increases in contraception use to the BCC effort.

Occasionally feedback from these reports will prompt the project staff to search for reasons for lack of behavior change. For example, when participation in immunization activities was falling, project staff carried out a mini-survey to better understand the reasons. Project staff realize, however, that the information from the monthly reports needs to be shared, not only with the HSA, but with the Estate Managers and the community health volunteers. To this end, project staff is working to develop a less complicated feedback form that would enable CHC members, community volunteers and estate managers to track the progress of specific health indicators on their respective estates.

3. Capacity Building Approach

PVO strengthening - In the first annual report five indicators for measuring the extent to which the project will strengthen Project HOPE as an institution were given. These include:

a. Improved organization, access and content of Project HOPE's technical library;
b. Systematized communication with the field, providing policy and procedures manuals for the field to better support both technical and administrative activities;
c. Explore methods for better communication of lessons-learned and CORE outputs to the field;
d. Increased experience in capacity building issues through interaction with CSTS on the issue of the PAL assessment and through facilitating the process in the field;
e. Increased technical ability to backstop emergency and essential obstetric care components of CS programs.

Through discussions with Project HOPE's Africa Regional Manager, the evaluation team found that the project has funded the procurement of some materials for HOPE's technical library and some secretarial services. Revised policy and procedures manuals have been provided to the field office. The project has also supported the participation of the Country Director and the KCSP Project Manager in leadership conferences organized by HOPE Center, during which lessons learned from different programs around the world are shared. Furthermore, through CSTS, lessons learned from other BHR/PVC child survival grant recipients' experiences are also being shared with KCSP staff. With regard

to gaining experience with capacity building issues, CSTS was instrumental in helping Project HOPE identify the expertise used in the Health Services Assessment and also the Institutional Capacity Assessment. The only capacity building indicator that is not being addressed through the project is that related to emergency and essential obstetric care, and that is being accesses through the work of an M. I. Fellow.

Local partner strengthening – The project has two partners: Press Agriculture Limited (PAL) and the District Health Management Team (DHMT). Capacity building efforts have focused to a large extent on PAL because they will be the implementers of the health activities at the end of the project and because they are less experienced thus far in health care delivery. Currently and at the end of the project, the DHMT will play a supporting role to the health activities on the estates.

During the life of the project the roles of Project HOPE's two partners have been determined as follows:

PAL	MOH/DHMT
▪ Provide access to the estate population	▪ Provide curricula for training of PAL health care providers (HSAs, TBAs, etc)
▪ Hire 15 HSAs	▪ Provide visual aids and other educational materials to PAL health care providers
▪ Cover the cost of HSA's uniforms	▪ Supervise PAL medical assistants and TBAs
▪ Maintain bicycles for the HSAs	▪ Organize and train PAL health care providers (HSAs, TBAs, CBD Agents, Medical Assistants)
▪ Increase staffing at the PAL health facilitates in line with services offered	▪ Restock PAL health care providers with supplies required to do their work (contraceptives, vaccines, TBA supplies etc)
▪ Expand PAL health facilities so as to offer services related to the care of women during pregnancy and delivery	▪ Serve as equal partner on Steering Committee
▪ Release PAL health care providers for participation in in-service training on a regular basis and cost-share where necessary	▪ Set standards for provision of health care services through the provision of protocols and job descriptions
▪ In collaboration with Project HOPE, assure adequate supply of drugs at PAL health facilities	
▪ Assure availability of ambulance transport from PAL clinics to district hospital	
▪ Serve as equal partners on the programme steering committee	

Thus far, both partners have fulfilled most of their obligations to the project, and in some ways PAL has exceeded expectations. For example, PAL provided the venue for the training of the HSAs. However, there remains some fine-tuning with regard to such

things as bicycles repair, assurance of drugs to PAL facilities and availability of the ambulance, as detailed in other sections of this report.

To assess capacity and help guide capacity-building efforts two studies have been carried out. The first, usually referred to as The Development Center Assessment, evaluated PAL's capacity as an organization to support and maintain the health delivery system established through this project. This assessment was supposed to have been conducted in June 1999, but was carried out six months later in December 1999 – January 2000. The delay was due to restructuring within PAL during the first year of the project. The results of the assessment were shared with all of the stakeholders in March 2000 and the report was reviewed and discussed during the July 24th Steering Committee meeting, at which time some amendments to the report were suggested. The delay in carrying out the assessment has reduced the amount of time the project and PAL have to address the issues and concerns highlighted in the report.

Neither the minutes of the Steering Committee meeting nor The Development Center Report provided to the evaluation team included a copy of The Development Center's proposed Plan of Action, and the committee's comments, so the time frame for execution of the recommendations is not clear. It is not surprising to note, however, that the PAL capacity assessment and the mid-term evaluation have come to some of the same conclusions and recommendations. The key findings from the assessment are provided below.

Key findings from The Development Center Report (PAL Institutional Assessment)

- PAL's leadership at the Senior Management level is very committed to the development of a sustainable health delivery system; This is evidenced by the recruitment and support of HSAs, (*and more recently a nurse-mid-wife*) and support of two clinics;
- Planning of the project within PAL was centralized within the executive management. Knowledge of the project and its objectives was not clearly communicated to PAL middle managers (this includes Area Development Managers and Estate Managers); As a result some resistance to the project has been experienced;
- There is no staffing structure within PAL to support the health delivery system (no medical manager); As a result, communication and reporting is quite unsystematic. This lack of clear structure also affects supervision and staff development plans.
- The number of health staff (2 medical assistants and 15 HSAs) is inadequate to meet the needs of the target population;
- The infrastructure (two clinics, no ambulance, only one refrigerator, no lab facilities old motorcycles) is inadequate to serve the target population.

The second assessment, called the Health Services Assessment, was conducted in March 2000 by The Quality Assurance Project. The study focused on the quality of the provision of care, and the results will be used to determine what areas of quality of care need to be strengthened. Service provision in the two estate clinics was assessed as well as the

quality of care in two MOH clinics often frequented by laborers and used as supply or referral sites by HSAs. The researchers also interviewed TBAs and observed two U/5 outreach clinics. The report from this assessment was completed in April 2000 and will be reviewed and discussed during the October 2000 Steering Committee meeting. (This mid-term evaluation report makes reference to some of the Quality of Care findings in Chapter One.)

The project faces some serious challenges in building the capacity of Press Agriculture with regard to its health delivery system. One of the challenges is unpredictable financial resources within PAL itself. Resources are uncertain at present due to the unstable tobacco market. Resources destined for the health delivery system are not considered a priority among some people at PAL at the moment, and as a result, these resources are allocated sparingly and sometimes slowly. This retards the growth and stability of the health delivery system and PAL's ability to learn to manage it. On the other hand, learning to deal with this type of uncertainty, typical of any institution, is also a part of the learning process.

Capacity building is also hindered by the fact that there is no one with public health experience within the PAL to manage the health delivery system. Furthermore, up until July 2000 the only decision-making link between the project and PAL was between the KCSP Project Manager and the Chief Executive. Fortunately, the inefficiency of this system was brought to light during the last Steering Committee meeting, and a PAL contact person was designated to deal with operational issues.

Another barrier to capacity building (and sustainability) is the lack of a budget line item within PAL, specifically designated to support the health delivery system. At the moment, funds for the different elements of the health services (HSA and Medical Assistant's salaries, medicines, bike and motorcycles repair, evacuation costs etc.) come out of various unrelated line times (or petty cash) which makes financial and program planning difficult.

The present Chief Executive of PAL is very committed to strengthening the agency's capacity to deliver quality health services to the estate laborers. If he is successful in communicating his commitment and enthusiasm for the program to board members and the various levels of management, then these barriers can be overcome and PAL will surely gain the necessary skills to ensure a healthy labor force. To ensure the long-term existence of the health delivery system however, all stakeholders should strive to *institutionalize* it; to make it an integral part of PAL.

Steering Committee - The future of the estate-based health delivery system depends not only on PAL gaining the knowledge and skills to manage, support and provide health services, it also depends on PAL's ability to work with the MOH and UNICEF. The Steering Committee idea was developed not only to help support the KCSP but also to provide an opportunity for PAL, the DHO and UNICEF to learn to cooperate for the benefit of the estate health system. To this end, one of the sustainability objectives is, "a

long term relationship created between the DMHT and health service management on the PRESS estates".

According to the DIP the purpose of the Steering Committee is to provide technical guidance, implementation advice and coordination of activities and resources. They are also charged with monitoring project progress and helping to resolve problems as they arise. It was anticipated that the Steering Committee would meet once per quarter and be made up of PAL's Human Resource Manger, Project HOPE's Project Manager, the DHO or his/her representative and a representative of UNICEF.

At the time of the mid-term evaluation, the Steering Committee had only met twice (April and July 2000) and no minutes were taken from the first meeting. Meetings were not convened during the first 18 months of the project for various reasons. During the first quarter of the project the meeting was postponed due to the late appointment (January 2000) of the project manager. In 1999 meetings were deferred due to a restructuring within PAL, and high turnover within the District Health Office (three DHOs within one year). UNICEF, who has not attended either of the steering committee meetings (and could not be reached during the evaluation), presumably does not attach much importance to its role on the committee or has placed its priorities elsewhere.

While the Steering Committee has not thus far fulfilled the role it was intended to play in the project, it appears that the first two meetings were productive and paved the way for future opportunities to improve communication and cooperation between the partners. If quarterly meetings continue to be well attended then there is hope that the necessary links between PAL and the DHMT will be cemented before the end of the project and the viability of the estate-based health delivery system will be secured.

Health Facility Strengthening – With regard to health facility strengthening, the Kasungu Child Survival Project has focused most of it's attention on building the service delivery capacity of the two health clinics run by PAL. (A third PAL-supported clinic located outside the project's target zone, has also benefited from capacity building efforts.) And as such, these efforts can be equated with partner-strengthening as well. Because the project has also supported some MOH health facility strengthening efforts, however, these endeavors will be discussed here.

As mentioned above, one of the most important steps taken was to assess the quality of service delivery, and this was done in March 2000 when a Health Services Assessment was conducted. The results of this assessment (conducted in both PAL and MOH clinics) should be used to focus future capacity building efforts and these efforts should be monitored carefully.

The project has also strengthened health facilities by providing 1.2 million dollars worth of equipment, supplies and drugs to the district health office. These commodities have been distributed to both PAL and MOH clinics in the district and have enabled caregivers to improve the quality of their services.

Services provided by health facilities have been further improved by up-grading the skills of both medical assistants. As shown in Table 2.1, the medical assistants have received various types of training, the most recent of which was in IMCI. The application of the IMCI case management protocols is expected to dramatically improve the quality of service at the clinics and greatly help to achieve the project's objectives.

By training a corps of Health Surveillance Assistants, access to health services provided by clinic staff has been improved. With assistance from HSAs and community health volunteers, the medical assistants are now able to provide outreach services. Likewise the work of the HSAs has raised awareness among the estate residents about the services available at the clinics (both MOH and PAL) and attendance has increased.

Through the project, PAL has committed to increasing the staff at PAL clinics. In July 2000, PAL hired a nurse mid-wife to work at the clinic at E/80, and another nurse-midwife is being recruited for E/32 clinic. With these new additions, maternal and child health services have been/will be institutionalized. (Prior to this MCH services were conducted periodically by visiting MOH nurses.)

The project tracks attendance at the estate's fixed facilities by collecting data from the clinics on a monthly basis. They ascertain attendance at well baby clinic activities and at antenatal consultations as well as care seeking behaviors related to the specific diseases monitored by the project (diarrhea, malaria, ARI and STDs).

Health Worker Performance – As with health facility strengthening, because the health workers with whom the project works are PAL employees, the project's work to improve their skills could also be considered efforts to strengthen their local partner, PAL. As a direct result of the project, there are now 15 HSAs and over 500 trained community health volunteers providing health services to approximately 30,000 people in the Kasungu District. This is a significant achievement.

As described previously, 15 HSAs were recruited by PAL (1 per 2,000 population as per MOH policy), in September 1999. PAL provided the training venue and accommodations during the 8-week MOH course and the DMHT and Project HOPE provided trainers and training materials. Following this course, the project provided a one-week training for HSAs in T4T. The training followed the standard MOH curriculum, which is meant to equip the HSAs to carry out their jobs, as outlined in the official HSA job description and as interpreted by the Ministry. How the MOH interprets the HSA's job is important, because, as the MTE team discovered, the HSA training course placed a lot of emphasis on environmental health. As a result, the HSAs have spent a disproportionate amount of time during the first years of the project promoting community clean-up campaigns and getting families to dig rubbish pits and latrines, and less time focusing on the project's specific objectives. During the second half of the project, staff will need to reorient the HSAs and CHCs toward the other aspects of the project.

The project has used the health services assessment described previously to identify the strengthens and weaknesses of health worker performance, and this report provided very valuable feedback to the project, PAL, and MOH. The stakeholders now need to use the recommendations to help direct future health worker skills development efforts. This will certainly require a review and revision of the training plan.

Project staff use HSA monthly reports to gauge health worker performance; the assumption being that improvements in outcome indicators mean inputs are being provided as expected. Reliance on these monthly reports has resulted in a lack of vigilance with regard to supervision of HSAs and community health volunteers, and supervision by project staff has been less frequent and systematic than anticipated. The supervision forms provided in the DIP (which originated with another project) are very detailed, but they focus primarily on health education activities, which is only one part of the HSA's job. They need to be reviewed and modified to include other components particular to KCSP.

Project staff have quarterly meetings with HSAs to plan the next quarter's activities. This provides an opportunity to supervise and guide their work, but because HSA's don't report against their work plans (what was done, what was not done etc), this opportunity is lost. Although HSA's say they plan according to community's needs, other than scheduling around U/5 and antenatal clinics, HSAs do not appear to follow a strategy or a plan when developing their work plans. As a result their work is rather haphazard, which weakens the project's hopes to achieve its objectives. Project Staff need guidance so that they in turn can help HSAs to better plan and execute their work.

Although the community health volunteers are not technically health workers in the same sense as HSAs or Medical Assistants, they are responsible for providing some very important services. For this to continue their performance needs to be monitored and supported systematically. This is the responsibility of the HSAs. While the DIP acknowledges this added responsibility and even includes a fairly detailed supervision grid, the evaluation team found that supervision of community health volunteers (TBAs, CBDAs, ORDP/GMVs and CHC) is not systematic or regular. None of the checklists mentioned in the DIP had been developed to help guide supervision. Contact with community health volunteers by the HSA is fairly frequent in most cases, but it consists more of collecting data, replenishing stocks and organizing events than supervision of tasks. As a result, as mention before, some problems have remained undetected and unsolved.

Training - The majority of the project's training efforts has been on the HSAs and the various community health volunteers. The HSAs and most of the volunteers are officially recognized MOH health workers and there are official job descriptions and training courses for each type of worker. The project added the T4T training, modified the training curriculum for CHC members, and had to develop courses for drama club members and ORDP managers. Some curricula were adopted from other projects (CHAPS and STAFH). Almost all courses and participants were assessed through the use

of pre and post-tests, which, in the case CBDAs, was used to eliminate trainees who had not reached the required skill/knowledge level.

As with most child survival projects, the majority of the first two years of the project has been spent training health workers and community health volunteers. These efforts are directly related to capacity building (in this case of the partner organization) and to sustainability. The DIP sets forth a very ambitious and detailed training plan with no less than 32 training events planned, and the project has, to a very great extent, adhered to the plan. (See Attachment 5 for an up-dated Training Plan Matrix.) As Table 2.1 shows, 26 training events have been implemented for a total of 537 individuals.

Since most of the training provided by the project has been for health workers and volunteers who have been newly recruited, proof that their training was successful is evidenced by their work. Thus, as proof of successful training project staff can point to the initiation of and participation in U/5 clinics and antenatal consultations; an increase in family planning acceptors, and reported increased use of condoms to prevent STDs. The Health Services Assessment is also evidence of successful training. The report indicates that for the most part, health service delivery is satisfactory.

IMCI Training - Central to several of the project's technical components (immunization, ARI, malaria and diarrheal disease control) is training of Medical Assistants in Integrated Management of Childhood Illnesses. Shortly after the project was funded, UNICEF chose Kasungu District (in part because of the presence of Project HOPE) as an IMCI pilot site. This meant that UNICEF would sponsor the training of all MOH clinic managers in the district, including the Medical Assistants employed by PAL. The training has also been facilitated by the project's own IMCI trainer. Implementation of the integrated approach should result in fewer missed opportunities for vaccinations as well as more systematic clinical assessments and management of ARIs, malaria and diarrhea.

Table 2.1
TRAINING PROVIDED BY THE
Kasungu Child Survival Project

Person Trained	Number	Courses Attended
Health Surveillance Agents	15	Initial training, Training for Transformation, CBD and Supervision of CBD Agents, Cold Chain Management, Epidemiology for Decision Making, ARI and use of Respiratory Timers
Medical Assistants	2	Training for Transformation, Cold Chain Management, Epidemiology for Decision Making, ARI and IMCI Case Management
Community Health Committee Members	165	Introduction to primary health care and community development; and refresher course
Community Problem Solvers	80	Training for Transformation
Village Health Committee Members	210	Introduction to Primary Health Care and Community Development
Community Based Distribution Agents	19	Family Planning Counseling and Contraception distribution
Oral Rehydration Point Managers/ Growth Monitoring Volunteers	29	Diarrhea Disease Control; Nutrition and Prevention of Malnutrition; Growth Monitoring, and refresher course
Traditional Birth Attendants	19	Antenatal Consultations and safe delivery practices
Youth Drama Club Members	56	Using drama for the prevention of STD/HIV/AIDS
Adult Drama Club Members	22	Using drama for the prevention of STD/HIV/AIDS
Total	**537**	**26 training events = 6,154 person days of training**

3. Sustainability Strategy

The Kasungu Child Survival Project's chances of sustainability are very high. This is due primarily to the design of the project – it's partnership with PAL, a for-profit institution - not to its sustainability plan, however. In fact, the DIP does not include a plan, per se, but rather an incomplete list of elements related to sustainability. It is time, therefore, to take these elements and to develop a detailed plan with full participation of the three partners. This plan should include clearly defined objectives and indicators, should set forth strategies to achieve the objectives and attach an action plan with timeframe. A logical framework (matrix) format would probably be useful in this effort. Once designed, the project staff and steering committee should closely monitor execution of the sustainability plan.

Despite the absence of a comprehensive sustainability plan, the evaluation team was able to assess the different elements of the sustainability plan. Of the 11 elements related to the sustainability plan, only one," HSAs in place as permanent employees of Press Agriculture", has been fully achieved. The others still require a lot of work, as described in Table 2.2.

Table 2.2
Sustainability Plan Up-date

Sustainability Plan Element from DIP	Status at Mid-Term
Health Surveillance Assistants in place as permanent employees of PAL	HSA's have been in place since Nov. 1999. What constitutes "permanent" needs to be more clearly defined in order to accurately assess this objective.
HSAs have the skills to train and supervise CBDAs, CHCs, mothers clubs, and ORDP volunteers.	HSAs have been trained to supervise CBD Agents, but not the other community volunteers. Supervision remains weak. It is not really the responsibility of HSAs to "train" these volunteers. Perhaps "support" would be a more accurate term.
HSAs have the skills to utilize the T4T methodology.	They have been trained, but they do no have the skills to use the T4T method themselves.
Medical Assistants have the skills to utilize IMCI methodology, supervise HSAs, and manage patient loads and drug inventories.	Medical Assistants have been trained in IMCI and will need support and monitoring in its use; They do not currently supervise HSAs. A system to monitor drug inventory management will need to be developed as part of the sustainability plan.
Press has developed and implemented a plan to increase its capacity to develop, implement, and evaluate community-based Child Survival interventions.	PAL is still considering The Development Center's Report. However, it is not clear that PAL senior management considered the report's recommendations during the most recent five-year planning session. The extent to which PAL acts to execute the recommendations will determine the sustainability of the health system.
Through a partnership with UNICEF and the DHMT, health services throughout the district have been strengthened and improved	UNICEF is supporting the implementation of the IMCI approach in the district. If the health care providers follow the protocol and if they have the means to implement it (drugs/vaccines available) the health services should be improved. Drugs, ORS and vaccine stock-outs threaten to undermine the training, however.
Long-term relationship created between the DHMT and health service management on the Press estates	Signs of this are evident. Systems for the re-supply of drugs and supplies are being developed, though estate workers say they are not treated equally. The DHO has attended one Steering Committee meeting and hopes to remain in his position for at least a year.

Expenses of HSAs, appropriate medications, support of community volunteers, and estate health facilities included in Press budget.	While expenses for HSAs, and estate clinics are being covered, PAL still does not have a separate budget line item to support the health delivery system. Having a separate budget line item would demonstrate long term commitment to the HDS.
Press health providers have access to continuing in-service training through relationships with UNICEF and the DHMT	At present in-service training is facilitated by the project. A mechanism, such as hiring a Health System Delivery Manager, would be needed to sustain this effort.
Permanent maternity services will be available at the estate health facilities	Through this project, the PAL Chief Executive has committed to constructing 2 maternity units, but this has not been accomplished yet. PAL has hired a nurse-midwife for E/80, however, and intends to hire another shortly. This is also evidence of their commitment.
Increased capacity to provide clinical services through FP shelters, Under-5 clinics, and mobile services provided by HSAs and medical assistants	The capacity of HSAs and Medical Assistants to provide clinical service has been increased through the various training events. However, continued access to in-service training and regular, high quality supervision of both needs to be ensured in order for this capacity to be sustained over time.

While much work will be needed to ensure the viability of the estate health delivery system, the prospects for sustaining the activities undertaken by KCSP are very good. This is because, unlike many other child survival projects, the health workers who are central to achieving the KCSP objectives, HSAs and Medical Assistants, are paid employees of the partner organization, PAL. This status contributes to their sense of loyalty and commitment to PAL. Furthermore, PAL has demonstrated its commitment to making the estate-based health delivery system operate effectively by supporting the HSAs and health system as a whole in more ways than is required by the Memorandum of Understanding. This reality makes sustainability more likely than in programs that depend on project-employed field agents or who work through government employees or only community volunteers. Through the project links between PAL and the Ministry of Health, in particular the DMHT, have also been forged, and these links will also serve to sustain health activities when Project HOPE withdraws.

4. Cross Cutting Approaches - Findings and Recommendations

Community Mobilization

1. Finding

It has taken an inordinate amount of time (more than four months) to replace a HSA who resigned. While waiting for a replacement to be hired, another HSA has taken on 2 additional estates plus the work of the CBD Agents. As a result of work overload, the work on all of the four estates has slowed considerably.

Recommendation

PAL needs to apply its hiring practice with regard to HSAs with the same rigor that it is applied to management level positions.

2. Finding

Project designers did not understand the role that PAL middle management (Area Development Managers, Operations Managers, and Estate Managers) would need to play for the success of the project. Their role was not defined in the proposal and PAL senior management did not adequately inform middle management about the project or their responsibilities to it. While most of the Estate Managers seem to understand the benefits of having a health delivery system on their estates, the lines of authority, and roles and responsibilities of these managers toward the project are still not clear. In some cases this has hindered project implementation and achievement of project objectives.

Recommendation

Press Agriculture needs to include the Project Manager in (part of) the monthly meetings with the ADMs, OM and Estate Managers. The purpose of his participation would be to clarify and define the Manager's role in the project. To do this, the Project Manager would only need to attend that specific part of the meeting.

- Each time there is training event or an activity, all of the Estate Managers should be clearly briefed as to the reason for the activity and how it will help improve the health of the workers and their families. They should be invited to any "graduation" events and installation of new health volunteers. Their role as partners with the project should be solidified.
- PAL should set up a system to recognize and provide an award to those estates that have the highest health status achievement among laborers. For example, best child immunization coverage; highest rate of family planning use; highest rate of condom use; highest attendance at outreach clinics; fewest malnourished children etc.

3. Finding

Project staff and HSAs do not consistently consider the schedule and needs of PAL middle management when scheduling health activities. Furthermore, the schedule of training events conducted by the MOH, and which the project is obliged to respect, also does not consider the routine of tobacco and coffee estates. Consequently, some activities are not well attended by project beneficiaries.

Recommendation

- At the monthly/quarterly meetings between the project manager and estate managers, the program of project activities should be discussed and dates set for such things as training events and Health Fairs that are convenient to both parties.
- PRESS should consider institutionalizing group meetings between estate managers and HSAs. In this way, issues of concern to many, such as modalities for "sharing" an HSA could be worked out between them and the adopted procedures or decision made known to all at the same time.

4.Finding

While the project proposal is quite clear about what activities will take place on the estates, there is less clarity about the activities to be implemented in the 22 villages and the role of the HSAs vis-a vis those villages.

Recommendation
The Project staff should discuss this issue with the PAL contact person and come up with a proposal. The proposal should then be presented to the Steering Committee for discussion and approval. The decision of the committee should then be made official and the activities entered into the project's work plan.

Behavior Change Communication / IEC

5. Finding
Although a good part of the project depends on health education, there is no detailed and comprehensive BCC strategy. As a result the staff, HSA's and community volunteer's activities are not coordinated and key barriers to behavior change may not have been identified. The staff does not appear to have the necessary experience in BCC strategy development to develop one on their own.
Recommendation: The staff, with additional Technical Assistance, should develop a BCC strategy. Given the attention this would require, and that it should be considered a capacity building activity for the staff, it would be most effective if this exercise was undertaken off site (away from the office).

6. Finding
The project has acquired many different types of visual aids and BCC promotion materials from the Ministry of Health, and many of these are exceptionally good. However, the majority of them are posters that are best suited for use in a static facility, and for conveying one message. Very few of the visual aids provided are suitable for small group work and home visits; the type of health education activities the estate health volunteers and the HSAs are most likely to conduct. Furthermore, most posters do not lend themselves to stories and problem-solving themes, which are very effective in engaging the audience and promoting behavior change.
Recommendation:
Since there are many NGOs working in Malawi in the area of MCH/PHC, Project HOPE/Malawi should contact these NGOs to find out if they have such things as flip charts and the like which are more easily carried and lend themselves to story-telling and problem-solving. HOPE Center should also see if any of the countries in Southern Africa in which they have PHC activities have appropriate IEC materials that could be adapted to the Malawian context.

7. Finding
Each of the project's eight interventions has from 8 – 22 messages. While all of the messages are important to each intervention, they can not all be considered "key messages". If the HSAs give equal importance and time to each message, they are unlikely to produce the desired behavior changes during the life of the project.
Recommendation:
The project staff should go through the list of messages in the DIP and identify those that are linked to the specific objectives (revised at the time of the MTE). These should be separated out from the rest of the messages (put at the top of the page and framed, for example) and identified as the "key" messages of the project. The reason for this should

be discussed with the HSAs during a regular quarterly meeting, at which time the HSA's should be instructed to give these messages high priority (more time and more frequency) when they are planning their schedule of health talks..

8. Finding
In general video projection is not the most effective or sustainable means of health education in developing countries. Equipment such as VCRs and TV monitors are costly, difficult to operate under the conditions encountered in most developing countries and practically impossible to maintain, let alone sustain. The screen of a TV is too small to effectively reach a large audience (attracted by the modern technology) and few audience members are able to hear and understand the dialogue, unless by good fortune, the video is in local language. And finally, videos are generally very passive and don't lend themselves to interactive problem-solving.
Recommendation
Evening entertainment activities should focus on presentations of the local drama groups, if possible, and perhaps small men's groups facilitated by the HSA and/or CHC members.

Strengthening Local Partner Organizations

9. Finding
At present there is no one who is technically qualified to supervise and oversee the functioning of the estate health services (clinics and the work of the Medical Assistants). Consequently, there is a lack of quality control, support for clinic staff, and coordination of activities. Furthermore, valuable assets, such as the ambulance are not being used effectively.
Recommendation
PAL should plan to hire a senior clinical officer to coordinate and oversee all health activities and to supervise Medical Assistants and HSAs.

10. Finding
At present PAL does not have a line item in its budget designated for health service provision. As a result, planning for improvements in quality of care (implementation of IMCI, for example) is very difficult and occasionally there are inadequate financial resources to support quality service provision (adequate supply of drugs, supplies such as gloves and equipment such as a refrigerator).
Recommendation
The PAL Project Contact person and the KCSP Manager should work together to develop a tentative budget for health services on the estates. This should include the elements necessary to support implementation of IMCI (essential drugs, supplies and equipment in adequate quantities) in the two clinics (E/32 and E/80), an inter-estate emergency evacuation plan and on-going support for HSAs (spare parts for bicycles etc). This proposed budget should then be submitted to the PAL senior management and Board for review and modification if necessary and then adopted as part of PAL's operational budget.

Strengthening Health Worker Performance

11. Finding
Project trainers visit HSAs quite regularly. However, supervisory visits are not well structured or systematic. As a result, some HSAs and Community Volunteers are not conducting their work as desired.
Recommendation:
See recommendation #3 in Chapter Three

12. Finding
HSA's are not supervising community health volunteers in a regular and systematic manner. As a result, some of their work is erratic, it lacks balance (i.e. it focuses too much on some interventions (sanitation) and not enough on others - vaccinations) and some errors persist.
Recommendation
See recommendation #3 in Chapter Three

13. Finding
- Most HSAs appear not to follow a standard efficient system when developing their monthly work plans. HSAs who cover more than one estate do not always spend equal amounts of time on each estate. This has caused some resentment among Estate Managers.
- HSA's are not reporting against their work plans each quarter; consequently project trainers can not/are not tracking the work of the HSAs effectively.

Recommendation
- Project staff should develop guidelines to help the HSAs to develop their work plans. Guidelines might include the following:
  - equal number of days on each estate;
  - attendance at outreach U/5 clinics on the estates they are responsible for;
  - collection of information (quarterly)
  - supervision of Community Health Volunteers
- Trainers should get a copy of the HSA's work plans for the next quarter and these should be posted in a prominent place for easy referral;
- During quarterly meetings each HSA should report (written) on his/her activities against the original work plan with explanation for discrepancies (deviations) and plans for the future.

Sustainability

14. Finding
The project staff consistently considers sustainability issues when making programmatic decisions and the detailed implementation plan identifies some key elements required for long term continuation of the project. At present, however, the project partners have not joined forces to develop a detailed sustainability plan that includes sustainability objectives, strategies and a plan of action. Without such a plan there will not be a

cohesive and comprehensive effort among the partners to ensure the long-term viability of the health activities.

Recommendation

Project partners, including representatives from various levels of PAL management, need to dedicate some time together to develop a detailed sustainability plan and exit strategy. To increase the effectiveness of this exercise, it should be done "off site" away from distractions, and the work guided by an experienced facilitator who is somewhat familiar with the project and Press Agriculture. Once the plan is developed and agreed upon, the Steering Committee should monitor its execution on a quarterly basis.

Chapter Three Program Management

A. Planning

Project HOPE's Country Director and PAL senior management began planning the initial stages of the project when funding for the project was announced in 1998. As a result, the recruitment and training of HSAs began during the first quarter of the project and two project trainers were recruited and employed in that same time period. The person initially slated for the project manager position did not finally except the terms of employment and it was not until January 1999 that a new Project Manager took up the position. In the meantime, a manager of another project supervised and guided the project. The project also experienced difficulty recruiting and retaining a Health Information System Specialist and IMCI Trainer both of whom were only employed in June 1999. Difficulties in filling key positions has resulted in some delays as indicated in Table 3.1, but for the most part the project staff have been able to adhere to the work plan.

Two key activities have been delayed which could have a detrimental effect on the outcome of the project. These include implementation of the Institutional Capacity Assessment and subsequent execution of the action plan, and construction of the two maternity units. The assessment was supposed to have taken place in June 1999 but was not implemented until December/January. The report was only issued in March 2000 and discussed during the July 2000 Steering Committee Meeting. Following the study the project partners were supposed to have developed a capacity-building plan together, but it appears that PAL intends to do this on their own. In any case, no plan had been developed at the time of the mid-term evaluation and now there is less time available than originally anticipated to execute the plan. This is significant because the future of the health system depends on PAL developing and demonstrating its capacity to manage and support it.

Another important delay is the construction of the maternity units as part of the two estate clinics. These were to have been constructed between April and September 1999. Restructuring within PAL during that time period coupled with a less than optimal market year for tobacco probably contributed to the delays. Nevertheless, the Chief Executive of PAL assured the evaluation team that construction on the maternity units would begin during the next quarter, and the fact that nurse mid-wives have been recruited and hired to staff the maternity units is proof of their intentions.

Construction of the two family planning shelters has also been delayed due to cost increases. This delay is not too serious, however, since the purpose of the shelters (which would not be permanently staffed) was to facilitate access to services that are already being provided.

Table 3.1 provides details regarding project implementation in relation to the work plan provided in the DIP. The letters within parenthesis indicate topics where additional information/explanations are provided in other sections of this report.

Table 3.1
Work plan Up-date

Activity	Time Frame Anticipated	Actually Implemented
Hire project staff (a)	10/98-1/99	10/98 – 1/00
Identify and recruit HSAs	10/98	11/98
Train HSAs	11-12/98	11-12/98
Conduct Community census	12/98	12/98
Train staff in KPC survey methodology	1/99	2/99
Conduct baseline KPC survey	1/99	2/99
Prepare DIP	2/99	3/99
Finalize MOU with PAL	2/99	2/99
Focus Groups to verify STD/HIV/AIDS language (b)	6/99	Not done
Focus groups to identify local methods of malaria prevention and cultural beliefs about SP side effects (c)	7/99	Not done
Staff training in the use of qualitative data collection took for exclusive breastfeeding information	3/99	4/99
Conduct Exclusive breastfeeding survey	4/99	6/99
Create project health information system (d)	4/99	4/00
Recruit compound residents to be CHC members.	3-4/99	4/99
Initial training of CHC members	4-5/99	6-7/99
Train CHC members in T4T	5-6/99	2/00
Recruit adult or already formed drama group members	4-5/99	6/99
Train compound adults in drama group methodology	5/99	6/99
Train adolescents to be drama group members	4-5/99	6/99
Train adolescents in nearby villages in Drama group M.	6/99	6/99
Family planning Core provider refresher training (e)	8/99	Not done
Refresher training in syndromic management of STDs (f)	4/99	Not done
Create staff skill assessment and develop professional development plan (g)	4/99	Not done
Create ORS distribution point reporting form	6/99	
Recruit vols to be ORDP managers	6/99	10/99
Initial trainings of ORDP Managers	6/99	10/99
Recruit vols to be CBD Agents	6/99	7/99
Initial training of CBD Agents	7-8/99	7-8/99
CBDA supervision training	8-9/99	7-8/99
HSA and general personnel supervision training (h)	8/99	Not done
Staff training in computer skills	5/99	On-going
Capacity Assessment of PAL	6/99	12-1/00
Establish Cold Chain in PAL estate clinics	4-5/99	Not done
Cold Chain management training for MA and HSAs	5/99	11/99
Assess vaccination skills of MAs and train if necessary	4/99	
Begin mobile U/5 clinics	5/99 on-going	7-9/99

Activity	Time Frame Anticipated	Actually Implemented
Conduct participatory process on how to structure and manage a community managed immunization monitoring system (i)	6/99	Not done
Develop outreach activity tracking form for MAs (j)	7/99	Not done
Create capacity building plan with PAL (k)	7/99	Not done
Provide technical assistance to PAL for the building of maternity units on estates 80 and 32	4-9/99	Not done
Quarterly health fairs (l)	quarterly	Bi-annually
Nutrition Assessment	11/99	3/00
Health Facility Assessment	10/99	4/00
Create mother's club curriculum (m)	10/99	Not done
Train HSAs in mother's club methodology	10/99	Not done
Begin establishing mothers clubs in pilot compounds	11/99	Not done
Training of medical assistants in drug inventory management (n)	12/99	Not done
Annual assessment of HSA skills and creation of development plan (o)	10/99	Not done
HSA T4T refresher trainings	7/00	Not done
Train selected member of CHC to be growth monitors*	11/99	10/99
Adult drama club refresher training	7/00	Not done
Adolescent drama club refresher training	5/00	Not done
Create TBA reporting form and recruit TBAs for training	10/99	10/99 & 8/00
Initial training of TBAs	10/99	10/99 & 8/00
Refresher training for facility-based mid-wives (p)	1/00	Not done
Refresher training in CBDA methodology	5/00	Not done
ORDP Manager refresher training	2/00	7/00
Training of HSAs in epidemiologic methods for com. Assessment	2/00	3/00
Refresher course for CHC and T4T	3/00	Not done
Build one family planning shelter	10/99	Not done
Training of HSA and MAs in use of timers for ARI diagnosis	10/99	4-5/00
Conduct DRF feasibility study (q)	1-2/00	Not done
Assessment of current emergency transport resources and activities	11/99	Not done
Implement T4T process with community to identify barriers and solutions to emergency transport problems	12/99	Not done
Create emergency transport working group to develop improved emergency transport services (r)	12/99	Not done
Conduct mid –term KPC survey	July 2000	July 2000
mid-term evaluation	August 2000	August-Sept. 2000

a. See Chapter Three section 4 for issues related to personnel
b. See Chapter Two , Progress by Intervention Area, section on HIV/AIDS/STDs
c. See Chapter Two, Progress by Intervention Area, section on Malaria
d. See Chapter Three, Section 7 for an explanation of issues related to the HIS.
e. See Chapter Two, Progress by Intervention Area, section on family planning

f. See Chapter Two, Progress by Intervention Area, section family planning
g. See Chapter Three, Section 2, Staff Training
h. See Chapter Two, Capacity Building Section, Strengthening Local Partner Organization
i. Don't know anything about this
j. Need info on outreach tracking form for MAs
k. See Chapter Two, Capacity Building Section, Strengthening Local Partner Organization
l. See Chapter Two, Cross Cutting Issues, Communication for Behavior Change
m. See Chapter Two, Cross Cutting Issues, Community Mobilization
n. Training of MAs on drug inventory
o. Annual assessment of HSA skills and creation of development plan
p. See Chapter Two, Progress by Intervention Area, section on maternal health
q. Conduct DRF feasibility study
r. See Chapter Two, Progress by Intervention Area, section on ARI

B. Staff Training

The Kasungu Child Survival Project employs a total of six professional staff: a project manager, 3 trainers, an HIS Specialist and an Administrator. While every staff member has several years of experience in their particular field, none had prior experience working for an NGO on a community-based project, which requires a broad range of knowledge and skills. Furthermore, the present HIS Specialist had no prior experience working with data specific to the field of public health. As a result of this general inexperience, the whole staff has had to acquire skills and knowledge while "on-the-job". To a great extent they have responded well to the challenge.

Despite their relative inexperience and need for support, Project HOPE has not invested significantly in the project staff. Although Project HOPE intended to conduct an annual assessment of the staff's skills in order to plan for professional development, this has not been done, and, as Table 3.2 indicates, very little formal staff training has been provided.

Table 3.2
Staff Training

Title of Course	Type of Trainee	Dates	Duration	No. of Trainees
Adult Learning Techniques	Trainers	1999		3
Qualitative Data Collection of Exclusive Breast feeding	Trainers	4/ 26 – 5/1/ 99	5 days	3
Finance for Non Finance Managers	Project Manager	11/22 – 26/99	5 day	1
HIS Epi Info	HIS Specialist	1/18 – 22/ 00	3 days	1
Training of Trainers in IMCI	IMCI trainer	7/3 – 7/2000	5 days	1

C. Supervision of Program Staff

The Project HOPE/Malawi Country Director (CD), whose office is located in Blantyre, a five-hour drive away, supervises the Project Manager. The Country Director visits the project once per quarter spending about three days in Kasungu. In addition to this, every two months there is a Project Manager's meeting, which the KCSP manager attends. These visits, along with the review of quarterly reports provide the means for the CD to supervise the Project Manager. This regime would normally have been sufficient; however, in as much as this is Mr. Msapato's first Project Manager's job with an NGO, he and the staff would have benefited from more frequent support and supervisory visits.

The Project Manger supervises his staff through staff meetings, review of reports, work plans, financial reports and health data, and observation. Staff meetings are held each week to review work plans and organize logistics, and assessment of staff performance appears to be based on adherence to the work plan rather than quality of work. Other than the regularity of staff meetings, supervision of project staff appears to be unstructured and unsystematic. As a result, for example, the project trainer's supervision of HSA's has also been sporadic and unproductive. This could be attributed to the project manager's unfamiliarity with personnel management, his irresolute demeanor or simply to the absence of supervision protocols for professional staff.

The DIP includes a detailed discussion of the proposed supervision system, which places much of the responsibility for supervision on the two Medical Assistants and the 15 HSAs. The problem with the plan is that the Medical Assistants did not participate in its development. If they had, perhaps they would have raised the issue of lack of time to supervise, lack of transport to reach the estates, lack of protocols and lack of skills and experience. The project intended to address the latter deficiency through training and the development of supervision checklist and schedule, but the course and the instruments have not yet been organized. The issue of time was supposed to have been addressed by training two HSAs to serve as supervisors of other HSAs, but this has not been implemented yet either.

Since Medical Assistants are not supervising HSA's, the project trainers have assumed the responsibility for this. To facilitate supervision and follow-up, the 34 estates have been divided into two approximately equal areas (East and West Areas) and one trainer is responsible for supervising 6-7 HSAs. The third trainer (a nurse who was hired only in June 1999 and specializes in TBA training and IMCI), backstops (and supervises) the trained TBAs on all the estates and will oversee implementation of the IMCI program. As described in Chapter Two, while trainers visit HSAs regularly, supervisory visits are not well structured or systematic and as a result some HSAs are not functioning as desired.

D. Human Resources and Staff Management

As described in the previous section, the project's five professional staff are managed by the Project Manager. All staff members have a job description and the appropriate

personnel policies and procedures are in place. The Memorandum of Understanding with PAL outlines the responsibilities of each partner.

After a bit of a rough beginning, the project staff appear to get along well. The three project trainers coordinate their work with each other and they sometimes conduct field visits together. It is not clear that the trainers appreciate the importance of the HIS Specialist or that the HIS Specialist fully understands the significance of the HIS system. To better understand the program and the way the HIS is being used, the HIS Specialist needs to visit HSAs and community health volunteers in the field more frequently – at least monthly.

Two of the three project trainers were hired in November 1998 and the third was employed in June 1999. Prior to the arrival of the third trainer, the project area was geographically divided between the two trainers, with one trainer taking responsibility for the estates located in the Eastern Area and the other taking the Western Area. When the third trainer was hired programmatic task assignments were informally designated and each trainer assumed prime responsibility for certain interventions. At present, one trainer is considered the "lead person" for the diarrheal disease control and immunization activities. Another is responsible for the family planning and HIV/AIDS/STD activities; and the third trainer is primarily responsible for IMCI (ARI and malaria case management) and the maternal health (including breastfeeding and Vitamin A and iron) activities. While this arrangement may have seemed practical at the time it was developed, because of this programmatic division of labor none of the trainers has a thorough understanding of the entire project. In addition to robbing the project of their collective input, this imbalance hinders effective supervision of HSAs who provide services in each of the eight intervention areas. Another more effective and practical way of dividing the tasks needs to be found.

Recruiting and retaining a qualified HIS person has been a challenge to the project. The first HIS Specialist was employed only in June 1999, eight months into the project. He only stayed for two months and it took another four months to find a replacement. In the meantime, project staff created the health information system themselves with assistance from other projects in Malawi and the MOH. Recruitment and retention problems are due primarily to two factors: the scarcity of information services (IS) specialists nation-wide, and the relatively remote location of the project. Having now hired and trained a second HIS Specialist, the challenge before the project is to retain him by providing incentives such as formal and on-the-job training and making sure that his contributions to the project are noted.

E. Financial Management

Project HOPE/Malawi maintains a Finance and Administrative Officer in their country office in Blantyre who backstops financial management of all Project HOPE projects in Malawi. Likewise the KCSP has an administrator who, among other things, is responsible for preparing quarterly financial reports for submission to the Blantyre Office. Quarterly budgets are based on projected annual budgets, and expenditures are

kept within these limits. A cursory review of a cumulative financial report (Oct.1, 1998 to date) indicated that spending is on target and that no budget line item over-runs have occurred.

Financial sustainability of the project is not a major issue in this project because PAL has already assumed responsibility for a considerable portion of the recurrent costs (HSA salaries, accommodation, and bike repairs) and the HSAs and community health volunteers are already receiving support from the DHMT. Securing the future of the project will depend primarily on institutionalizing the estate-based health delivery system by creating a HDS budget line item that also covers the salary of a health system coordinator who is technically qualified to oversee it.

F. Logistics

With the exceptions of stock-out and shortages of drugs and vaccines which should be provided by the MOH, logistics have not been a major obstacle to the project thus far. Crucial materials, supplies and equipment have been procured and received in a timely fashion. At times, having only one enclosed vehicle has been a challenge to project staff, but creative problem-solving and good partnerships have enabled the project to meet each specific need. At other times, specific inputs such as baby weighing scales and TBA kits have not been forth-coming from the MOH (via UNICEF) as anticipated. As a result related activities have been delayed or have had to be modified and the project has had to purchase some equipment that was not budgeted for.

No logistics challenges are anticipated for the remainder of the project.

G. Information Management

Despite the high turnover in the HIS Specialist position, the project has developed a functional health information system. The health information system centers on the HSA Monthly Report Form. This is a six-page instrument that is used to gather and report data from amongst the various health service providers (HSAs and community health volunteers). The form has undergone some changes during the life of the project but the current instrument is divided into 6 sections: immunization, diarrheal disease control, malaria control, family planning and maternal care, ARI and inspections. Vitamin A and iron data are included under Family Planning and Maternal Care as well as EPI. No data on exclusive breastfeeding is collected, but information regarding IEC activities and "other activities" is recorded on the form.

Until May 2000 each HSA completed one form for his/her estates, which meant that information from two or more estates was combined on to one form and the information could not be desegregated. In June 2000 it was decided that the information should be separated and now each HSA completes one monthly report for each compound. While this enables the activities on each compound to be tracked in a more accurate way and facilitates identification of "problem compounds", for those HSAs who cover more than two estates it is a very time consuming task.

Much of the data reported on the monthly report form is collected by HSAs by going from house-to-house on each estate and recording information from each child's Road-to-Health Card, from the immunization card and the mother's antenatal card. Information collected this way includes, immunization status for both mother and child, Vitamin A status for mother and child, attendance at antenatal consultations, iron supplementation for pregnant women, under-fives growth status, and the number of children weighed that month. Because this information comes directly off of the cards themselves, it is quite reliable.

Other information comes from reports kept by the community health volunteers. For example, the family planning data comes from the CBD Agent's records regarding clients recruited, supplied and referred. Data regarding diarrheal disease control activities, including the distribution of ORS packets, is copied from the ORDP Manager's reports as well as the HSAs' records of ORS distribution. This information is only as reliable as the recorder's skills and since supervision of these volunteers is not regular or comprehensive, the reliability of this information is questionable.

The sources of other types of information are also uncertain. For example the numbers of children under age two that had diarrhea and the number referred to hospital is not collected in a timely fashion or linked to a reliable source. It is the same for identification and referral of malaria and ARI cases. Furthermore, discussions with HSAs regarding data collection suggests that not all HSAs are using the same sources of information and that some confusion exists in the way the report should be completed. Consequently, the consistency of the data is in doubt.

The monthly reports submitted by HSAs are compiled each quarter, analyzed and discussed among project staff and with HSAs during regular quarterly meetings. Problems revealed by the data are discussed and efforts made to identify solutions. For example, in response to a reduction in vaccination coverage, the staff decided to conduct an immunization survey to identify the reasons and potential solutions. At one point, the staff also concluded that HSAs were not spending enough time on health education activities, and as an incentive the reporting form was revised to include a more detailed section on BCC activities.

The HSA's send their monthly reports to the Medical Assistants as well as to the project. The Medical Assistants combine the HSA's information into their monthly reports to the DHMT. In this way, the District Health Officer remains apprised of the progress of the project and his office can assume credit for the work by including this information in their own reports to the Ministry of Health.

The project has conducted a total of five assessments/mini-surveys. These include a) the Health Services Assessment, b) The Nutrition Assessment, c) an Institutional Assessment of PAL (The Development Center Report); d) an Immunization Survey and e) a survey on exclusive breastfeeding. The project also conducted a KPC survey in July 2000, the results of which were not finalized at the time of the mid-term evaluation. Project staff

were expected to have been conducted two other surveys, one on people's attitudes about drugs used to treat malaria, and another to better understand attitudes related to sexuality, but these have been delayed.

Specific information regarding each assessment is included in Chapter Two in the section it relates to. Of the five surveys, the Institutional Assessment of PAL and the Health Services (Quality of Care) Assessment have provided the most useful results and have been well worth the time and effort. The results of the other three are of less value technically in part due to the lack of experience of the staff in conducting such assessments and to the overly large scope of the Nutrition Assessment. Given these results and the amount of other (perhaps more important) work that lies ahead, it is not clear whether implementing the other two surveys is the most effective use of the staff's time. Staff time would be better spent making sure that the results of the first two studies are used to institutionalize the health delivery system within PAL and to ensure the quality of health services.

H. Technical and Administrative Support

The project has received external technical assistance on four occasions: to conduct the nutrition assessment, to conduct the institution capacity-building assessment of PAL, to implement the health services assessment and to facilitate the mid-term evaluation. All of these types of technical assistance were foreseen in the DIP. Two of the four sources of technical assistance were local (in-country). With the exception of the technical assistance provided to conduct the nutrition assessment, all other assistance was considered satisfactory and met expectations. The consultant who implemented the nutrition study took five months to complete her report, and the mid-term evaluation team facilitator found some of her recommendations to be impractical.

Although the DIP does not anticipate the need for external technical assistance during the second half of the project (other than for the final evaluation), findings from the mid-term evaluation suggest that outside technical assistance will be necessary to help develop a comprehensive BCC strategy as well as a detailed sustainability plan. Furthermore, if the staff decide to conduct the two other surveys, professional assistance should be sought to ensure reliable, useable results and a productive learning experience.

Project HOPE provides backstopping services through bi-annual visits to the project and by maintaining regular contact with the country office between visits. Headquarters staff also receive quarterly project reports which enables them to monitor progress and provide support as necessary. Financial reports showing expenses incurred in the States as well accumulative expenditures are also provided to the country office. Project staff report that support from headquarters is timely and effective. The Africa Regional Manager, who is at the same time the project backstop officer, spends approximately two months per year in direct support of the project. Furthermore, she has recently moved to Lilongwe which will enable her to provide additional support to the project.

I. Findings and Recommendations Related to Program Management

Planning

1. Finding
For the most part the project has been able to adhere to the work plan set forth in the DIP. However, two important activities are significantly behind schedule: development of the capacity building plan for PAL and construction of the two maternity units. It appears that PAL plans to develop it's own capacity building plan, without input from the project.
Recommendation

- The project manager should discuss this issue with the recently appointed PAL contact person so that he understands Project HOPE's interest and concern in helping to build PAL's capacity with regard to the health delivery system.
- The project manager should offer to work with PAL to develop a capacity building plan with timeframes, which is based on the recommendations of The Development Center Report.
- This plan should then be presented, discussed (modified if necessary) and approved by the partners at the next Steering Committee meeting.

Staff Training

1. Finding
Project HOPE has not invested appropriately in the professional development of their staff. Given the inexperience of the entire staff, there are too few opportunities for staff development while on-the-job.
Recommendation
As originally planned, Project HOPE should conduct an assessment of the skills and knowledge of all project staff, and from those results, develop a professional development plan for each person, which includes specific formal skills development opportunities.

Supervision of Program Staff

2. Finding
Project staff need more structured and directed supervision. Currently supervision focuses almost exclusively on operations (adherence to work plan) rather than quality and creative problem solving. All project staff lack experience in supervising personnel.
Recommendation
The Project HOPE / Country Director and Africa Regional Manager should discuss this issue with the project manager and together identify his strengthens and weaknesses. From this they should develop a strategy to build his capacity with regard to personnel supervision.

3. Finding

The supervision plan presented in the DIP has not been respected and supervision at all levels is weak. Neither the Medical Assistants nor the HSAs have received training in supervision as planned (with the exception of specific CBDA supervision training), nor have the proposed protocols been developed. Project trainers, instead of Medical Assistants are supervising HSAs, and HSAs are not effectively supervising community health volunteers. The continued provision of high quality health care depends on regular supervision.

Recommendation

- The project should organize a workshop with the project staff, the PAL medical assistants and the PAL contact person in attendance to develop a practical supervision plan. The details of the plan (who supervises whom, the frequency of supervision, the protocols to be used, the logistics required to implement the plan, training needed to develop skills etc) should be worked out to each participant's satisfaction.
- This plan should then be presented to the Steering Committee for approval and reports regarding its execution should be made at each subsequent meeting.

Staff Management

4. Finding

Each project trainer has assumed a lead role with regard to one or more of the eight interventions. This method prevents each trainer from being equally knowledgeable about each intervention and from effectively backstopping and supervising HSAs and community health volunteers.

Recommendation

- The project's program staff should brief each other on the details of each of the eight interventions including a review of training provided to HSAs and community health volunteers and the data gathering instruments used by each. The HIS Specialist and Administrator should attend this briefing so that they, too, can become very familiar with the different components of the project.
- Following this, program staff should equally redistribute (geographically) responsibility for backstopping and supervising project activities among the three trainers.
- In specific cases, problems that concern a specific technical area for which one trainer has more expertise can be referred to that person for resolution, if need be.

Health Information System

(Additional HIS findings and recommendations related to specific interventions can be found in Chapter Two, Sections A and B)

5. Finding

Evidence from the field suggests that not all HSAs are using the same sources of information for their monthly reports and that some confusion exists in the way reports should be completed. As a result, the consistency of the data is in doubt.

Recommendation

- The HIS Specialist and project trainers should write a protocol for the completion of the HSA monthly report. This should include where the information should come from – the specific source/document, how often, how to calculate it, if necessary.
- This protocol should be reviewed with all HSAs during a regular quarterly meeting and modified to reflect reality if necessary.
- Checking the statistics should be a part of regular supervision activities of the conducted by trainers of HSAs.

6. Finding
Although HSAs collect and submit reports on a monthly basis, the reports are analyzed and reviewed by project staff only each quarterly. HSAs appear to spend several days out of every month gathering this information (going door-to-door) and preparing monthly reports. This time would be better spent providing services and overseeing the work of the community health volunteers.
Recommendation
While the community volunteers who play a role in information gathering can continue to do compile and report data on a monthly basis to the HSA, the HSA should be required to collect his information and submit reports to Project staff on a quarterly basis.

7. Finding
The HSA monthly report form does not show the total number of children in the primary target age group (< 24 months). This makes it difficult for HSA's to assess their immunization coverage rates. At present the form collects information about the <5 age group, which is not a target audience for which this project is reporting (i.e. no specific objectives pertain to the under five age group).
Recommendation
- While activities and services involving children ages < 5 years of age should continue, the HIS Specialist should modify the HSA monthly report form to eliminate the information pertaining to under fives and should add a space to record the total number of children ages < 24 months.
- If need be, the HSAs can *estimate* the number of under fives by calculating the size of this age group based on the total compound population.

8. Finding
The HSA monthly report currently desegregates all information pertaining to children by gender. This is not required by AID, Project HOPE, or the MOH, serves no particular programming purpose and makes it difficult to figure the total number of children in a particular target group.
Recommendation
The HIS Specialist should modify the form to combine the genders of children.

9. Finding
With the arrival of a nurse/mid-wife, the clinic in Block 80 is beginning to provide antenatal services to pregnant women. There are a couple of types of information with regard to the antenatal services that need to be included in the monthly report.
Recommendation

The HIS Specialist and the Project Manager should meet with the Medical Assistant and nurse in Block 80 clinic to make sure that they understand what information needs to be reported to the project each month.

10. Finding

The staff has conducted a couple of assessments/studies on their own and participated in several other assessments and surveys. They have spent quite a bit of time on these efforts with mixed results. Given the quality of the work, and the tight schedules of the staff, it is not clear whether the time spent on these assessments and surveys has added enough value to the project to be worth the time spent on them.

Recommendation

- The Project Manger should seriously re-consider the value to the project of doing additional mini-surveys. Should a mini-survey be deemed necessary, professional guidance should be sought so that the results will be valid and the learning experience for the staff worthwhile.
- The Project Manager should use the Institutional Capacity and Health Services Assessments to plan capacity building opportunities for PAL, Medical Assistants, HSAs and community volunteers.

Technical Support

11. Finding

Additional technical assistance is likely to be needed during the second half of the project to help develop a comprehensive BCC strategy and to facilitate the development of a detailed sustainability plan. These needs were not anticipated or budgeted for.

Recommendation

- The project manager should develop scopes of work for the two technical assistants to clarify the work needed and the time required. An estimated budget should be developed from this.
- The project manager, in consultation with the Country Director and Regional Director, should then review the budget and determine if funds can be found to cover the costs of this technical assistance.
- If adequate funds can not be identified to cover both consultancies, priority should be given to the one related to sustainability. In-house consultants should also be considered.

Attachments

1. Baseline information from the DIP
2. Mid-Term Evaluation Team Members
3. Assessment Methodology
4. List of Persons Interviewed and contacted
5. Training Plan Matrix – up-date
6. Results Highlight – Sustaining Benefits
7. KPC Survey

Attachment 1 Baseline information from the DIP[7]

1. Field Program Summary

C. Percentage of Effort

The percentage of effort for each intervention is:

Control of Diarrheal Disease	10%
Immunization	10%
Breastfeeding Promotion	10%
Vitamin A and Iron Folate	10%
Acute Respiratory Infections	10%
Malaria	10%
Family Planning/Maternal Care	20%
HIV/AIDS/STDs	20%

D. Program Site Population: Children and Women

Total estimated Population : 29,000

2. Program Goals and Objectives[8]

Goal: To reduce maternal and child morbidity and mortality on the 34 estates of Press Agriculture in Kasungu District, Malawi.

The goal will be achieved through changing individual and household caretaking behavior; creating or strengthening community support systems; and increasing quality and access to preventive and curative health services.

Activities addressing individual and household behaviors will focus on prevention of illness; recognition of illness and danger signs; management of the ill child or laboring and post-partum mother; and prompt careseeking from appropriate facility-based providers. Community support system activities will focus on creating community-based competencies for supporting and encouraging behavior change; creating education and outreach mechanisms for community initiated prevention and management of illness; and development of emergency transport mechanisms. In the area of health services, new services will be expanded and improved.

[7] BHR/PVC gave permission to Project HOPE to follow a different format for their DIP. As a result, the sections that were requested to be included in the attachments do not correspond to those in the DIP. The report author has provided the information from the DIP that corresponds as close a possible to that requested in the guidelines.

[8] These objectives were revised after the DIP review. The revised objectives are included in the body of the Mid-term evaluation report.

DIARRHEAL DISEASE	
OBJECTIVES	INDICATORS
Increase from 18% to 30% the percent of mothers that breastfed their child more than usual during a diarrheal episode.	- % of mothers stating that they breastfed their child more than usual during a diarrheal episode occurring 2 weeks previous to the KPC survey
Of women already giving fluids to children <4 months of age, increase from 13.3% to 50% the percent giving the same or more fluids during a diarrheal episode.	- Of women already giving fluids to children <4 months of age, the % stating that they gave the same or more fluids during a diarrheal episode occurring 2 weeks previous to the KPC survey
Of women already giving solid or semi-solid food, increase from 75% to 85% the percent giving the same or more solid or semi-solid foods during a diarrheal episode.	- Of women already giving solid or semi-solid food, the % giving the same or more solid or semi-solid foods during a diarrheal episode occurring 2 weeks previous to the KPC survey
Increase from 66.5% to 75% the percent of women that have prepared ORS for treatment of diarrhea.	- the % of women stating that they have prepared ORS for treatment of diarrhea. - the # of women utilizing the ORDPs - the # of ORS packets distributed
Increase from 47.9% to 75% the percent of women who have prepared ORS that can correctly describe its preparation.	- the % of women who have prepared ORS that can correctly describe its preparation. - the % of women accessing the ORDPs that can correctly demonstrate preparation of ORS
Increase from 35.8% to 75% the percent of women who have prepared ORS that can correctly describe how to administer ORS.	- the % of women who have prepared ORS that can correctly describe how to administer ORS. - the % of women accessing ORDPs that can correctly demonstrate administration of ORS
Increase from 12% to 40% the percent of women that can name at least 3 danger signs of diarrhea that would cause them to seek advice or treatment.	- the % of women that can name at least 3 danger signs of diarrhea that would cause them to seek advice or treatment.
Increase from 12% to 40% the percent of women that can name at least 3 important actions a mother should take when a child is experiencing diarrhea.	- the % of women that can name at least 3 important actions a mother should take when a child is experiencing diarrhea.
Increase from 11% to 40% the percent of women who can name at least 3 ways to prevent diarrhea.	- the % of women who can name at least 3 ways to prevent diarrhea.

EPI	
OBJECTIVES	INDICATORS
Increase from 66% to 80% the percent of children 12 to 23 months of age that are completely vaccinated.	- % of children 12 to 23 months of age that present an under-5 health card during the KPC survey indicating that they have been completely vaccinated - # of children attending Under-5 clinics and vaccination activities
Decrease from 21.2% to 20% the dropout rate for immunizations.	- the % of children 12 to 23 months of age that began but did not complete their vaccination schedule

BREASTFEEDING	
OBJECTIVES	INDICATORS
Decrease from 41.9% to 25% the percent of mothers that state that a child should begin receiving fluids or foods in addition to breastmilk earlier than 4 months of age.	- the % of mothers that state that a child should begin receiving fluids or foods in addition to breastmilk earlier than 4 months of age.
Increase from 11% to 25% the percent of mothers that exclusively breastfeed to 4 months of age.	- the % of mothers that state that they exclusively breastfeed to 4 months of age.

VITAMIN A / IRON FOLATE	
OBJECTIVES	INDICATORS
Increase from 35.3% to 75% the percent of children older than 6 months of age that received vitamin A supplementation in the last 6 months previous to the survey.	- the % of children older than 6 months of age that received vitamin A supplementation in the last 6 months previous to the KPC survey as indicated in the Under-5 health card - the # of Vitamin A capsules administered at Under-5 clinics
Increase from 12.7% to 40% the percent of mothers that can name at least 3 foods that contain vitamin A.	- the % of mothers that can name at least 3 foods that contain vitamin A.
Increase from 25% to 75% the percent of women who can document receiving 2 antenatal visits during their last pregnancy.[3]	- the % of women who can document receiving 2 antenatal visits during their last pregnancy. - the # of women received iron/folate through a TBA - the # of women attending estate antenatal clinics

ARI	
OBJECTIVES	INDICATORS
Increase from 63.9% to 85% the percent of mothers who sought treatment for their child's cough, rapid or difficult breathing.	- the % of mothers stating that they sought treatment for their child's last episode of cough, rapid or difficult breathing. - # of mothers accessing estate health services for pediatric respiratory complaints
Increase from 49.2% to 75% the percent of mothers that sought treatment within 24 hours for children that experienced cough, rapid or difficult breathing.	- the % of mothers stating that they sought treatment within 24 hours for children under 3 months that experienced cough, rapid or difficult breathing. - # of mothers with children under 3 months experiencing respiratory symptoms accessing estate health services within 24 hours
Increase from 3.7% to 40% the percent of mothers that can name 3 appropriate ways to manage a child with cough, rapid or difficult breathing.	- the % of mothers that can name 3 appropriate ways to manage a child with cough, rapid or difficult breathing.
Increase from 25.7% to 40% the percent of mothers that can name 3 danger signs of respiratory infection that would cause them to seek advice.	- the % of mothers that can name 3 danger signs of respiratory infection that would cause them to seek advice.

MALARIA	
OBJECTIVES	INDICATORS
Increase from 51.7% to 85% the percent of mothers that know that malaria is transmitted by mosquitoes.	- the % of mothers that know that malaria is transmitted by mosquitoes.
Increase from 14.4% to 40% the percent of mothers that can name at least 3 appropriate ways to treat a fever (presumptive malaria).	- the % of mothers that can name at least 3 appropriate ways to treat a fever (presumptive malaria).
Increase from 10.8% to 50% the percent of mothers that give SP for a fever (presumptive malaria).	- the % of mothers that state that they gave SP for a fever (presumptive malaria). - the # of doses of SP sold privately at distribution points around the estates

[3] Should have received iron folate supplies during these visits. Unfortunately iron folate data was not specifically collected at baseline but will be collected at mid-term and final.

MALARIA	
OBJECTIVES	INDICATORS
Increase from 12.7% to 40% the percent of mothers that could name at least 3 signs of severe malaria.	- the % of mothers that could name at least 3 signs of severe malaria.
Increase from 4.3% to 40% the percent of mothers that could name at least 3 appropriate ways to prevent malaria.	- the % of mothers that could name at least 3 appropriate ways to prevent malaria. - the # of houses that have demonstrated actions to prevent malaria

FP / MATERNAL CARE	
OBJECTIVES	INDICATORS
Increase from 32.9% to 75% the percent of women who have ever been pregnant that have retained their antenatal card.	- the % of women who have ever been pregnant that have retained their antenatal card. - the # of women attending estate antenatal clinics
Increase from 65.5% to 85% the percent of women that have ever been pregnant that can demonstrate at least 3 doses of TTV.	- the % of women that have ever been pregnant that can demonstrate at least 3 doses of TTV. - the # of women attending estate antenatal clinics - the # of TTV doses administered
Increase from 35.2% to 50% the percent of women attended in their last delivery by a trained TBA, midwife, or doctor.	- the % of women stating that they were attended in their last delivery by a trained TBA, midwife, or doctor. - the # of deliveries reported by trained TBAs - the # of deliveries conducted at the regional hospital
Increase from 44% to 60% the percent of women/couples using a modern method of FP.	- the % of women/couples stating that they are using a modern method of FP. - the # of CBDA clients - the # of methods distributed through estate health centers

HIV / AIDS / STDs	
OBJECTIVES	INDICATORS
Increase from 21.3% to 50% the percent of women that can name at least 3 STD symptoms.	- the % of women that can name at least 3 STD symptoms.
Increase from 23.4% to 50% the percent of men that can name at least 3 STD symptoms.	- the % of men that can name at least 3 STD symptoms.
Increase from 32% to 75% the percent of men who had experienced a STD symptom in the last 12 months that sought treatment at a health facility.	- the % of men who had experienced a STD symptom in the last 12 months that sought treatment at a health facility. - the # of men accessing estate health services for an STD symptom
Increase from 41.4% to 75% the percent of men who had a STD symptom in the last 12 months that informed their partner(s).	- the % of men who had a STD symptom in the last 12 months that state that they informed their partner(s). - the # of women coming to estate health clinics because of a referral from a partner
Increase from 27.8% to 40% the percent of men that can name at least 4 correct ways of transmitting HIV/AIDS.	- the % of men that can name at least 4 correct ways of transmitting HIV/AIDS.
Increase from 14.8% to 40% the percent of women that can name at least 4 correct ways of transmitting HIV/AIDS.	- the % of women that can name at least 4 correct ways of transmitting HIV/AIDS.
Increase from 19.6% to 40% the percent of men that can name at least 4 correct ways of avoiding HIV/AIDS.	- the % of men that can name at least 4 correct ways of avoiding HIV/AIDS.

HIV / AIDS / STDs	
OBJECTIVES	INDICATORS
Increase from 18.5% to 40% the percent of women that can name at least 4 correct ways of avoiding HIV/AIDS.	- the % of women that can name at least 4 correct ways of avoiding HIV/AIDS.
Increase from 21.4% to 35% the percent of men that state that they used a condom the last time they had sex with a non-regular partner.	- the % of men that state that they used a condom the last time they had sex with a non-regular partner. - the # of condoms distributed by HSAs, CBDAs, private sources, and estate health clinics
Increase from 33% to 50% the percent of women that state that they used a condom the last time they had sex with a non-regular partner.	- the % of women that state that they used a condom the last time they had sex with a non-regular partner. - the # of condoms distributed by HSAs, CBDAs, private sources, and estate health clinics

6. Partnerships

7.

The project's implementing partners are Press Agriculture, the district office of the Ministry of Health, UNICEF and Project HOPE. However, the main partnership is between Project HOPE and Press Agriculture. For the purposes of this project the roles and responsibilities of the primary partners will be[4]:

Press Agriculture:

1. Hire, as full-time Press Agriculture employees, 15 HSAs, and maintain this staffing level.
2. Expand health care services on the estates to include maternal care
3. Provide adequate clinical staffing levels and maintain adequate drug supplies
4. Support the training of the HSAs and clinic staff
5. Assure emergency transport
6. Serve as an equal partner in all aspects of project activities

Project HOPE:

1. Provide technical support and training to all cadres of health personnel and volunteers on the estates.
2. Provide and maintain HSA bicycles for the duration of the project
3. Serve as liaison between Press Agriculture and other organizations, both public and private, that provide health services
4. Assist Press Agriculture in building its capacity to develop, maintain and improve health services on the estates.

Press currently has very limited capacity to provide preventive and curative health services. In fact, before the implementation of the project, health capacity consisted of services provided by two medical assistants. As a foundation for a capacity building strategy, a capacity assessment of Press Agriculture will be conducted with external technical support. The assessment will be conducted in collaboration with Press and

[4] See Appendix O for the Memorandum of Understanding between the two organizations.

external assistance. The findings will be used to develop a detailed plan, with measurable goals, to build health care capacity within Press.

In addition to Press and Project HOPE, the DHMT (District Health Management Team) and UNICEF will have influence on project activities. UNICEF activities in Malawi include supporting Capacity-Building within the Ministry of Health; a Healthy Communities project focusing on behavior change and community empowerment; Well Child programming; Sick Child programming; and Safe Motherhood. Well Child activities focus on immunization; malaria prevention and treatment; micronutrients; control of diarrheal diseases; and breastfeeding. To support these activities UNICEF provides vaccines, Vitamin A capsules, and iron folate tablets. Sick Child activities include the promotion of Integrated Management of Child Illness (IMCI); improving referral systems; addressing pediatric HIV/AIDS; and community based sick child initiatives. The IMCI initiative will be piloted tested in several districts including Kasungu. Teams from each district, comprised mostly of Ministry of Health (MOH) personnel, will be trained as trainers. These teams will then train health providers in their district in IMCI methodologies. In addition, one of the Project HOPE field trainers will be trained as an IMCI trainer, thus increasing the capacity of the DHMT to bring health facilities on-board with IMCI. UNICEF is also implementing "community-based" activities focusing on household improvements in knowledge and practice to be implemented through a cadre of district based teams that work directly with villages. UNICEF's role is to train the district teams to carry out these activities.

Through these various initiatives UNICEF will provide technical support to project interventions as well as commodities support through the provision of Vitamin A, vaccines, and iron folate. UNICEF has also agreed to be a member of the project's Steering Committee.

The DHO (District Health Officer) is mandated to provide clinical oversight to all facilities, public or private, that provide health care. Consequently, the DHO should already be making regular supervision calls to the medical assistants on the estates. However, until the process of preparing the project proposal made the issue public, the DHO had never made a visit to the estate clinics. The DHO is now making regular visits. Since all community level volunteers (CBDAs, CHCs, ORDP volunteers, and others) report to the HSAs, which in turn report to the medical assistants on the estates, the DHO is, in effect providing clinical oversight to all project associated personnel. The DHO, or their representative, will also be a member of the project's Steering Committee.

The DHMT is comprised of MOH personnel who oversee various health services within the district. The Press reporting structure is included in the project organogram. The DHMT includes the District Environmental Health Officer, the District Nursing Officer, the Chief Clinical Officer, the Health Services Administrator, and the District Health Officer. The project will collaborate closely with the DHMT to assure compliance with MOH protocols; facilitate access to or directly provide training; and to build capacity off the estates for improved health services.

6. Health Information System

VIII. Monitoring and Evaluation

Logical Framework for Monitoring and Evaluation Activities

Process, Outcomes, and Impact Indicators by Intervention

Indicator	Measurement Methodology	Frequency
Cross-cutting Process Indicators		
15 HSAs trained in HSA methodologies and T4T	Project reports	1st annual report
At least 64 mothers clubs educated	Project reports	End of project
CHCs utilizing T4T approaches in community meetings	Project reports	Quarterly
HSAs conducting regular home visits, community education, and supervising community-based volunteers	HSA reports	Monthly
Evening "entertainment" activities and community meetings conducted on a regular basis	Project reports	Quarterly
CHC meetings held regularly	HSA reports	Quarterly
CHC training curriculum created	Project report	mid-term
Drug inventory training curriculum created	Project reports	mid-term
Medical assistants trained in drug inventory management	Project reports	mid-term
Health fairs conducted quarterly	HSA reports	Annually
Cross-cutting Outcomes Indicators		
2 "family planning" shelters created and providing maternal and Under-5 services	Project reports	annually
Press Agriculture providing improved health care services based on MOH and IMCI protocols	Health facility assessment	End of project
Press Agriculture appropriately stocking and managing drugs	Health facility assessment	End of project
15 HSAs permanently placed on Press Agriculture estates	Project reports	End of project
Selected facilities adjacent to the estates providing services based on IMCI protocols	Health facility assessment	End of project
34 Community Health Committees established and functioning	Project reports	End of project
Emergency transport systems established and functioning in each compound	Project reports	End of project
Sustainable liaison created between Press, UNICEF, and the DHMT	As part of sustainability indicator measures[5]	End of project
Accurate census of Press compound residents created and maintained	Project reports	end of project
Diarrheal Disease *(process indicators)*		
ORDP curriculum created	Project report	1st annual report
Community volunteers trained as ORDP managers	Project reports	1st annual report
ORDP volunteers providing education, demonstration, and supplies of ORS	HSA reports	monthly
Selected CHC members functioning as growth monitoring volunteers	HSA reports	quarterly
Diarrheal Disease *(outcome indicators)*		
the # of women utilizing the ORDPs	ORDP report	monthly
the # of ORS packets distributed	ORDP report	monthly
34 Oral Rehydration Distribution Points created	Project reports	end of project
Diarrheal Disease *(impact indicators)*		

[5] Sustainability plan presented in section XI

Indicator	Measurement Methodology	Frequency
% of mothers stating that they continued to breastfeed their during a diarrheal episode occurring 2 weeks previous to the KPC survey	KPC survey	baseline, mid-term, and final
% of mothers stating that they breastfed their child more than usual during a diarrheal episode occurring 2 weeks previous to the KPC survey	KPC survey	baseline, mid-term, and final
Of women already giving fluids to children <4 months of age, the % stating that they gave the same or more fluids during a diarrheal episode occurring 2 weeks previous to the KPC survey	KPC survey	baseline, mid-term, and final
Of women already giving solid or semi-solid food, the % giving the same or more solid or semi-solid foods during a diarrheal episode occurring 2 weeks previous to the KPC survey	KPC survey	baseline, mid-term, and final
The % of women stating that they have prepared ORS for treatment of diarrhea.	KPC survey	baseline, mid-term, and final
the % of women accessing the ORDPs that can correctly demonstrate preparation of ORS	observations at ORDPs	quarterly
The % of women who have prepared ORS that can correctly describe its preparation.	KPC survey	baseline, mid-term, and final
The % of women who have prepared ORS that can correctly describe how to administer ORS.	KPC survey	baseline, mid-term, and final
the % of women accessing ORDPs that can correctly demonstrate administration of ORS	observations at ORDPs	quarterly
the % of women stating that they are preparing ORS or administering appropriate home-based fluids during a diarrheal episode occurring 2 weeks previous to the KPC survey	KPC survey	baseline, mid-term, and final
The % of women that can name at least 3 danger signs of diarrhea that would cause them to seek advice or treatment.	KPC survey	baseline, mid-term, and final
The % of women that can name at least 3 important actions a mother should take when a child is experiencing diarrhea.	KPC survey	baseline, mid-term, and final
The % of women who can name at least 3 ways to prevent diarrhea.	KPC survey	baseline, mid-term, and final
Immunization *(process indicators)*		
Cold chain maintenance curriculum created	Project report	mid-term
Medical assistants trained in cold chain maintenance	Project reports	1st annual report
Cold chain established in both estate health clinics	Project reports	End of project
Immunization tracking system established in each compound	Project reports	End of project
Immunization *(outcome indicators)*		
Immunization tracking systems functioning and reducing the % of children who have not completed their immunization schedule	Project reports	mid-term and final
HSAs providing community-based immunization services	HSA reports	Monthly
Increase in vaccination access points through Under-5 clinics, immunization specific activities, and immunizations provided in both estate health clinics	Project reports	End of project
# of children attending Under-5 clinics and vaccination activities	activity reports from estate clinics and HSAs	monthly
Immunization *(impact indicators)*		
% of children 12 to 23 months of age that present an under-5 health card during the KPC survey indicating that they have been completely vaccinated	KPC survey	baseline, mid-term, and final
the % of mothers that can produce an Under-5 health card during the KPC survey	KPC survey	baseline, mid-term, and final
Breastfeeding *(process indicators)*		

Indicator	Measurement Methodology	Frequency
Project staff trained in the use of survey tools to collect qualitative data on breastfeeding knowledge and practices	Project reports	1st annual report
Qualitative assessment conducted of cultural, practical, and knowledge barriers to exclusive breastfeeding	Project reports	mid-term
Breastfeeding ***(outcome indicators)***		
"Baby Friendly" protocols being used in estate clinic maternity units	Health Facility Assessment	End of project
Breastfeeding ***(impact indicators)***		
The % of mothers that state that a child should begin receiving fluids or foods in addition to breastmilk earlier than 4 months of age.	KPC survey	baseline, mid-term, and final
The % of mothers that state that they exclusively breastfeed to 4 months of age.	KPC survey	baseline, mid-term, and final
Vitamin A/Iron Folate ***(process indicators)***		
Qualitative and quantitative data collected and disseminated on diversity and consumption of food by estate workers	Project reports	mid-term
Vitamin A/Iron Folate ***(outcome indicators)***		
Vitamin A being distributed by TBAs immediately post-partum	TBA activity reports from district health office	quarterly
the # of women received iron/folate through a TBA	TBA activity reports from district health office	quarterly
the # of women attending estate antenatal clinics	activity reports from estate clinics and HSAs	monthly
the # of Vitamin A capsules administered at Under-5 clinics	activity reports from estate clinics and HSAs	monthly
Vitamin A/Iron Folate ***(impact indicators)***		
The % of mothers that gave their child, older than 4 months of age, food within the week previous to the KPC survey that is a good source of vitamin A.	KPC survey	baseline, mid-term, and final
the % of mothers regularly giving their child a source of Vitamin A	Nutrition Survey	baseline and final
the % of children older than 3 months of age that received vitamin A supplementation in the last 6 months previous to the KPC survey as indicated in the Under-5 health card	KPC survey	baseline, mid-term, and final
The % of mothers that can name at least 3 foods that contain vitamin A.	KPC survey	baseline, mid-term, and final
The % of women who can document receiving 2 antenatal visits during their last pregnancy.	KPC survey	baseline, mid-term, and final
Acute Respiratory Infections ***(process indicators)***		
HSAs trained in the use of respiratory timers to assess respiratory infections	Project reports	mid-term
Medical assistants trained in the use of respiratory timers as a diagnostics tool	Project reports	mid-term
Medical assistants trained in ARI case management through IMCI protocols	Project reports	mid-term
Acute Respiratory Infections ***(outcome indicators)***		
HSAs using respiratory timers to screen and monitor respiratory infections in children	Project reports	monthly

Indicator	Measurement Methodology	Frequency
Medical assistants using IMCI and MOH protocols to screen and treat children with respiratory infections	Health facility assessment	End of project
Health providers in selected facilities adjacent to estates utilizing IMCI and MOH protocols to screen and treat children with respiratory infections	Health facility assessment	End of project
# of mothers accessing estate health services for pediatric respiratory complaints	estate health center reports	monthly
# of mothers with children under 3 months experiencing respiratory symptoms accessing estate health services within 24 hours	estate health center reports	monthly
# of mothers with children older than 3 months experiencing respiratory symptoms accessing estate health services within 48 hours	estate health center reports	monthly
Acute Respiratory Infections *(impact indicators)*		
The % of mothers stating that they sought treatment for their child's last episode of cough, rapid or difficult breathing.	KPC survey	baseline, mid-term, and final
The % of mothers stating that they sought treatment within 24 hours for children under 3 months that experienced cough, rapid or difficult breathing.	KPC survey	baseline, mid-term, and final
The % of mothers stating that they sought treatment within 48 hours for children older than 3 months that experienced cough, rapid or difficult breathing.	KPC survey	baseline, mid-term, and final
The % of mothers that can name 3 appropriate ways to manage a child with cough, rapid or difficult breathing.	KPC survey	baseline, mid-term, and final
The % of mothers that can name 3 danger signs of respiratory infection that would cause them to seek advice.	KPC survey	baseline, mid-term, and final
Malaria *(process indicators)*		
Medical assistants trained in malaria case management through IMCI protocols	Project reports	mid-term
Environmental assessment of estates conducted to identify strategies to reduce mosquito levels	HSA reports	mid-term
Press Agriculture developed a plan to reduce environments for mosquito proliferation	Project reports	mid-term
Qualitative data collected and disseminated regarding SP side-effects, and traditional methods for preventing and treating malaria	Project reports	mid-term
Malaria *(outcome indicators)*		
the # of doses of SP sold privately at distribution points around the estates	rapid survey of local SP distribution points	Baseline and final
the # of mothers seeking advice at estate health facilities within 48 hours of fever onset	estate health center reports	monthly
the # of houses that have demonstrated actions to prevent malaria	rapid assessment of household	Baseline and final
Press Agriculture implementing a plan to reduce environments for mosquito proliferation	Project reports	mid-term and final
Malaria *(impact indicators)*		
The % of mothers that know that malaria is transmitted by mosquitoes.	KPC survey	baseline, mid-term, and final
The % of mothers that can name at least 3 appropriate ways to treat a fever (presumptive malaria).	KPC survey	baseline, mid-term, and final
The % of mothers that state that they gave SP for a fever (presumptive malaria).	KPC survey	baseline, mid-term, and final
The % of mothers that state that they sought advice or treatment outside the home within 48 hours of the onset of fever.	KPC survey	baseline, mid-term, and final

Indicator	Measurement Methodology	Frequency
The % of mothers that could name at least 3 signs of severe malaria.	KPC survey	baseline, mid-term, and final
The % of mothers that could name at least 3 appropriate ways to prevent malaria.	KPC survey	baseline, mid-term, and final
Family Planning/Maternal Care *(process indicators)*		
Medical assistant received refresher training as a FP Core Provider	Project reports	1st annual report
2 family planning shelters created	Project reports	End of project
80 TBAs trained in clean and safe delivery practices as well as emergency obstetrical care	Project reports	mid-term
22 CBDAs trained	Project reports	1st annual report
Maternity units established in 2 estate health clinics	Project reports	End of project
Family Planning/Maternal Care *(outcome indicators)*		
2 family planning shelters providing community based FP services	Estate clinic reports	monthly
22 CBDAs providing and supporting the use of modern methods of family planning among estate residents	HSA reports	monthly
the # of women attending estate antenatal clinics	reports from estate clinics and HSAs	monthly
The % of women who have ever been pregnant that have retained their antenatal card.	KPC survey	baseline, mid-term, and final
the # of deliveries reported by trained TBAs	TBA activity reports from district health office	monthly
the # of deliveries conducted at the regional hospital	Activity reports from district hospital	monthly
the # of TTV doses administered	reports from estate clinics and HSAs	monthly
the # of CBDA clients	CBDA reports	monthly
the # of methods distributed through estate health centers	estate clinic reports	monthly
At least 80 TBAs providing safe and clean delivery services to estate residents	TBA activity reports from district health office indicating birth outcomes	mid-term and final
Family Planning/Maternal Care *(impact indicators)*		
The % of women that have ever been pregnant that can demonstrate at least 3 doses of TTV.	KPC survey	baseline, mid-term, and final
The % of women stating that they were attended in their last delivery by a trained TBA, midwife, or doctor.	KPC survey	baseline, mid-term, and final
The % of women/couples stating that they are using a modern method of FP.	KPC survey	baseline, mid-term, and final
The % of couples stating they faced problems the last time they tried to obtain a FP method.	KPC survey health facility assessment	baseline, mid-term, and final baseline and final
HIV/AIDS/STDs *(process indicators)*		

Indicator	Measurement Methodology	Frequency
Medical assistants receive refresher training in Syndromic Management of STDs	Project reports	1st annual report
10 adult drama groups trained and established	Project reports	End of project
HIV/AIDS/STDs *(outcome indicators)*		
10 adult drama groups functioning	HSA reports	monthly
HSAs and CHCs using T4T to identify HIB/AIDS/STD issues and developing strategies to address them	Project reports	quarterly
the # of men accessing estate health services for an STD symptom	estate clinic reports	monthly
the # of women accessing estate health services for an STD symptom	estate clinic reports	monthly
the # of women coming to estate health clinics because of a referral from a partner	estate clinic reports	monthly
the # of men coming to estate health clinics because of a referral from a partner	estate clinic reports	monthly
the # of condoms distributed by HSAs, CBDAs, private sources, and estate health clinics	reports from HSAs, CBDAs, and estate health clinics Rapid survey of local condom distribution points	Monthly Baseline and final
HIV/AIDS/STDs *(impact indicators)*		
The % of women that can name at least 3 STD symptoms.	KPC survey	baseline, mid-term, and final
The % of men that can name at least 3 STD symptoms.	KPC survey	baseline, mid-term, and final
The % of men who had experienced a STD symptom in the last 12 months that sought treatment at a health facility.	KPC survey	baseline, mid-term, and final
The % of women who had experienced a STD symptom in the last 12 months that sought treatment at a health facility.	KPC survey	baseline, mid-term, and final
The % of men who had a STD symptom in the last 12 months that state that they informed their partner(s).	KPC survey	baseline, mid-term, and final
The % of women who had a STD symptom in the last 12 months that state that they informed their partner(s).	KPC survey	baseline, mid-term, and final
The % of men who had experienced a STD symptom in the last 12 months that could name something effective that they did to prevent passing the disease to their partner.	KPC survey	baseline, mid-term, and final
The % of women who had experienced a STD symptom in the last 12 months that could name something effective that they did to prevent passing the disease to their partner.	KPC survey	baseline, mid-term, and final
The % of men that can name at least 4 correct ways of transmitting HIV/AIDS.	KPC survey	baseline, mid-term, and final
The % of women that can name at least 4 correct ways of transmitting HIV/AIDS.	KPC survey	baseline, mid-term, and final
The % of men that can name at least 4 correct ways of avoiding HIV/AIDS.	KPC survey	baseline, mid-term, and final
The % of women that can name at least 4 correct ways of avoiding HIV/AIDS.	KPC survey	baseline, mid-term, and final
The % of men that state that it is possible for a healthy looking person to have HIV/AIDS.	KPC survey	baseline, mid-term, and final
The % of women that state that it is possible for a healthy looking person to	KPC survey	baseline, mid-

Indicator	Measurement Methodology	Frequency
have HIV/AIDS.		term, and final
The % of men that state that AIDS can be cured.	KPC survey	baseline, mid-term, and final
The % of women that state that AIDS can be cured.	KPC survey	baseline, mid-term, and final
The % of men that state that they are engaged in a behavior putting them at risk for HIV/AIDS/STDs.	KPC survey	baseline, mid-term, and final
The % of women that state that they are engaged in a behavior putting them at risk for HIV/AIDS/STDs.	KPC survey	baseline, mid-term, and final
The % of men that state that they used a condom the last time they had sex with a non-regular partner.	KPC survey	baseline, mid-term, and final
The % of women that state that they used a condom the last time they had sex with a non-regular partner.	KPC survey	baseline, mid-term, and final

As part of the health facilities assessment, a series of quality of care indicators will be identified. These indicators will be measured at baseline (sometime in the first year of the project), six-months later, and then annually thereafter.

Information from the various data sets will be disseminated in the following ways:

- Monthly reports from HSAs and medical assistants

The reports from the HSAs will be given to the medical assistants through the HSA supervisors. The HSA reporting form includes:

- Number and type of health education talks
- Under-5 clinic, growth monitoring, and immunization activities
- Numbers of referrals to a health facility and subsequent follow-up
- Number and types of inspections (latrines, housing, water supplies)
- Number and type of supervision visits
- Number of home visits and outcome

The information provided will be included in the medical assistants' monthly reports to the DHO. In addition to the above information, the medical assistant report also includes:

- Number of types of diseases seen and treated (*using national HIS form*)
- Number of women and children immunized
- Number of children weighed by age group and findings
- Number of clients referred to the district hospital and why

Certain elements of both reports will be extracted, initially by Project HOPE personnel, eventually by the Press management, for assessment of achievement of project goals and for supervision purposes. The findings from the extraction process will be distributed at quarterly Steering Committee meetings, during supervision visits to HSAs and medical assistants, and during quarterly feedback sessions with compound residents and CHCs. Project HOPE and Press management will utilize the information, and feedback from the Steering Committee, compound residents and CHCs, to plan in-service trainings, modify

project targets, and assess efficacy of project strategies. It should be recalled that HSA reports will include information from CBDAs, ORDP volunteers, and drama groups.

The information from these reports will also be used to develop quarterly workplans and as well as provide a foundation for semi-annual meetings with technical representatives from Project HOPE, the DMHT, and Press (as capacity is built within Press). Quarterly reports will also be prepared for the DHO, RHO (Regional Health Officer), national office of the MOH, and Press senior management.

- Health facility assessment

The findings from the health facility assessment will be formally presented to the DHO and Press management. The Steering Committee will be used to develop strategies to address the findings. Once a strategy to remediate any problems is developed, the findings and strategies will be shared formally with the medical assistants and HSAs (since they occasionally provide support to clinic services). Findings regarding clinics off of the estates will be shared with the DHO. The IMCI field trainer will work with the DHMT to develop and implement any necessary remediation strategies.

- KPC Survey

The findings of the KPC survey will be shared widely through:

  - Steering committee meeting
  - "debriefing" meetings with HSAs and medical assistants
  - meetings with CHCs, compound residents, and community volunteers that focus exclusively on the KPC findings

- Nutrition Survey

Findings will be presented at a Steering Committee meeting focused exclusively on this issue. A process to develop a strategy to address any problems will begin at this meeting. The findings will also be shared with CHCs, through a T4T process, to define any possible community-based solutions.

To further disseminate all assessment findings and project results, Project HOPE will explore the possibility of convening technical committee meetings. These meetings would be attended by representatives from other NGOs working in the district, the DHMT, and the Regional Health office to facilitate sharing of lessons-learned between all parties.
Finally, one of the sustainability goals of the project will be to institutionalize the data analysis and dissemination functions within Press management.

Attachment 2 – Evaluation Team Members

- Bonnie Kittle – Independent Consultant, MTE Team Leader
- Kwame Msapato – Project Manager
- Elise Jensen – Hope Africa Regional Director
- Everrett Mthunzi Head Mid Wife – District Health Management Team
- Thomas H. Mphonde - Press Agriculture – Technical Trainer
- Jacqueline Kanjira – Project Trainer
- Holman Phiri – Project trainer
- Themba Phiri – Project trainer
- Kondwani Nkanaunena – Project HIS Specialist

Attachment 3

Methodology of the Mid Term Evaluation

- 3 days of document review
- 3 days of team planning including team building exercises, review of the Terms of Reference, identification of key informants, setting criteria for site selection, site selection, work plans development and instrument design;
- 2 days of interviews with project staff
- 1 day for instrument finalization and re-production
- 3 days for field data collection
- 2 days for data analysis and additional interviews
- 1 day for findings, conclusions and recommendation prioritization; and presentation design;
- 1 1/2 days for three presentations – 1 to the PRESS Chief Executive, 1 to PRESS Estate Managers, and 1 to PRESS General Managers and USAID

Data collection methods included:
- document review
- key information interviews
- project instrument and materials review

Members Present at the Presentation of the Mid-Term Evaluation of the CS Program Tuesday, September 5, 2000

Isaac Daka – General Farming Division, PAL, General Manager
Annie Longwe – PAL, Internal Audit Manager
Elise Jensen – Project Hope, Africa Regional Director
Joan LaRosa – USAID/Malawi, HPN Team Leader
Kwame Msapato – Project Hope, Project Manager
Isaac Kambilinya, PAL, Human Resources Manager
Joe Lucomwa, PAL, General Manager
Jones S.A. Kampereni, PAL, General Manager

Attachment 4 – List of persons Interviewed and Contacted

HOPE

Mrs. Dorothy Namate	Country Director Project Hope / Malawi
Mr. Fanwell	Finance and Administration Manager
Ms. Elise Jensen	Regional Director for Africa / Hope Center

Press Agriculture Limited

Dr. Evance Chipala	Chief Executive
Mr. Isaac Kirlirinya	Human Resources Manager
Mr. Mwanza	Estate Manager
Mr. Jambo	Estate Manager
Mr. Kachitsa	Estate Manager
Mr. Kacheche	Estate Manager
Mr. Kadziche	Estate Manager
Mr. Yamikani	Estate Manager
Mr. Kamwendo	Estate Manager
Mr. Mithi	Estate Manager
Mr. Chapita	Estate Manager
Mr. Kumambala	Estate Manger
Mr. Matuta	Estate Manager
Mr. Winston Somanje	Medical Assistant/E32
Mr. Dorek Oailupsya	Medical Assistant/E80
Zione Luka	Nurse E80
Ms. Masanda	Health Surveillance Assistant
Ms. Moloko	HSA
Mr. Mailosi	HSA
Mr. Katentha	HSA
Mr. Chidani	HSA
Mr. Mkandawire	HSA
Mrs. Kayuni	HSA
Mr. Gobede	HSA
Mr. Chombo	HSA
Mr. Yobe	HSA

Community Members and Health Volunteers

12 Community Health Committees
12 Community Based Distribution Agents
9 Oral Rehydration Distribution Point Managers/Growth Monitoring Volunteers
6 Traditional Birth Attendants

District Health Office

Dr. Kuchingale	District Health Officer
Ms. Else Chipula	Family Planning Officer

USAID.Malawi

Joan LaRosa

Attachment 5

Training Plan Matrix
shaded areas indicate training course conducted

Topic/Intervention	Trainee	Trainer	Dates/Length of Training	Materials	Techniques
Training in HSA methodology	HSA candidates	MOH certified trainer and Project HOPE	Nov. 1998 8 weeks	MOH HSA training curriculum	Classroom training; practicals at district hospital; role-plays
T4T Methodology – all intervention areas	HSAs	Project HOPE STAPH project personnel	Nov. 1998 1 week	Project HOPE curriculum	Classroom training; role-plays; community practicals; debriefs and return to community practicals
KPC survey techniques	HSAs and new Project HOPE staff	Project HOPE	February, 1999 1 week	CSSP KPC survey training materials	Classroom training; field pilot testing; role-plays; tools adjustment
T4T Initial Training – all intervention areas	Community Health Committees	Project HOPE STAPH personnel	7 days May/June 1999	Project HOPE curriculum	Lecture; role-plays; community practicals; debriefs and return to community practicals
Drama Group initial training – HIV/AIDS/STDs	Adult members of compound	Project HOPE STAPH personnel	7 days May/June 1999	STD Drama Curriculum & Manual	Community assessment; classroom; role-play; poems; debate; songs; drama
Initial Training as FP Core Provider	"new" medical assistant	MOH or BLM	Not yet scheduled 5 days	MOH training curriculum	Classroom training; role-play; practicals at hospitals
FP Core Provider Refresher Training	Both estate medical assistants	STAPH project	3 days August 1999	MOH training curriculum	Classroom training; role-play; practicals at hospitals
Initial Training in Syndromic Management of STDs	"new" medical assistant	MOH	Not yet scheduled by MOH 2 weeks	MOH training curriculum	Classroom training; practicals at hospitals
Refresher Training in Syndromic Management of STDs	2 medical assistants	STAPH project	2 weeks April 1999	MOH training curriculum & STD manual	Classroom training; practicals at hospitals
Training in the Use of Respiratory Timers/ARI	HSAs and medical assistants	Project HOPE	1 week October 1999	MOH training curriculum	Classroom training; practicals at district hospital
Breastfeeding Practices Survey Training	Project HOPE Child Survival Field Trainers	Project HOPE CHAPS project	March/April 1999	Developed by PSI & CHAPS personnel	Classroom training; field piloting and practicals
Case Management for ARI, Malaria (as part of	Medical assistants on the estates and health	Project HOPE IMCI trainer	To be developed based on finalized	National IMCI curriculum	Classroom; demonstration; practicals at district hospital;

Topic/Intervention	Trainee	Trainer	Dates/Length of Training	Materials	Techniques
IMCI)	care providers in facilities nearest the estates		national IMCI curriculum		observation; peer education
ORS distribution point management	ORS distribution point volunteer	Project HOPE	3 days July 1999	To be developed	Demonstration; role-play; lecture
Cold Chain Maintenance	HSAs and medical assistants	Project HOPE	1 week May 1999	To be developed/ MOH materials	Classroom; demonstration; field testing of skills
Drug Inventory Management	Medical assistants	Project HOPE	2 days December 1999	To be developed	Demonstration
Initial Training in TBA Maternal Care Services	TBAs	MOH certified trainer	4 weeks October 1999	MOH TBA training curriculum	Lecture; practicals at district hospital maternity unit
Initial Training in CBDA methodology	CBDA candidates and HSAs	MOH certified trainer and Project HOPE	2 weeks July 1999	Ministry of Health CBDA training curriculum	Classroom training; role-plays; demonstrations; practicals in the community
Refresher Trainings in TBA Maternal Services	TBAs	MOH certified trainer	2 weeks August 2001	MOH TBA refresher training curriculum	Lecture; practicals at district hospital maternity unit
Refresher Trainings for facility-based Midwives	Facility-based midwives near estates	MOH certified trainer and Project HOPE	2 weeks January 2000, 2002	Safe Motherhood MOH training curriculum	Lecture; practicals at district hospitals; observations
Refresher training on CBDA methodology	CBDAs and HSAs	MOH certified trainer and Project HOPE	1 week May 2000, 2001, 2002	MOH CBDA training curriculum; CBDA manual; counseling visual materials	Classroom training; role-plays; demonstrations; practicals in the community
T4T Refresher Training – all intervention areas	Community Health Committees	Project HOPE STAPH personnel	3 days July 2000, 2001, 2002	Project HOPE curriculum	Lecture; role-plays; community practicals
CBDA supervision	HSAs	MOH certified trainers	3 weeks July 1999	Ministry of Health CBDA supervision curriculum	Classroom training; demonstration; role-plays; practicals in the community
HSA and general personnel supervision	Medical assistants and HSA supervisor candidates	MOH certified trainer	3 weeks August 1999	Ministry of Health HSA supervisor training curriculum	Classroom training; demonstration; role-plays; practicals in the community
Community Health	Community Health	Project HOPE	1 week	To be developed	Lecture; demonstration; group

Topic/Intervention	Trainee	Trainer	Dates/Length of Training	Materials	Techniques
Committee Methodology	Committee Candidates and HSAs		April/May 1999		discussion; role-play
Computer skills; EpiInfo; Excel	Program Manager; Field Trainers; HIS Specialist	Project HOPE and independent consultant	3 weeks 1st / 2nd week April, 3rd week May 1999	EpiInfo and Microsoft materials	Classroom; demonstration; practicals with project reports and documents
Community Health Committee Methodology Refresher Training	Community Health Committee members and HSAs	Project HOPE	3 days March 2000, 2001, 2002	To be developed	Lecture; group discussion; role-play; T4T problem analysis/problem-solving process
Epidemiology methods for community assessment	Medical assistants	Project HOPE	1 week Jan/Feb 2000	To be developed/ MOH materials	Classroom training; demonstration; on-going in-service training
ORS distribution point management – refresher training	ORS distribution point managers and HSAs	Project HOPE	1 day July 2001	To be developed	Lecture; demonstration; role-play; observation
T4T Refresher Training – all intervention areas	HSAs	Project HOPE STAPH personnel	Nov. 1999, 2000, 2001 3 days	Project HOPE curriculum	Classroom training; role-plays; community practicals; debriefs and return to community practicals
Drama Group initial Training – HIV/AIDS/STDs	Youth living in communities next to the estates	Project HOPE STAPH personnel	7 days June 1999	STD Drama Curriculum & Manual	Community assessment; classroom; role-play; poems; debate; songs; drama
Drama Group Refresher training	Adults	Project HOPE STAPH personnel	4 days July 2000	STD Drama Curriculum & Manual	Community assessment; classroom; role-play; poems; debate; songs; drama
Drama Group Refresher training	Youth	Project HOPE STAPH personnel	4 days May 2000	STD Drama Curriculum & Manual	Community assessment; classroom; role-play; poems; debate; songs; drama

Attachment 6 - Results Highlight

"Sustaining Benefits"

Ensuring that the benefits of the project will continue to be enjoyed by the beneficiaries after the withdrawal of the NGO is often the most challenging aspect of any child survival project. Despite an increased focus on sustainability during the past decade and the recognition by many that sustainability needs to be planned for during the project design stage, true sustainability remains elusive.

In the case of the Kasungu Child Survival Project being implemented in the Kasungu District of Malawi, by Project Hope and their partners, the prospects for sustainability are unusually high. This is because Project Hope is partnering with a for-profit agri-business, Press Agriculture Limited (PAL), whose senior management is highly motivated to implement and support a health delivery system (HDS) that benefits the laborers on their tobacco and coffee estates. PAL is also in a position to hire and support the key caregivers, Medical Assistants and Health Surveillance Assistants, who are central to the estate-based health delivery system. Perhaps this is a model that can be replicated elsewhere.

Prior to the project, PAL already supported a facility-based health system, with two small clinics, staffed by two Medical Assistants and a couple of attendants. Services were primarily curative. With assistance from the project, PAL has been able to expand this to include an outreach component that focuses on preventive services for mothers and children and is implemented by 15 Health Surveillance Agents. While the clinical skills of the Medical Assistants are being up-graded through training and PAL has agreed to add maternity units to each clinic, thus far the major thrush of the project's capacity building efforts has been on community (estate) members. On each of the 30 compounds where estate laborers live, a cadre of community health volunteers has been formed and trained. These health volunteers provide health care services, such as ORT packet distribution, family planning counseling and provision of contraceptives, birthing services, and they help to educate and mobilize other community members to participate in health activities, such as under-fives clinics. They are supported and supervised by the Health Surveillance Agents, who also live on the estates.

Press Agriculture Limited is contributing significantly to the establishment of this health delivery system. They pay the salaries of the clinic employees and the 15 HSAs, and make sure that the two clinics are stocked and supplied with the necessary equipment and drugs. They provide housing on the estates for these employees and in some cases provide rations. Transportation is furnished to the Medical Assistants and PAL maintains the bicycles provided to the HSAs by the project. PAL provided housing and per diem for the HSAs during their training and furnished the training venue. Each HSA has an office on the estate provided by PAL. Press Agriculture has made an ambulance available to estate workers and since the project was initiated it has hired two nurse mid-wives to provide MCH services at the clinics. They have agreed to build two maternity units.

While these contributions are substantial and impressive, and serve to demonstrate PAL's commitment to the health delivery system, they will not, in and of themselves, guarantee that the health services initiated under the project will continue afterward. Other steps need to be taken, skills learned, and systems established to ensure the continuance of the health activities and the provision of the services. And this where the skills of Project Hope and the Ministry of Health come to play.

The challenge that lies ahead with regard to sustainability includes *institutionalizing* the health delivery system within PAL. To better understand what needs to be done to institutionalize the health delivery system, the project carried out an Institutional Capacity Building Assessment of Press Agriculture. That assessment and the mid-term evaluation identified the steps that need to be taken to ensure the longevity of the program. Reports from those assessments emphasized the need to raise awareness about the HDS among middle management; the need to incorporate the HDS into the five-year plan and to consider the HDS in the budgeting process. PAL will also need to develop systems, plans and policies to support this new cadre of staff. These will include a supervision system, a logistics support system, as well as a human resource development plan and career planning policies.

In addition to the Institutional Capacity Building Assessment, the project also carried out a Quality of Care Assessment. This study examined the abilities of the various health care providers – professional and voluntary – to provide health care services that meet or exceed the government standards. While the assessment team found that most services met the standard, it also revealed specific practices that could be improved. Additional in-service training and supervision will be required to close these gaps.

The challenge that faces the project during the remaining years is to take the findings from these two assessments and to work with their partners to institutionalize the services and to bring all of the health services up to the standard. This will require masterful coordination and cooperation between the three partners, Hope, PAL and MOH. The role of the project staff is to orchestrate these collaborative efforts, such that the partnership between PAL and the MOH is solidified and will sustain itself beyond the life of the project.

Attachment 7 - KPC Survey

REPORT OF MID-TERM
KNOWLEDGE, PRACTICE AND COVERAGE SURVEY
PROJECT HOPE/KASUNGU - MALAWI

Child Survival XIV Project

JULY 2000

Submitted By:
Kwame Msapato
Programme Manager

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Acknowledgement

The Programme Manager of the Child Survival CSXIV project gratefully acknowledges the cooperation of all enumerators who made themselves available during the entire period of the survey; the supervisors from the technical team of the CSXIV; and the Health Information System Analyst for his statistical input:

Enumerators

1. Pearson Gobede
2. Jolam Chombo
3. Olipa Moloko
4. Judith Masanda
5. Davie Dinala
6. Davie Chikanda
7. Solomon Chidani
8. Maggie Mizwa
9. Zainga Mkandawire
10. Peter Mkandawire
11. Lameck Sakala
12. Lonjezo Matunga
13. Sylvester Mailosi
14. Martin Katentha

Supervisors

Themba Phiri
Jacqueline Kanjira
Holman Phiri

HIS/Statistician

Kondwani Nkanaunena

The discussion with the technical advisor Elise Jensen and the Country Director for Project HOPE - Malawi Dr Dorothy Namate and for their substantive review of the data collection tools is also greatly appreciated. The cooperation of the estate residents, all local leaders from surrounding villages and PAL estate managers is also greatly appreciated.

Finally the secretarial services of CSXIV are thanked for their work.

EXECUTIVE SUMMARY

A mid-term Knowledge, Practice and Coverage (KPC) survey for Project HOPE CSXIV project was conducted from May 29th, 2000 through 10th June, 2000 in the project area.

The goal of the survey was to assess the progress that the programme has made in terms of Knowledge, Practice and Coverage, mid way through the programme period of 4 years.

The findings at mid-term indicate that the programme is providing much needed education as evidenced by the increase in knowledge of the caretakers; outreach education as evidenced by the formation of 34 community health committees and 22 village health committees from surrounding villages which ensure liason between the programme; and provision of preventive maternal and child health (MCH) services. This has led to an increase in access to immunizations and improved coverage even though there has been countrywide shortage of antigens over the last 9 months.

There has been a notable increase in stated positive practices. Many of the residents state that they are practicing behaviours that promote good health as a result of the health messages being promoted in the programme. It is expected that at the completion of the project period the objectives will have been attained if the current progress is anything to go by.

LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ARI	Acute Respiratory Infections
CBDA	Community-Based Distribution Agents
CHC	Community Health Committees
CS & MC	Child Survival & Mother Care
DHO	District Health Officer
EPI	Expanded Programme on Immunization
HIV	Human Immunodeficiency Virus
HSA	Health Surveillance Assistant
IMCI	Integrated Management of Childhood Illness
KPC	Knowledge, Practice and Coverage
MOHP	Ministry of Health and Population
NGO	Non-Governmental Organisation
ORDPs	Oral Rehydration Distribution Points
ORS	Oral Rehydration Salts
PHC	Primary Health Care
PVO	Private Voluntary Organisation
STD	Sexual Transmitted Diseases
T4T	Training for Transformation
TBA	Traditional Birth Attendants

1.0 INTRODUCTION

1.1 Background

Project HOPE, a PVO with headquarters in Millwood, Virginia, USA is implementing a Child Survival Project on Press Agriculture Limited (PAL) estates and the surrounding villages in Kasungu District of Central Malawi. Funding for the project has come from the United State Agency for International Development. (USAID). The programme will run from September, 1998, through August 2002.

The goal of this programme is to reduce the high rate of morbidity and mortality in children under the age of five and among women of reproductive age. The major causes of under five morbidity and mortality in Malawi are Malaria, malnutrition and pneumonia. HIV/AIDS may be major causal factor in almost one in five of these deaths. Maternal mortality is estimated at 620 per 100, 000 live births due to lack of access to essential obstetric services, poor nutritional status, high burden of diseases (STDs, HIV/AIDS, Malaria) and very high fertility.

The Project is targeting the following CS/MC activities

- Control of diarrheal diseases 10%
- Expanded programme on immunization 10%
- Promotion of exclusive breastfeeding 10%
- Vitamin A/iron folate supplementation 10%
- Control of Acute Respiratory Infections 10%
- Prevention and control of Malaria 10%
- Promotion of Family Planning/Maternal Care 20%
- Prevention of HIV/AIDS and STDs 20%

Project HOPE staff facilitates the provision of direct educational services to communities in the target area through Health Surveillance Assistants (HSAs) who were recruited by PAL and trained by Project HOPE. In addition Project Hope staff serve as trainers alongside MOHP staff, training community health volunteers/agents and TBAs. To maximize partnership with MOHP and PAL, Project HOPE plays the liaison role.

This report presents the findings of the Mid-term Survey of the CS XIV project after about 1 year 6 months since its inception.

1.2 Objectives of the survey

The objectives of the mid-term were fourfold:

- Assess progress in implementing the DIP since the baseline was conducted
- Assess progress towards achievement of objectives.
- Identify barriers to achievement of objectives.
- Make recommendations to guide the programme staff through the last half of the programme.

1.3 Survey process

The questionnaires that were used in the mid-term survey were revised versions of those that were used in the baseline KPC survey. The baseline KPC used modified versions of the generic CS questionnaire developed by the John Hopkins University (JHU), and other tools used in Malawi for women, men and youths.

Because there were no quantitative or qualitative differences between the findings of the baseline caretaker/mother questionnaire and the women questionnaire, this mid-term survey combined the two into one questionnaire, which was named the female caretaker questionnaire.

The men and youth questionnaires were retained with a few modifications.

The interviewers used in this mid-term survey were the very same ones that participated in the baseline KPC. Therefore, the training was more of a refresher and only lasted for two days including pilot testing of the tools.

Fourteen PAL HSAs were refreshed in a training as interviewers while the Project HOPE staff were refreshed about their roles as supervisors.

The refresher training included the purpose of the survey; determination of sample size, a thorough understanding of each tool used, and how to ask each question. Role-play was used to familiarize the interviewers with the techniques to be used. The task of the supervisors was also addressed. Emphasis was put on checking completeness of questionnaires after each interview. The final version of the tools was produced after pilot testing.

2.0 METHODOLOGY

2.1 Questionnaire

The index questionnaire used in this mid-term KPC survey was female caretaker questionnaire which focused on the care of a child 24 months or younger. The questionnaire borrowed a lot from the generic CS questions with other questions reflecting the specific interventions of this CS XIV Project. The other questionnaire was for men found in the same household as the child. Youth in the same household aged 11-18 years had their own questionnaire. The questionnaires were translated into the local language. The English versions of these questionnaires are attached in Annex 1.

2.2 Determination of sample size

The method for determining the sample size for this mid-term KPC is based on the method used to determine the sample size for WHO-EPI 30 cluster coverage surveys. This was adopted because it is time saving since individuals within each cluster are selected to reach the required sample size.

However, in order to compensate for the bias introduced by interviewing persons in clusters rather than as randomly selected individuals, experience has shown, (Henderson, et al 1982) that a minimum of sample of 210 (7 per cluster) should be used. In rapid 30 cluster survey a sample size of 300 (10 per cluster) is generally used to ensure that sub samples are large enough to obtain useful management information with statistical margins adequate for making management and programme decisions. In this case, a sample, size of 300 (10 per cluster) households with children 2 years of age or less was selected.

2.3 Selection of cluster

- A list of all estate compounds and their nearest villages were drawn and their populations indicated.
- Since there are two distinct divisions of the estates, i.e. western and eastern divisions with different management, and their corresponding surrounding villages, sampling started with one division and later changed to the other division.
- The compound and village population figures were then cumulated.
- The total population figure was divided by 30, which gave a sampling interval.
- A random number less than or equal to the sampling interval was selected
- The first community listed in the cumulative population table was identified.
- The other 29 clusters in which clusters were located were identified as follows:
  a) The randomly selected number was added to the sampling interval giving a new figure leading to a second cluster.
  b) The process moved down the cumulative population table until all clusters were identified.

A total of 22 estate compounds and 8 villages were identified.

2.4 Selection of sample

The sample consisted of 301 female caretakers, 262 men and 56 youths.
At the designated cluster site, the initial household with a child less than 2 years old or less was determined in the following manner

- The centre of the village/compound was located with the help of the village head or compound police.
- The direction for starting the survey was selected by spinning a bottle.
- The first household encountered was the starting point. The second and subsequent household was every third household in that direction or the next one, if the third house did not have an under 2 year old child.

2.5 Refresher training of supervisors and interviewers

The supervisors were made up of three Project HOPE staff who work as field trainers and the interviewers were HSAs working in the project. These are the same individuals who took part in the baseline KPC, therefore they were conversant with the data collection techniques and the training was just to refresh them. The training was conducted by the Project Manager.

The training, which was for two days, consisted of lecture and discussions on the KPC survey, discussion and practice exercises on the cluster sampling methodology, selection of the first and consecutive households, identification of boundaries, and good and bad interviewing techniques. On the first day there was a plenary to discuss and learn from mistakes discovered.

2.6 Conduct of interviews

The interviewers were grouped into three teams of four or five HSAs. The supervisors of each team were responsible for the selection of the initial household and the subsequent ones. Each questionnaire was checked for completeness before the survey team left the area in the case of missing or contradictory information so that the interviewees could be re-interviewed. In addition, all questionnaires were checked by the Project Manager and the statistician (HIS) for completeness and accuracy.

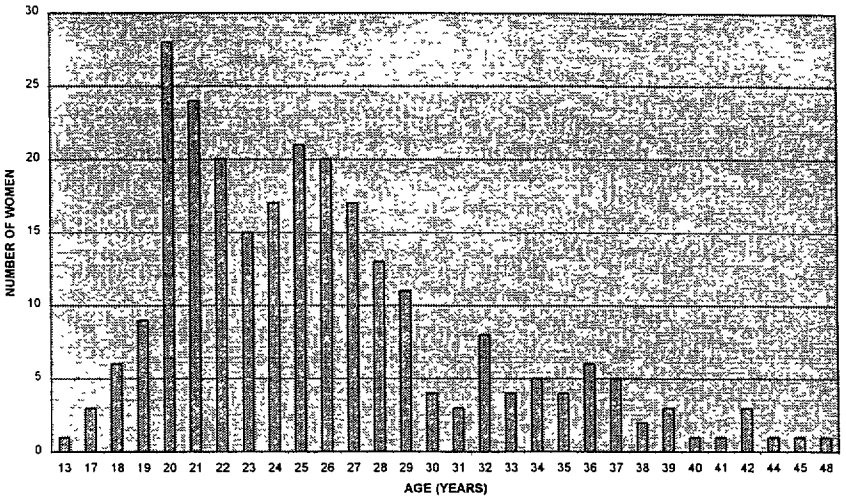
An oral consent was obtained from each subject by the interviewers before commencing the interview. This ensured that they were not obliged to participate in the survey. The interviewees were also assured of confidentiality.

3.0 RESULTS [*figures in italics indicate baseline findings*]

3.1 Description of sample

A total of 301 caretaker, 262 men and 56 youth usable questionnaires were obtained during the survey. The following figures provide the age distribution of the study units. Below is a description of the sample

Age:



The mean age of female caretakers surveyed was 25 years; while that of men was 31.7 and that for youth was 14.8 years. Of the 257 caretakers who indicated their age, 3.9% (n=10) were aged 18 years and below.

Education:

Of the 301 female caretakers, 68.8% (n=207) reported they had some formal education. Out of those with formal education, 99 (47.8%) had up to 4 years of schooling while 108 (52.7%) had 5 years and above of schooling. In total only 35.8% of female caretakers could read and write.

Of the 262 men, 54% (n=141) reported that they had attended 5 years and above of schooling and could therefore read and write.

Migration Pattern:

Thirty four out of 301 caretakers (11.4%) *[30.8%]* reported that they go out of the village or compounds for an extended period of time at least once a year. The most frequently mentioned months are June and July (this is after the farming season). The remaining women (88.7%) reported that they had stayed within the village or compound throughout the year.

3.2 Breastfeeding

Two hundred and ninety mothers (96.3%) *[85.6]* reported that they were breastfeeding their child. The remaining 3.7% (n=11) of the mothers who were not breastfeeding, said the reason for having stopped breastfeeding was "baby not interested" (40%), "mother felt it was the right time to stop" (20%) and "mother pregnant"(20.0%) respectively. One woman stated that she stopped because she did not have enough milk and one woman stated that she stopped because of sore nipples. The earliest that breastfeeding was discontinued was at 10 months of age.

When caretakers were asked about the time they first breastfed their child, 167 (55.5%) *[32.1%]* said they breastfed immediately after delivery, 30.6% *[46.3%]* breastfed on the first day; 10.3% *[13.2%]* reported they breastfed some days later and the remaining 3.7% (n=301)of the mothers could not remember.

When the caretakers/mothers were asked the age of the child at which they started giving fluids or foods other than breast milk, 17.3% said before 4 months of age; 123 (40.9%) *[30.6%]* said between 4-6 months, 108 (35.9%) *[16.2%]* said at 6 months or later, 2 (0.7%) *[6.5%]* said during the first 3 days, while 16 (5.3%) *[11.3%]* said they had no idea.

The percentage of female caretakers that stated that they breastfed immediately after delivery increased from 32.1% at baseline to 55%. This shows a 24.9% increase. More women, 40.9% at mid-term against 32.1% at baseline, stated that a child should begin receiving fluids in addition to breastmilk at 4-6 months. This shows an 8.8% increase in knowledge of exclusive breastfeeding period.

3.3 Growth monitoring/immunization

Two hundred and sixty seven (88.7%) *[80.4] f the caretakers* presented their children's under-fives card. Two hundred and forty one (90.3%) *[81.4%]* of the children who had a card, were weighed in the last 4 months prior to the survey, while 45.3% *[32.7%]* had a record of ever having received vitamin A supplementation.

From the immunization records, among children less than two years, 141 out of 301 (52.8%) *[55%]* were fully immunized. Table 2.0 illustrates vaccination status.

Table 2.0. Table illustrating immunization coverage by antigen (N=267)

Age (months)	BCG	DPT POLIO 1 2 3			1	MEASLES
0 - 23	228 85.4%	239 89.5%	217 81.2%	183 68.5%	239 89.5%	141 52.8%

Drop -out rate for DPT and Polio

Antigen	Baseline	Mid-term
D.P.T.	21.2%	23.4%
Polio	19.4%	23.4%

MEASLES

Age group (months)	Baseline	Midterm
10-23 months	59%	83%

Of the 22 children aged more than 12 months who had not received, or could not document, all the vaccinations, 78.3% of their caretakers reported that the children had not completed the vaccination for no particular reason, while 8.4% reported having lost the card as the reason .

The programme had planned to increase the immunization coverage among children aged between 12 months and 24 months. The findings of the mid-term show that 74.4%[66%] (n= 87)of the117 children12 to 24 months of age were fully immunised or could document being fully immunised.

The results of the mid-term showed that 88.7% of female caretakers had presented underfive cards of their children while 80.4% had the underfive cards during baseline. This shows an increase of 8.3% of card retention.

There is an increase in immunization dropout observed during the survey, from 19.4% for polio at baseline to 23.4% at mid-term and from 21.3% for DPT at baseline to 23.4% at mid-term. The programme believes this was due to stockouts of DPT and Polio vaccines, which affected the whole country.

3.4 Diarrheal diseases

Out of three hundred and one caretakers, 91 (30.2%) *[46.5%]* reported that their children had diarrheal in the two weeks prior to the survey. Out of those who reported that their children had diarrhea (n=91), 85 (93.4%) *[82.8%]* reported to continue breastfeeding their children during the diarrhea episode.

Of the 85 caretakers who continued to breastfeed their children during the diarrhea episode, 49.4% *[68.5%]* breastfed same as usual 45.9% *[18%]* more than usual and the remaining 4.7 *[13.5%]* breastfed less than usual. Fifty (54.9%) *[52.2%]* of the caretakers provided other fluids other than breastmilk at the time their children had diarrhea. Of those who provided other fluids other than breastmilk, 70.0% (n=35) provided home-made sugar-salt solution - (54.3%) of them same as usual, and 42.9% more than usual; 38.0% provided cereal-based ORT such as porridge - 66.7% (n=12) provided same as usual , 22.2% more than usual. 12.0% (n = 6) had their children given intravenous fluids; 72.0%(n=36) reported their children got anti-diarrheal drugs, including antibiotics; 64.0% (n = 32) reported their children got herbal medicine.

When the caretakers were asked if the children were provided any solid food during the diarheal episode, 39.6%(n =36) *[59%]* reported that their children were provided with semisolid/solid food. Of these, twenty-six (70.3%) *[72%]* reported that they were given same as usual, 18.9%(n = 7) *[25.6%]* more than usual and 10.8% (n =4) *[25.6%]* less than usual.

Of the 301 caretakers, 270 (89.7%) reported that they have heard about a treatment fluid called ORS and 61.1% (n=165)*[66.5%]* had prepared ORS for treatment of diarrhea.

When caretakers were asked what signs and symptoms of diarrhea would cause them to seek advice or treatment for diarrhea, 198 (65.8%) *[56.3%]* mentioned if child is weak or looks tired, 105 (34.9%) *[12.0%]* mentioned if child has sunken eyes, 22.6% *[25.7%]* mentioned if diarrhea is lasting 2 days or more, 20.3% *[2.3%]* mentioned if child has dry mouth, while 19.6% *[2.3%]* mentioned sunken fontanel, 13.9% *[1.7%]* mentioned if the child has loss of skin turgor while 21 (6.9%) *[19.7%]* said they did not know any danger signs or symptoms.

When asked where caretakers would go first when they needed advice or treatment for a child with diarrhea, 31.2%(n=94) *[1.7%]* would go to HSA; 37.2% *[24.7%]* said estate clinic; 13.9% *[13.1%]* said local government health centre (at Wimbe); 12.3% *[24.2%]* said a government health centre (at Mtunthama); and 3.9% would go to a family member/friend/traditional healer/ grocery.

For important actions that the caretaker/mother should take when a child is having diarrhea, 142 (47.2%) *[13.3%]* said give child ORS; 119 (39.5%) *[33.0%]* said take child to health centre; 18.6% *[13.3%]* said give child more to drink than usual; and 16% *[7.0%]* said give child small amounts to drink at frequent intervals. Almost 13% said give homemade fluids; 10.6% *[6.0%]* said start giving fluids right away; 7.6% said continue breastfeeding; while 3.5% *[19.7%]* said they did not know what to do when child has diarrhea.

One hundred and forty caretakers out of 301, (46.5%) *[20.0%]* stated that covering food is a practice that can prevent a child from getting diarrhea. Over 30% *[20.3%]* mentioned washing hands before eating; 24.6% said washing hands after changing nappies or using a toilet as a practice that would prevent diarrhea. Almost 17%*[13.3%]* mentioned using safe or boiled water as an activity that would prevent a child from getting diarrhea while 15.3% (n =46) said did not know what to do to prevent their children from getting diarrhea.

Of the 301 households that were visited, for 61.1%(n=184) *[62.7%]* their source of water was piped taps;13.6% *[no baseline]* from boreholes; 3.7% *[16%]* from protected wells; 2.7% from river/dam; and 17,9% from unprotected wells . According to respondents, 55%(n=160) are 0-15 minutes walk from their water source; 27.8% between 16 and 30 minutes; 14.4% 31 minutes to 60 minutes; and 2.7% more than 60 minutes.

When asked whether they boil their drinking water, 25.9% (n =78) *[28.1%]* of the 301 households said yes, 3.3%(n=10) said sometimes, and the balance said not at all. Out of those who do not boil water, 64.4% *[43.1%]* said there was no need as the water is safe, 13.3% *[12.5%]* said they lack time, 6.7% *[13.0%]* said they did not know they should boil water, and 10.7% mentioned other reasons for not boiling water. Out of those who boil their water for drinking, 51.7% out of 60 boil the water for less than 30 minutes.

Two hundred and eighty eight caretakers, (95.7%) *[91.6]* said they use a latrine when nature calls. Two hundred and forty four, 47.3% *[65.0%]* of the caretakers, wash their hands after

answering the nature's call,18.8% after changing baby nappies, 27.6% before eating. One hundred and seventy households, 56.5% *[53.7%]* of the 301 households dispose of their refuse by dumping in pits,30.9% (n=93) dispose openly in the streets,9.6%(n=29) burn the refuse.

The results show that 45.9% of female caretakers who continued to breastfeed their child, stated that they breastfed their child more than usual during the diarrhea episode, while only 18% did this at baseline. Of the female caretakers who stated that they gave the same amount or more solid foods during diarrhea episode, 89.2% stated that they did this at mid-term while 97% stated this at baseline. This shows a decrease in percentage of people practicing the practice being promoted. More than 61% of caretakers stated that they had prepared ORS during the mid-term while 66.5% had prepared ORS at baseline. This may be attributed to the shortage of ORS that has been experienced during the last 6 months.

When asked to (name) at least 3 danger signs of diarrhea that would cause them to seek advice, or treatment 17.7% could name at least 3 (at mid-term) while 23.5% had named at least 3 during baseline. This shows a decrease in knowledge of danger signs of diarrhea.

Twenty percent of the female caretakers could name at least 3 important actions that a mother should take when a child is experiencing diarrhea, while at baseline only 10% could name at least 3 important actions. This shows an increase of 10% in knowledge about what action to take when the child has diarrhea.

Knowledge of ways to prevent diarrhea increased from 9% at baseline to 36% at mid-term. This shows that 4 times the number of people at baseline could name at least 3 ways to prevent diarrhea as at mid-term. Overall knowledge on diarrhea prevention increased and this trend needs to be promoted so that less children suffer from diarrhea. The increase in knowledge of prevention corresponds with the decrease in the percentage of children who had diarrhea from 46.5% at baseline to 30.2% at mid-term.

3.5 Malaria control

Two hundred and sixteen caretakers out of 301 (65.5%) *[51.7%]* stated that a child can get malaria through mosquito bites while 12.7% *[29.3%]* said they did not know, while 39.9% of the mothers gave wrong answers like exposure to coldness. Fifty five percent (n =166) *[64.5]* reported that their children had been ill with fever two weeks prior to the survey. Out of the 166 caretakers who reported that their children had had fever, 40.4% *[37.6%]* took them to hospital 13% *[10.8%]* gave Fansidar; 16.8% *[20.1%]* gave other anti-malarial drugs; 12% gave paracetamol; 8.7% *[14.4%]* kept the child cool or provided tepid sponging; 3.8% *[1.0%]* undressed the child; and the rest used traditional methods of treatment.

One hundred and twenty two, 73.5% *[56.3%]* sought advice or treatment outside the home when their child had fever while 26.5% *[43.8%]* did not. Of those who sought advice 48 (39.3%) *[25.0%]* sought advice or treatment immediately, 32.8% (n =40) *[36.1%]* sought advice within 24 hours, 15.6% *[23.1%]* sought advice or treatment between 24-48 hours, while 15 (12.3%) *[13.9%]* sought treatment after 48 hours. Table 3.5.0 shows the most frequently mentioned health facility place/people where the caretakers went first when their children had fever.

Table 3.5.0 Frequencies of where caretakers went first when their child had fever

Source of treatment	Midterm	Baseline
Estate clinics	20.1%	*[19.8%]*
Grocery or shop	19.4%	*[27.3%]*
Govt Health Centre(Mtunthama)	17.2%	*[11.0%]*
District Hospital	11.9%	*[17.4%]*
Local govt health centre(Wimbe)	12.7%%	*[10.5%]*
HSAs	7.5%	-
Private dispensary/pharmacy	6.7%	-
Traditional Healers/friends	4.5%	-

Over 95% of caretakers reported that their children were given some treatment or got some treatment. Of those who were given treatment, 19% *[18.7%]* were given fansidar, (the anti malaria first line drug); 60.3% (n =69) *[65.%]* were given aspirin, cafenol, or paracetamol; 4.8% were quinine; 3.2% *[2.7%]* were given choloroquine; and 12.7% were given something else.

When asked what important action the caretakers would take when their child was having fever, 35.1% (n =166) *[33%]* said taking the child to hospital; 8.7% *[16%]* said giving some kind of anti-malarial medicine;14.0% *[5.7%]* said give child fansidar; 4.7% said give pain relievers like aspirin and cafenol; while 4.7% said keep the child cool; and finally, 1.5% said go to a traditional healer. Table 3.5.1 provides responses in relation to caretakers' knowledge about the signs and symptoms that are indicative of severe malaria, the following were the responses

Table 3.5.1 Responses of caretakers knowledge about signs and symptoms of severe malaria

Responses	**Mid-term**	**Baseline**
High fever	26.5%	*[55.3%]*
Convulsions	25.7%	*[30.0%]*
Severe weakness (lethargic)	16.8%	*[13.0%]*
Vomiting	7.6%	*[9.3%]*
Rapid/difficult breathing	7.6%	*[7.3%]*
Not drink or eat	3.0%	
Pale	2.7%	

Thirty-six 6.0% *[22%]* said did not know any signs or symptoms of severe malaria.

When asked about knowledge on what can be done to prevent the child from getting malaria, 15.7% (n = 301) *[2.0%]* said sleeping under a mosquito net; 14.1% *[6.3%]* said not having stagnant water around the house; 11.6% *[6.3%]* said using mosquito coils; and 6.9% *[6.4%]* said cutting long grass around the house. A further 5.9% *[1.7%]* said closing windows at night; 9.4%

[2.7%] said spraying insecticides; and 5% said burn leaves or dung. Seventy eight, (15.9%) *[58%]* said do not know what needs to be done to prevent a child from getting malaria and 15.5% gave responses related to malaria treatment.

Fewer (55%) (n = 301) children had been ill with fever at mid-term than the 64.5% (n = 300) who were ill with fever at baseline. The mid-term results show that, 89.7% of female caretakers sought advice or treatment within 48 hours of onset of fever while 89.0% had sought advice or treatment at baseline. Over 26% could name at least 3 appropriate ways to treat fever at mid-term while 22.8% did this at baseline. This shows an increase of 5.3%. Fewer caretakers, 21.7% at mid-term, than at baseline (32.7%), could name at least 3 signs of severe malaria.

There was an increase in the percentage of the caretakers who name at least 3 appropriate ways to prevent malaria from 3.6% at baseline to 12.5% at mid-term.

3.6 Acute respiratory infections

When caretakers were asked if their children had signs or symptoms two weeks prior to the survey (indicative of any acute respiratory infections) 30.9% (n=157) said their children had a cough, 20% said the children had difficult breathing, 17.8% said the child had fast breathing, while 31.5% reported that their children had a running nose.

When asked what actions a mother would take at home for a child suffering from a cough, rapid or difficult breathing 47.0%(n=93) *[11.3%]* of caretakers said keep child warm; 9.6% *[3.7%]* said continue breastfeeding the child; 3.0% *[3%]* said provide a lot of fluids; while 26.8% *[48%]* did not know what actions were needed to be taken. Nineteen (9.6%) mentioned other actions (most commonly mentioned being giving traditional medicine or going to a traditional healer)

When asked if the caretakers sought advice or treatment outside home for their child's cough or rapid or difficult breathing, 54.3%(n=101) *[68.9%]* said yes, 43.0% said no and 2.7% could not remember. Of those who sought treatment or advice, 41.6% *[32.5%]* did that immediately when the child had experienced the signs and symptoms, 28.7% *[16.7%]* within 24 hours 12.9% *[23.8%]* between 24-48 hours and 16.8% *[21.4%]* after 48 hours.

Treatment was first sought at estate clinic by 21.8% *[13.4%]* of caretakers; at grocery or shop by 15.8% *[29.6%]*; at local government health centre by 15.8% *[8.4%]*; and at government health centre by 11.95 *[8.9%]*. The traditional healer was sought out by 9.9% *[7.8%]*; treatment was sought at government district hospital by 8.9% *[14%]*; private dispensary by 6.9% *[2.2%]*; while HSAs by 2.0% of the caretakers. All caretakers said they got treatment or advice at places where they visited.

When asked about the signs or symptoms of respiratory infections that would cause them to sick advice or treatment, 27.0% *[42.7%]* said cough; 18.4% *[25.7%]* said difficult breathing; 4.5%*[4.0]* said chest indrawing; 11.0% *[25.3%]* said fast breathing; 11.8% said fever; 6.4% said vomiting; and 7.5% *[8.7%]* said tiredness or weakness. Less than 3% of respondents said refusal

to eat or drink while 7.2% gave other responses. Nineteen of the responses (3.6%) *[23%]* said did not know any signs and symptoms that would cause them to seek any advice or treatment.

3.7 Health utilization services

One hundred and seventy nine out of 301 caretakers (59.5%) *[40.6]* said they use estate health facilities. Of those that use the estate health facilities, 89.4% said are satisfied, 1.1% did not have any comments while 9.5% said were not satisfied. One hundred and thirteen of those satisfied (47.5%) said because drugs are available, 10.9% said the cost of drugs is affordable, 10.1% said they walk a short distance, 9.2% said because of short waiting time, 7.1% said because of the friendly attitude of the provider, 4.6% said because they get drugs on credit, 4.6% felt the drugs are effective. Those who said they were not satisfied cited, shortage of drugs and long walking distance as the reasons.

3.8 Family planning/maternal care

All female caretakers (100%) *[94.6%]* said they have been pregnant. Two hundred and seventy seven (92.0%) said they had received some antenatal care service. Of those that had received antenatal care, 72.6% (n=201)*[32.9%]* had an antenatal card or TTV card.

One hundred ninety four of the mothers, (96,5%) *[95.6%]* received at least TT1, 163 (81.0%) *[81.7%]* had TTV2 indicated, 111 (55.2%) *[65.5%]* had TTV 3 indicated, 77 (38.3%) *[34.4%]* had TTV 4 indicated and 51 (25.4%) *[18.3%]* had TTV 5 indicated.

One hundred and twenty two (40.5%) *[50.9%]* of the female caretakers reported that their last delivery was conducted at home, 22.6% *[14.7%]* had the delivery conducted at a health centre, 15.9% *[20.4%]* had the delivery done at a hospital, 18.9% *[13.7%]* were delivered had by a TBA, while the remaining 2.0% (n=6) reported having delivered at other places e.g. on the way to clinic, traditional healer and at a private hospital.

Out of 301 deliveries, 33.2% (n=100) *[16.1%]* were conducted by TBAs, 27.6% *[12.4%]* were conducted by midwives, 19.9% *[23.5%]* were conducted by family members or neighbors, 11.6% *[22.8%]* were conducted by a doctor, 6.0% *[18.5%]* were self deliveries and 1.7%(n=5) *[6.0%]* were conducted by traditional healers.

Two hundred and eighty two female caretakers (93.7%) *[90.3%]* had heard about family planning, 244 (93.1%) *[91.4%]* of the men had heard about family planning while only 27, (48.2%) *[36.0%]* of the youth had heard about family planning. Table 3.8.0 indicates, by type of respondent, the types of methods that respondents had heard of.

When asked on the best child spacing time laps between successive children, 271 (97.8%) of the female caretakers reported a duration of two years or more.

A total of 165 female caretakers (58.5% of those who had heard of family planning) *[53.2%]* reported that they were using family planning method at the time of the interview, 152, men (63.1%) *[50.8%]* reported that their spouses were using a method to delay pregnancy.

Asked what family planning methods they have ever used, 7 (33.3%) out of 21 youths who had ever had sex reported that they have ever used some methods.

Table 3.8.0 Individuals who have heard of Family Planning by methods

Family planning Method	Female Caretakers n=301	Men N = 262	Youths n = 56
Injections	30.7%	28.5%	18.8%
Pill	28.6%	24.3%	29.2%
Condom	18.0%	26.3%	37.5%
IUD	7.0%	4.2%	2.1%
Tubal ligation	4.8%	3.4%	4.2%
Norplant	3.4%	-	4.2%
Foam, Jelly	2.6%	2.2%	-
Vasectomy	2.2%	3.3%	2.1%
Traditional	1.0%	2.3%	-
Diaphragm	0.8%	-	-
Coitus interruptus	-	-	2.1%
Abstinence	-	1.6%	-

Ninety-three (56.4%) *[31.0%]* of the female caretakers were using the injection method to prevent pregnancy, 16% *[12.9%]* were using the pill, while 14.9% *[3.9%]* were using condom. Ten were practicing abstinence, 3 had had tubal ligations, and the remaining 8% were using traditional methods. Thirteen (8.3%) *[16%]* of men were using condom to avoid pregnancy; 53.8% of the men's partners were using Depo Provera; 23.7% were on the pill; and 10% are using traditional methods. Of the 15 youth who are in a relationship, only 2 are using a method to avoid pregnancy or a STD. Both are using condoms. The youth obtained the condoms from shops and HSAs.

The female caretakers reported that they obtained the methods from a variety of sources.

Of the sources cited, 41(24.1%) *[24.5%]* obtained the methods from district hospital, 20% (n=34) *[23.2%]* from government health centre, 19.4%(n=33) *[.3%]* from CBDAs, 15.9% *[1.7%]* from estate clinic, 5.3% from a mobile clinic, 4.1% from BLM (Mary Stoppes health facility), and the balance from a variety of sources. Forty-one of the men (24.6%) obtained methods from government health centres, followed by district hospital at 21.0% and then 18.6%

from CBDAs. Fifteen percent got methods as estate clinics, 9% from a traditional healer, and the balance from a variety of sources.

The majority of the men (93%), 82.4% *[82.6%]* of women and 100% of the youth reported that they did not encounter any problems in obtaining the family planning methods of their choice

The mid-term shows that 55.2 % of women that had been pregnant could document at least 3 doses of TTV while 65.6% had demonstrated 3 doses of TTV 3 at baseline. This decline may be due to stock-outs that occurred during the last 12 months of the project.

More women, 72.4%(n=111), were attended to in their last delivery by trained TBA, Midwife or Doctor than at baseline when only 51.3% had been attended by these trained personnel. A training of 14 TBAs might be attributed to the increase in proportion of women being attended by trained personnel during delivery.

3.9 STDs

Two hundred and seventy six (91.7%) *[87.5%]* of female caretakers, 253 (96.6%) *[92.8%]* of the men and 45 (80.4%) of the youth had heard about sexually transmitted diseases.

Out of the 276 women who had heard about sexually transmitted diseases, 143 felt they knew signs and symptoms. The most frequently mentioned signs or symptoms were: discharges from the penis cited by 16.5% *[27.5%]*;16.2% genital ulcers; and swelling in the inguinal area cited by 19.7% (n=78) *[27.5%]*. An addition 8.1% said discharge from the vagina; sores in the penal area cited by 10.6% *[33.3%]*; and 9.1% said pain while passing urine. Over 57% of respondents could name at least 3 symptoms of STDs.

Out of the 253 men who stated having heard about sexually transmitted diseases, 181 said they knew signs and symptoms. The most frequently mentioned signs and symptoms were: discharge from penis cited by 20.1%(n=92) *[34.6%]*; sores in the penal area cited by 17.7%(n=81) *[23.5%]*; swelling or pain in the inguinal region cited by 12.5%(n=57) *[41.2%]*; scrotal pain/swelling cited by 11.6% (n=53) *[9.6%];* genital ulcers cited by 10.9%(n=50) *[15.4%];* and pain/burning sensation when urinating cited by 10.5%(n=48) *[19.9%]*. Almost 47% of men named at least 3 signs or symptoms of STDs.

Out of 45 youths (80.4%) who reported that they heard about sexually transmitted diseases 35.6%% (n=16) said did not know any signs and symptoms. Nine (20%) mentioned sores in the penal area, 12.7% mentioned lower abdominal pains in women, and 7.9% mentioned discharges from penis and vagina respectively. An additional 9.5% mentioned pain in the scrotal area, and 6.3% said genital ulcers as signs and symptoms of STDs. Only 15.6% could name at least 3 signs or symptoms.

Twenty-five of all men interviewed reported that they had experienced signs and symptoms of STDs in the last 12 months. Of these, 68% *[64.3%]* sought treatment. Of the 17 men who sought treatment, 33.3% (n=6) *[33.3%]* sought treatment from district hospital, 16.7% (n=3) *[16.7%]* sought treatment at government health centre, 16.7% (n=3) *[27.8%]* at a traditional healer,

16.7% sought assistance from a friend, and 5.6% sought treatment from each of the following: estate clinics, parents/relatives and BLM clinic.

Twenty-eight *[3]* of the 143 women who had ever heard of STDs, had experienced signs and symptoms in the last 12months. Of these, 17 sought treatment. Of the 17 women who sought treatment, 35.3%(n=6) sought treatment from a government health centre, 23.5%(n=4) from hospital, another 23.5%(n=4) sought treatment from traditional healers. An additional 5.9% sought treatment from each of the following: BLM clinic, street vendors, and relatives.

Two of the 56 youths had experienced signs and symptoms of STDs and of these, 1 sought treatment from the district hospital.

The youths that got infected with a STD never informed their partners, while 15(53.6%) *[100%]* of caretakers who had signs or symptoms informed their partners, and 13(52.0%) [*41.4%]* of men informed their partners. Nine (60%) *[35%]* of the male partners who were informed sought treatment while 7(53.8%) *[66%]* of the female partners sought treatment.

Approximately 43% of women who had a sign or symptom took an action to protect their partner – most abstaining from sex - while 64% of men did the same.

The mid-term results showed that 13.3% (n=35) of the men could name at least 3 STD symptoms of STDs while 20% did so at baseline. As for the women, only 17.5% (n=53) could name at least 3 STD symptoms during the mid-term survey while 28% of the women did so at baseline.

3.10 HIV/AIDS

When asked if they have ever heard about AIDS, 295 (98.0%) *[99.3%]* of the female caretakers said they had. All *[99.3%]* of the men said they had heard about AIDS as had 50 of the youth (89.3%) *[no baseline]*. The most common source of information about AIDS in women was the radio 35.6% (n=211) seconded by the health workers 26.5% (n=157). Amongst men, 41.6% (n=211) said radio was the most common source of information about AIDS, followed by health workers 28.4% (n=144). In relation to the youth, 32.4% (n=35) said the radio is the most common source followed by schoolteachers at 13.9% (n=15).

When asked about how HIV/AIDS is spread, 195 of the 301 females (64.5%) *[62.1%]* said through sexual intercourse with multiple partners, 37.5% *[14.8%]* said intercourse with AIDS/STD patients, 31.6% *[0.3%]* said sharing toothbrushes and 23.9% *[3.0%]* said through injections or needles or blades.

Responses from men on how HIV/AIDS is spread yielded the following responses: 152 responses (58%) *[41.7%]* said sex with multiple partners; 89 (33.9%) *[34.8%]* said sexual intercourse with someone with AIDS; and 21.8% *[28.1%]* said sex with prostitutes would spread HIV/AIDS. An additional 18.7% stated sharing toothbrushes and 18.3% said the use of infected injections, needles, or razor blades. Almost 13% could name at least 4 ways of contracting HIV/AIDS.

Among the youths 42.3% said sexual intercourse with multiple partners would spread HIV/AIDS, followed by sexual intercourse with an AIDS./STD patient (26.9%), use of infected injections, needles, or razor blades (17.3%), while19.2% said sex with prostitutes, would spread HIV/AIDS. Only 14% could name at least three risk behaviors for HIV/AIDS.

When asked the measures to avoid HIV/AIDS, the most frequently mentioned responses among women were; 201 (66.8%) *[67.8%]* having a single partner; 90(29.9%) *[5.0%]* said using condoms always during sex; 62(20.6%) *[no baseline]* said decreasing the number of sex partners; and 58(19.3%) *[2.0%]* avoid sharing toothbrushes. A little over 20% of women could name at least 3 ways of protecting themselves from AIDS.

One hundred and fifty (57.3%) *[51%]* of men said by having a single sex partner one would avoid contracting HIV/AIDS; 74 (28.2%) *[9.6%]* said by using condom one would avoid AIDS; 27.9% *[26.6%]* said by not having sex at all one would avoid AIDS. An additional 15.6% of men said that not sharing toothbrushes was a protection method as was decreasing partners (19.8%) and staying abstinent (15.3%). Almost 20% of men could name three ways to protect themselves from HIV/AIDS.

Amongst the youths, 17(32.7%) responses mentioned that AIDS can be avoided by not having sex; 23.1% said that by decreasing the number of sex partners one would avoid AIDS. An additional 21.2% mentioned always using condoms, 15.4% said a single partner, and 17.3% said not sharing toothbrushes. Only 12% could name at least 3 ways to protect yourself from HIV/AIDS.

Two hundred and fifty one (83.4%) *[95.6%]* of the female caretakers said it is possible for a healthy looking person to have HIV/AIDS, 92% of the men *[89.5%]* said a healthy looking individual could have AIDS while 68% *[no baseline]* of the youth said a healthy person can have AIDS.

When asked if AIDS has a cure, 289(98.0%) *[97.3%]* of the female caretakers, 261(99.6%) *[96%]* of the men and 49 (98%) of youth said AIDS has no cure.

129 (42.6%) *[60%]* female caretakers considered themselves to be at risk of getting HIV/AIDS. Almost 9% because they do not always use a condom, 11.6% because they recently had injections, 7.5% because they are in a polygamous marriage, and 30.6% because their partner has other partners. Among men, 74 out of 262 (28.2%) *[98.9%]* considered themselves at risk of getting HIV/AIDS because they don't always use condoms (7.4%), they recently had injections (16%), they have more than one partner (8.6%), they are in a polygamous marriage (7.4%), and 8.6% because their partner has other partners.

Of the 15 women, (5%) *[2.0%]* who had sex with a non-regular partner 10(66.7%) *[66.7%]* did not use a condom. Twenty-four (9.2%) of the 262 men interviewed had sex with a non-regular partner in the six months prior to the survey and 33% (n=8) *[79%]* did not use a condom.

Six (10.7%) out of the 56 youths had sex with a non-regular partner in the six months prior to the survey and 5 of them (83.3%) never used a condom.

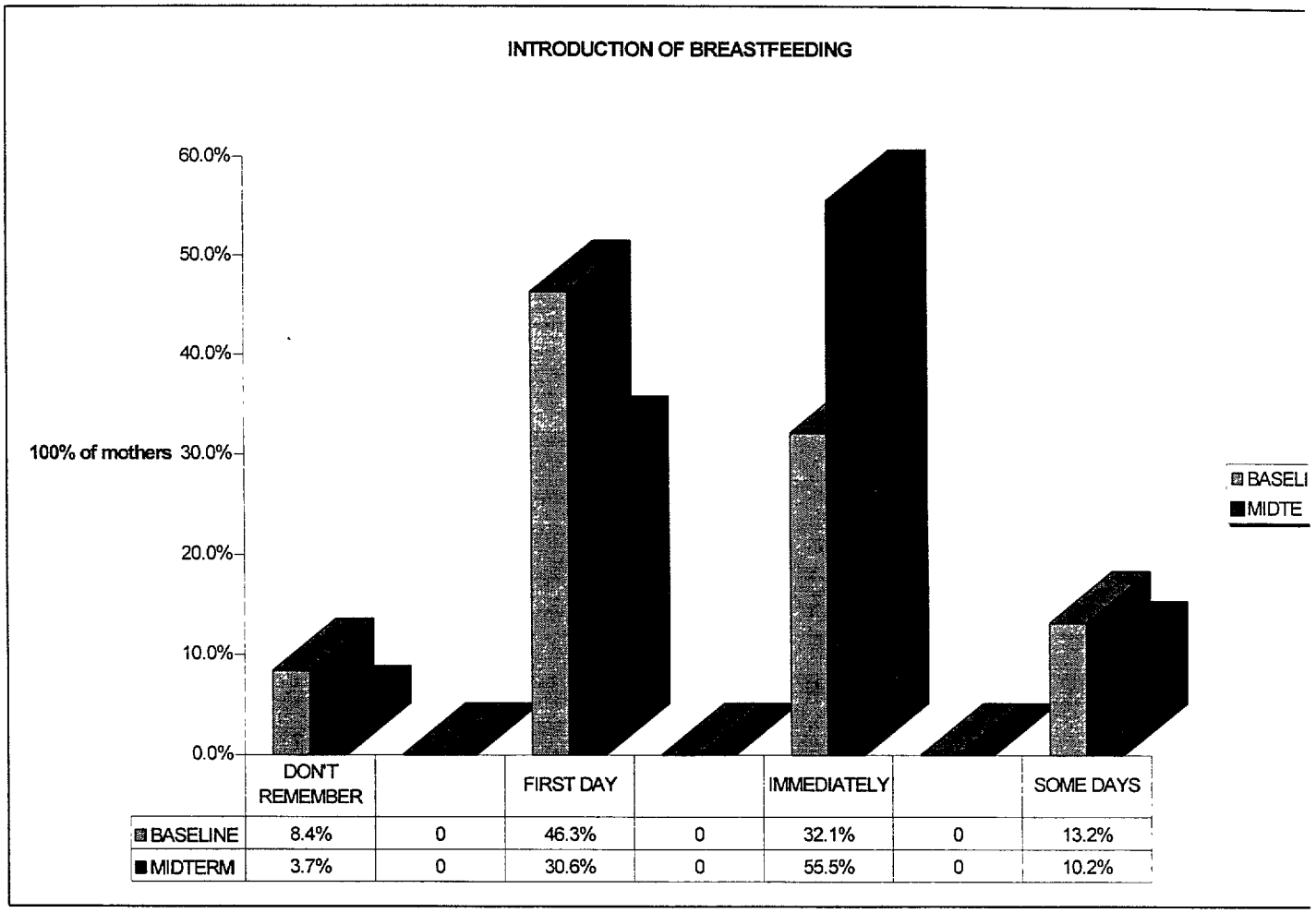
Sixteen of the youths interviewed (30.8%) said their schools have anti-AIDS clubs and 5 of them are members of the clubs. The clubs mostly perform drama and sing songs about HIV/AIDS awareness for prevention/behavioral change.

4.0 SUMMARY OF KEY CHILD SURVIVAL INDICATORS

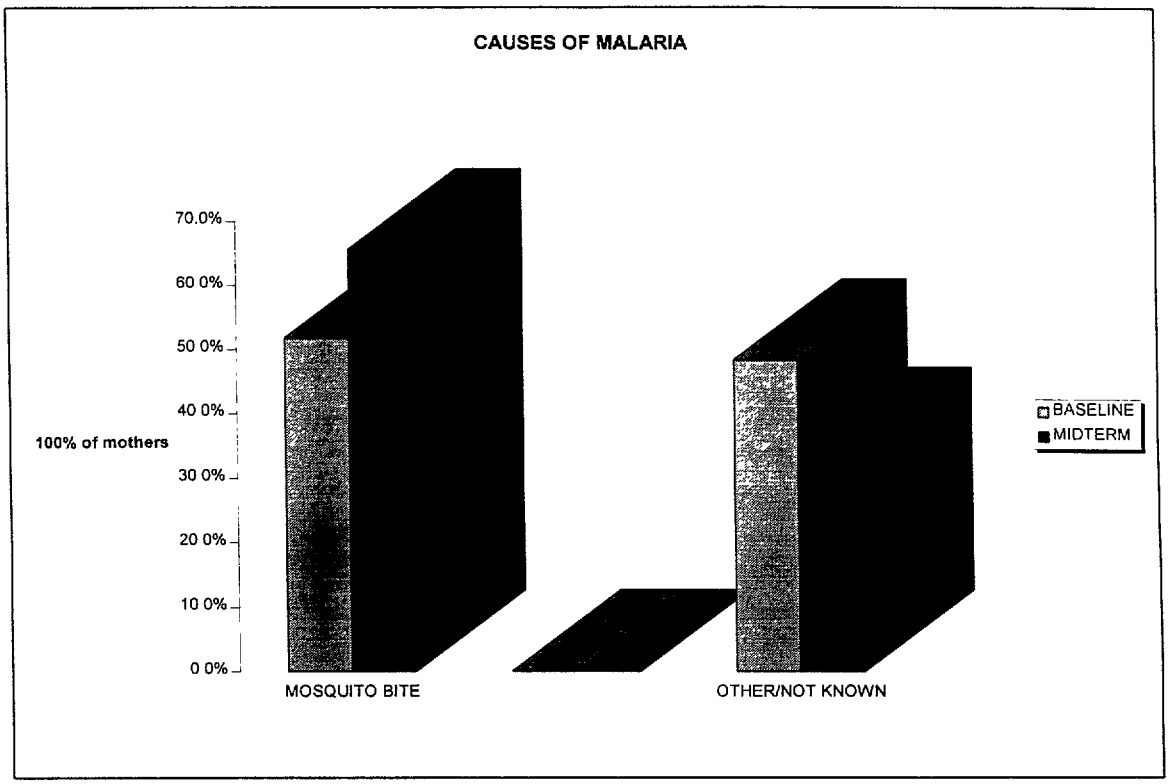
Performance Indicator	Baseline		Mid-term	
	Year	Finding	Actual	Finding
4.1 Breastfeeding	**1999**		**2000**	
(a) % of children (24 months and below) who were breastfed immediately after delivery.		32.1%		55.5%
(b) % of mothers that state that a child should begin receiving fluids in addition to breastmilk at 4-6 months.		32.1%		40.9%
(c) % of mothers that state that they exclusively breastfed to 4 months age.		46.8%		40.9%
4.2 Growth monitoring				
(a) % of children (less than 24 months) whose mothers/caretakers present an under-five card.		80.4%		88.7%
(b) % of children 12 to 23 months of age that present an under-five card indicating that they have been completely vaccinated.		46.0%		74.4%
4.3 Control of diarrheal diseases				
(a) % of mothers that continued to breastfeed their children during a diarrhea episode occurring 2 weeks prior to the survey.		82.8%		93.4%
(b) % of mothers stated that they breastfed their child more than usual during a diarrheal episode occurring 2 weeks prior to the survey.		18%		45.9%
(c) % of mothers stating that they gave the same or more fluids during a diarrhea episode occurring 2 weeks prior to the survey.		74.7%		91.2%
(d) % of mothers stating that they gave the same or more solid or semi-solid foods during a diarrheal episode occurring 2 weeks prior to the survey.		97%		91.7%
(e) % of mothers/caretakers stating that they prepared ORS for treatment of diarrhea.		66.5%		61.1%
(f) % of caretakers that can name at least 3 danger signs of diarrhea that would cause them to seek		23.5%		42.5%

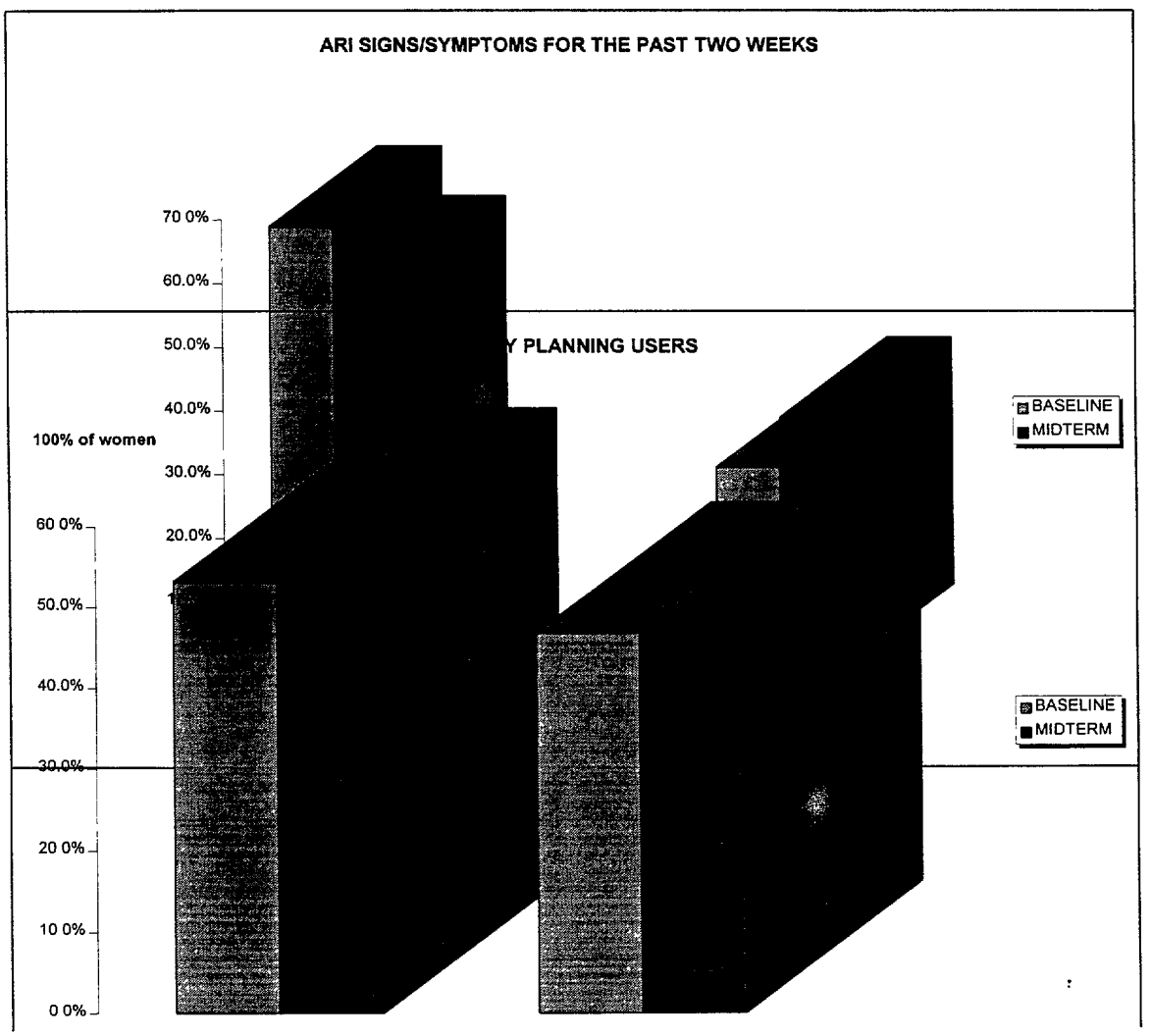
advice or treatment.		
(g) % of caretakers that are preparing ORS or administering home-based fluids during a diarrhea episode occurring 2 weeks prior to the survey.	–	72.5%
(h) % of caretakers that can name at least 3 important actions that a mother should take when a child is experiencing diarrhea.	10.0%	12.9%
(i) % of caretakers that can name at least 3 ways to prevent diarrhea.	9.0%	21.3%
4.4 Malaria control		
(a) % of caretakers seeking advice or treatment within 48 hours of fever on set.	89.0%	86.1%
(b) % of caretakers that can name at least 3 appropriate ways to treat fever.	22.8%	12.3%
(c) % of caretakers that could name 3 signs of severe malaria.	32.7%	28.6%
(d) % of caretakers/mothers that could name at least 3 appropriate ways to prevent malaria.	3.6%	11.9%
4.5 Family planning/maternal care		
(a) % of women that have ever been pregnant that can demonstrate at least 3 doses of TTV 3.	65.6%	55.2%
(b) % of women stating that they were attended in their last delivery by a trained TBA, Midwife or Doctor.	51.3%	57.4%
(c) % of women/couples stating that they are using a modern method of Family Planning.	55.5%	58.5%
4.6 Acute respiratory infections		
(a) % of mothers stating that they sought treatment for their child's last episode of cough, rapid or difficult breathing.	63.9%	54.3%
(b) % of mothers that can name 3 appropriate ways to manage a child with cough, rapid or difficult breathing.	13.3%	23.6%
(c) % of mothers that can name 3 danger signs of respiratory infections that would cause them to seek advice.	31.2%	29.6%

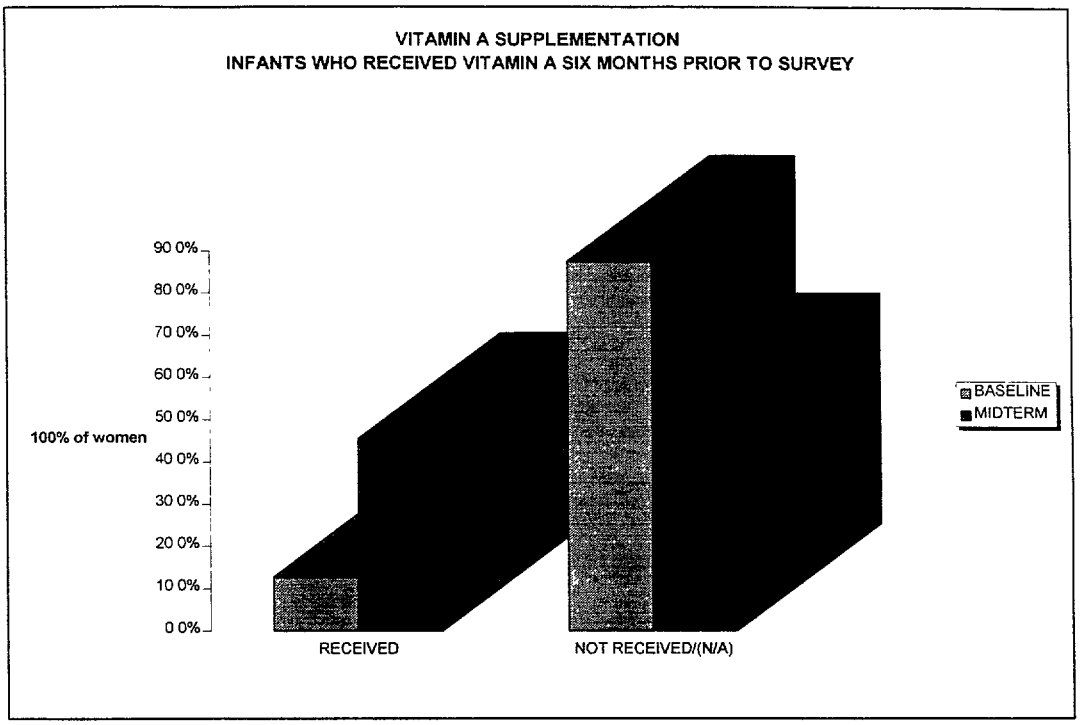
4.7 HIV/AIDS			
(a) % of men and women that can name at least 3 STD symptoms.	men	50.5%	46.8%
	women	26.5%	57.3%
(b) % of men/women who had a STD symptom in the last 12 months that state that they informed their partner(s).	men	41.4%	52.0%
	women	100%	53.6%
(c) % of women and men that can name at least 4 correct ways of avoiding HIV/AIDS.	men	19.6%	12.9%
	women	18.5%	21.6%

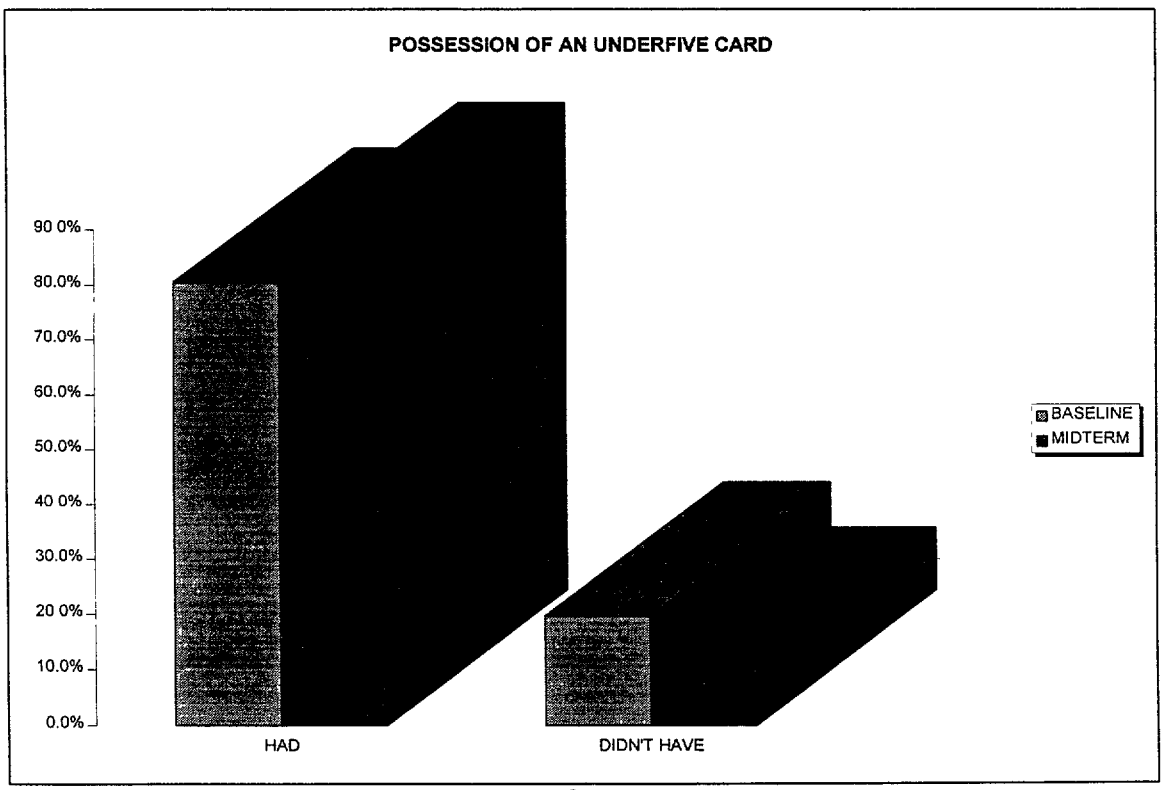


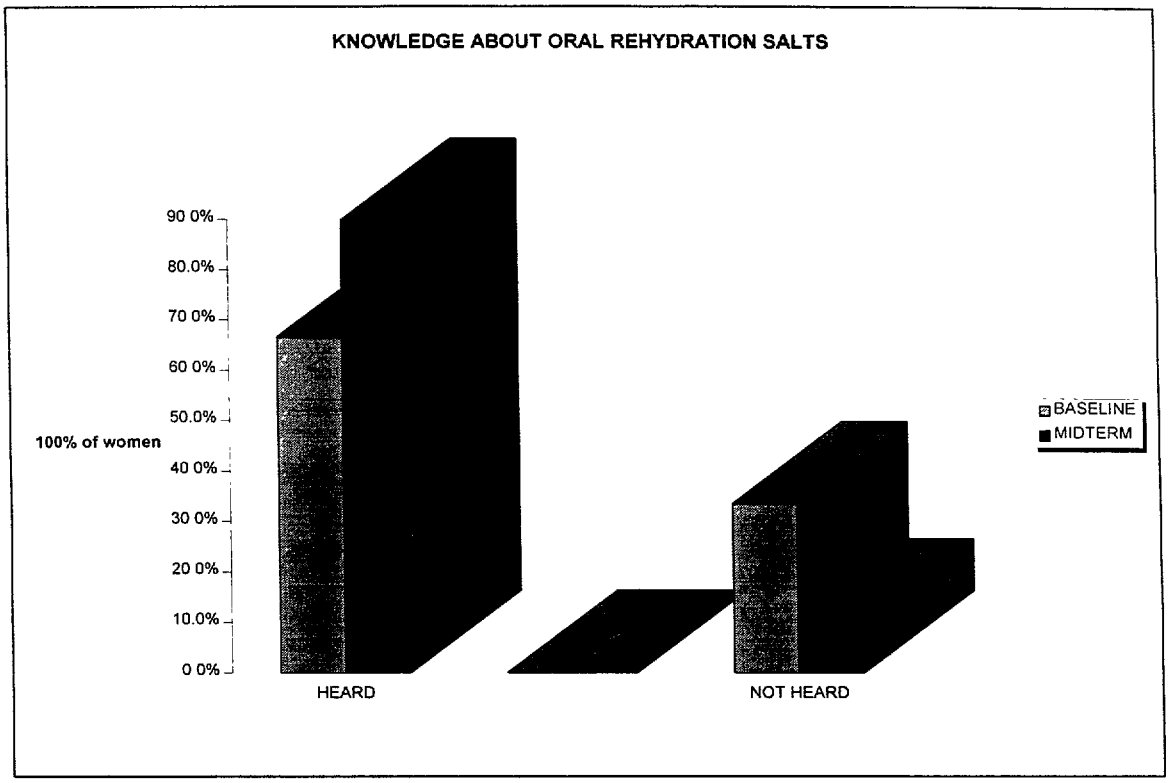
	DON'T REMEMBER		FIRST DAY		IMMEDIATELY		SOME DAYS
BASELINE	8.4%	0	46.3%	0	32.1%	0	13.2%
MIDTERM	3.7%	0	30.6%	0	55.5%	0	10.2%

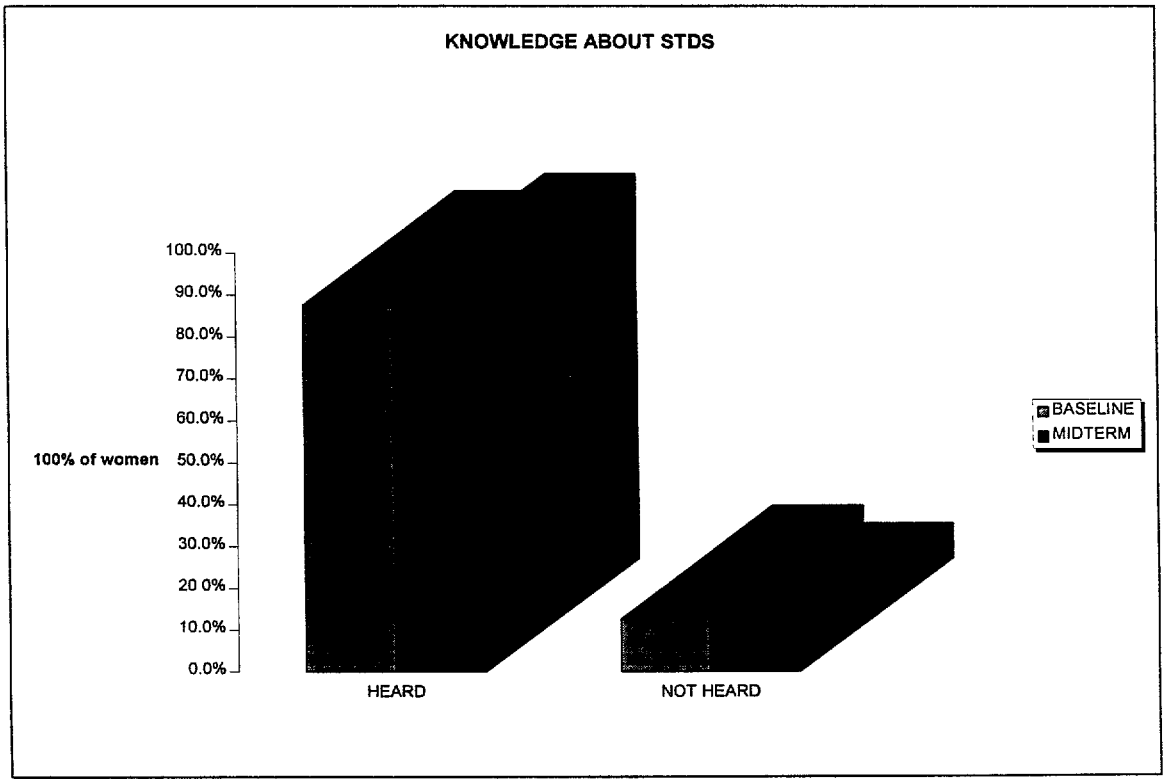

CAUSES OF MALARIA
70.0%
60 0%
50 0%
40 0%
100% of mothers
30 0%
20 0%
10 0%
0 0%
MOSQUITO BITE
OTHER/NOT KNOWN
BASELINE
MIDTERM


ARI SIGNS/SYMPTOMS FOR THE PAST TWO WEEKS
70 0%
60.0%
50.0%
40.0%
100% of women
30.0%
20.0%
60 0%
50.0%
40.0%
30.0%
20 0%
10 0%
0 0%
BASELINE
MIDTERM
BASELINE
MIDTERM


VITAMIN A SUPPLEMENTATION
INFANTS WHO RECEIVED VITAMIN A SIX MONTHS PRIOR TO SURVEY
100% of women
90 0%
80 0%
70 0%
60 0%
50 0%
40 0%
30 0%
20 0%
10 0%
0 0%
RECEIVED
NOT RECEIVED/(N/A)
BASELINE
MIDTERM


POSSESSION OF AN UNDERFIVE CARD
90 0%
80.0%
70.0%
60.0%
50.0%
40 0%
30.0%
20 0%
10.0%
0.0%
HAD
DIDN'T HAVE
BASELINE
MIDTERM


KNOWLEDGE ABOUT ORAL REHYDRATION SALTS
90 0%
80.0%
70 0%
60 0%
50.0%
100% of women
40 0%
30 0%
20 0%
10.0%
0 0%
HEARD
NOT HEARD
BASELINE
MIDTERM


KNOWLEDGE ABOUT STDS
100.0%
90.0%
80.0%
70.0%
60.0%
100% of women
50.0%
40.0%
30.0%
20 0%
10.0%
0.0%
HEARD
NOT HEARD
BASELINE
MIDTERM