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**WORLD VISION RELIEF AND DEVELOPMENT INC.**

**FIRST ANNUAL REPORT  
TETE CHILD SURVIVAL PROJECT  
TETE, MOZAMBIQUE**

**Project Beginning and Ending Dates  
October 1, 1990 through September 30, 1993**

Submitted to:

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## **SUMMARY DESCRIPTION OF THE PROJECT**

**The difficult socioeconomic and military situation in Mozambique affects every citizen, but the most vulnerable groups are women and children. These groups have immediate basic health care needs which go unattended for extended periods of time, resulting in high morbidity and mortality and much unnecessary human suffering.**

**Much of this suffering is directly related to rebel activities that frequently burn down homes and farms, attack villagers, and destroy health care facilities throughout the country. In Tete province, the destruction of hospitals, and vandalization of health clinics and posts have left over half of the population in the province without health care.**

**The goal of the project is to reduce child mortality and morbidity in secure districts of the war-torn Tete Province of Mozambique by initiating Child Survival interventions, which include nutrition surveillance and promotion, ORT, training of health workers, health education, malaria control, and immunization.**

**Tete CSP is the continuation of a project sponsored under two previous AID grants, the latter of which terminated March 31, 1991. These grants (OFDA 8132/9005) were one-year initiation grants which were predecessors of CSP. A baseline survey for the CS project was conducted in February 1991. Survey results are outlined in the Detailed Implementation Plan (DIP) which was drafted in April 1991.**

**By the end of September 1991, 4,500 families, over 5,000 women of childbearing age and 3,000 children under three years were registered and benefited from the project. Tete CSP has achieved 86 percent full immunization of the total target population of children 0-11 months and 68 and 20 percent vaccination coverage for TT1 and TT2, respectively, among the target population of women 15-49 years.**

**One third of the mothers have been instructed on the importance of breastfeeding and proper weaning practices. Sixty percent of the mothers have been trained on the proper preparation and administration of ORT, and 63 percent reported that they treated their children under three years suffering from diarrhea with ORT. One hundred fifty patients were admitted into the therapeutic feeding program between April and September 1991.**

**One thousand one hundred latrines have been constructed in the 11 villages along the Tete-Zimbabwe corridor since 1989. Five hundred thirty-two are in Cancune alone, which provide 85 percent of this population access to ventilated pit latrines. One hundred community facilitators have been identified, and were trained in the prevention and treatment of diarrhea in 1990. An additional 60-70 will be identified and will be functioning by the end of September 1992. Six formal CSP/MOH staff training sessions have been conducted since October 1990, and six to eight additional sessions on various community-based health topics are scheduled to take place before the end of September 1992.**

**This annual report documents the changes in project design, addition of staff, use of technical staff, progress in the health information and data collection, improvement in the**

quality of the program, progress toward objectives and sustainability and a revised work plan and budget for fiscal year 1992.

The format of this report was adapted to fit the guidelines for CSPs provided by the International Health Programs Department (IHPD) of World Vision Relief and Development (WVRD). Deviations from this format are specifically noted.

Data presented in this report are based on the monthly statistics and reports between April 1 and September 30, 1991. This period corresponds with the interval during which funds began to be accessed for the current interventions under Tete CSP.

## **I. CHANGES IN PROJECT DESIGN**

### **A. Statement of Country Project Objectives**

#### **1. Length of Project**

Project objectives and benchmarks of Tete CSP have changed very little over the course of this first year. The length of the project, however, was modified since the drafting of the proposal in December 1989. Tete CSP was originally designed to be a four-year project. However, the project was granted three years with possibility of an extension. Consequently, program length and end-of-project objectives have been shifted to reflect objectives and benchmarks of fiscal year 1993. This information has been accurately reflected in the DIP.

#### **2. VHW Training**

One of the three major training objectives was to train 100 volunteer village health workers on CS interventions and water and sanitation. Originally 100 VHW (Agente Polivalente Elementares de Saude [APES]) were identified and trained through a World Bank (WB) grant administered and supervised by the Mozambican government.

### **B. Location and Size of the Priority Population Living in the CS Impact Area(s)**

#### **1. Location**

Due to continued rebel activity and instability, Tete CSP staff were forced to pull out of several target areas along the Harare-Blantyre corridor, where Tete CSP had targeted 11 villages. These villages were originally located 5-10 km. from the road but were relocated closer to the road for security.

In March 1991, CSP staff met with the MOH to discuss security problems and determine alternative strategies and new sites for the CSP. The new strategy divides the project into three zones: Boroma, Changara, and Mssawa. Each zone consists of three to five villages with populations ranging from 12,000-15,000. It also divides the staff into two teams, the mobile team and the stationary team. Each stationary team is responsible for several interventions (vaccinations, nutrition, ORT, and health education), as opposed to having one team for each intervention. A description of each team is attached (Appendices B and C).

Below is a list of impact areas of Tete CS project. These are changes not reflected in the DIP, but are a result of meetings with MOH and other government officials:

<b><u>Previous Target Area</u></b>	<b><u>New Target Area</u></b>	<b><u>1991 Population</u></b>	<b><u># of Bairros</u></b>
Bunga	Bunga	1,880	4
Cancune	Cancune*	3,000	2
Carata	Carata	870	4
Changara	Changara*	13,040	5
Chiocompende	Chiocompende	880	2
Dzunga	Degue	3,950	12
Matambo	Matambo	7,700	8
Mazoe	Mufa I and II	3,800	4
Mssawa	Mssawa	6,460	10
Mpcassa	Mpcassa	2,420	8
Nvuzi	Boroma	3,780	2
	Cassica (see Degue)		2
	Chiringa (see Degue)		2
<b>TOTALS:</b>	<b>13</b>	<b>47,700</b>	<b>65</b>

## **2. Size of Priority Population Living in the CS Impact Areas:**

The target population indicated in the DIP was approximately 40,000. The restructuring of the zones represents an increase of 7,700 (16 percent) in the target population. The ratio of children between the ages of 0-3 years and women of childbearing age in these new villages is virtually equivalent to the ratio as that of the original target areas.

There are few differences in the current and previous target populations. First, the new target areas, namely, Boroma, Cassica, Chiringa, Degue and Mufa I and II, have better access to health care facilities and services. Each has a health center or a health post which, though understaffed and inadequately equipped, can provide CS interventions. Secondly, the level of community participation and enthusiasm appears to be greater in the new areas. The leadership of each village supports and promotes the CS interventions. Finally, the location of these new target areas is closer to Tete and quite secure. It is a 90 km. stretch between Tete City and Dzungi, the last village formerly serviced by UNICEF on the Mozambique-Zimbabwe border.

## **C. Health Problems which the Project Addresses**

There have been no changes in the problems which project interventions addressed over the course of this fiscal year.

#### **D. Child Survival Interventions**

There have been no changes in the type of CS interventions over the course of this fiscal year. However, there were changes in the scope of CS interventions. In August 1991, a policy regarding the inclusion of recently displaced people ("deslocados") into the Tete CSP was established. Displaced populations from villages around the target areas will be provided CS interventions and will be monitored regularly. However, they will not be included in the official target population until permanent residence is established in the new area or until the population achieve "afectado" status. This status as defined by the Department for the Prevention and Control of Natural Disasters (DPCCN), includes a person or group of people who reside in a new area other than their former residence for a period of at least 18 months.

Currently, Tete CSP assists two non-target population groups who fall under the "displaced people" category. Both communities were forced to flee into the target areas because of repeated rebel activity in their villages. They are considered "deslocados" because of their recent relocation.

The first group is from Ntemangau, a village located approximately 20 kms. northeast of Changara Sede. It consists of over 2,000 people. Of these, 300-400 are children aged 0-5 years. The second addition is a small group of "deslocados" from Nhatreze, near the target area of Boroma. To date only very few women under 20 years and children between the aged 0-3 years have participated in the program.

One of the target population groups fully registered and serviced by the program has "afectado" status according to DPCCN definition. Tete CSP has served this community (Bunga) for over 22 months as a result of their permanent relocation in Changara.

#### **E. Strategies for Identifying and Providing Service to Individuals at Higher Risks**

##### **1. High-Risk Pregnant Women**

In April 1991 the Pregnant Women's Program was indefinitely suspended due to lack of CSP and MOH health staff, problems with security and inadequate funding. The aim of the program was to decrease the number and rate of low-birth weight babies in target areas. Prior to suspension, pregnant mothers were given monthly rations of beans and fish, were immunized against tetanus, and provided at least three complete antenatal physicals by a maternal/child care nurse before delivery. Food rations were given to mothers up to one month after giving birth. These rations provided 600 kcal/day and 50 percent of the daily requirement of protein.

The recommencement of this program in the target areas in Tete Province are currently being discussed. It is hoped that the program will recommence in 1992.

## **2. Malnourished Children**

### **a. Therapeutic Feeding Program**

The Therapeutic Feeding Program was initiated in Changara in January 1990. It targets severely malnourished individuals whose weights are below 75 percent weight/height at all ages. Patients are given frequent small feedings of LOA, high protein biscuits, porridge, corn meal mixture, and beans in varying amounts and proportions depending on age. They are evaluated clinically twice a week by a staff nurse and are weighed weekly. Children under five graduate from the program when their weight for height is above 80 percent for the standard, or when signs of severe malnutrition have disappeared.

There were 150 admissions between April and September 1991. Of these, 128 were children aged 0-12, and 22 were adults. This represents a 56 percent increase in admissions during the same period last year. This increase is attributed to the increased rebel activity, crop failures, drought and other security problems.

Five CSP target villages are serviced by the Changara center. A second center was opened in Boroma in August which serves five target villages. A third site under consideration is located near the provincial hospital and will serve the area under Mssawa. This center will operate on an outpatient basis only as the current security situation prohibits patients from sleeping in the center overnight. Rebel activity and vandalism have increased in this zone, causing most families in and around Mssawa to retreat to the bush each evening before dark.

### **b. Supplemental School Feeding Program**

An agreement was reached with the Ministry of Education (MOE) in Tete Province to promote and support the school children's supplemental feeding program. The program began in March 1990 in the early stages of the Tete Health Program. Program objectives are (1) to provide one meal/day to school-aged children of target populations, and (2) to monitor improvement in the level of chronic malnutrition of school children by weighing them monthly.

Currently this program serves 2,285 children ages 5-14 years in five villages near Changara Sede. Four hundred forty (19.3 percent) of

these children are "deslocados" or "afectados" who live in the target areas. The children are fed corn, beans, and oil supplied by WV commodities. Fish is supplied by the Tete CSP. The meal provides 30 percent of daily calorie requirement and 50 percent of daily protein requirement.

School children are weighed monthly. Those failing to gain weight are listed for follow-up by the CSP team leader weekly. Those who fail to gain weight in two months are referred to the district health center for examination and treatment.

An expansion proposal, if approved, will provide a supplemental school feeding program to all schools in three target zones. Sixteen primary schools will be included. The school feeding program will continue towards the end of the CS project in target areas. The Provincial MOE and Provincial Emergency Director will implement a supplemental school feeding program province-wide within the next few years.

c. Supplemental Ration Project

A supplemental nutrition program for chronically malnourished children (weight/age <3 percent) was initiated in July 1991. Monthly rations of beans, rice, corn, and oil provided by WVM commodities are distributed to each chronically malnourished child and his/her family by the DPCCN.

Tete CSP registers names and addresses of children in target areas who qualify for the rations. The list is given to the DPCCN who distribute the supplemental food. The children are weighed and measured twice a month as part of the CSP growth-monitoring program.

**3. Children with Incomplete Immunization**

In order to decrease the number of incomplete vaccinations (individuals who miss one or more vaccines that are given in sequence or are not vaccinated at the required schedule) in the target population, Tete CSP has initiated a vaccination checklist. The list records the names of "bairros" and/or "quateiroes" (subsections of a village), names of the chefes of the bairro, names of individuals requiring the vaccination, address, type of vaccination needed and other related information such as the scheduled time for specific type of vaccination. The village leaders are given (1) a vaccination checklist, (2) information about the importance of vaccinations, and (3) instruction on when and where the vaccinations will be administered. The village workers are encouraged to promote complete immunization and to follow up defaulters on a regular basis.

The local hospital and health clinic are also given a copy of this form. The CSP staff keeps a copy and is filed after the list has been counter checked against the hospital or health clinic list and the vaccination cards of the patients.

## **II. HUMAN RESOURCES AND COLLABORATION**

### **A. Staff**

Several new staff positions have been added to the Tete CSP, as follows:

- \* Theresa Andrews, M.D., Health/Nutrition Manager (Expatriate)
- \* Jana L. Webb, HIS Coordinator (Expatriate)
- \* Francisco Milice, Water and Sanitation Technician (National, new appointee)
- \* Horario Gemussee, Technical Coordinator (National)

Several of the staff changed positions and job titles during this fiscal year, as follows:

- \* Jaime Bitone Jose', Administrative Assistant (National)
- \* Jose Cupertino, Assistant Health Training Manager (National)

Documents pertaining to staff positions including job descriptions, resumes and updated organizational charts are attached. (See Appendices D and E.)

### **B. Technical Assistance**

Technical assistance was provided by the following individuals during FY90:

#### **Dr. Virginia Canlas, Project Officer, IHPD, WVRD**

Dr. Canlas assessed the health status of the target population using the knowledge, attitudes and practices (KAP) baseline survey. She provided technical assistance in the areas of data collection, management and analysis for project design and planning, and in the implementation of the KAP survey. She completed the Detailed Implementation Plan following the survey in April.

#### **Dr. Dennis Holdenried, Health Consultant, Johns Hopkins University**

Dr. Holdenried coordinated a workshop for the Tete CSP baseline survey. He assisted in training and supervision of community volunteers who participated in the survey. He analyzed the survey results.

#### **UNICEF Water and Sanitation Workshop, Pemba, Mozambique**

A two-week conference was funded by UNICEF in conjunction with Agua Rural and the government of Mozambique. It focused on the following issues: (1) community mobilization for sanitation and cleanup campaigns, (2) improvement in personal hygiene, (3) water sanitation, (4) correct usage of latrine, and (5) use of bed nets in mosquito-infested communities.

### **C. Community Activities**

#### **Formation of Health Committees**

Five new health committees were initiated in the "bairros" of Changara during FY91. Each committee consisted of six to ten villagers. The role of the health committee is to help the community problem-solve health issues that the community identifies and to choose and support community facilitators in their role as health promoters.

Each community facilitator (CF) had training in CSP interventions which includes ORT, nutrition (breastfeeding and weaning practices) and immunization. Home facilitation, skills development and community mobilization were also part of the training curriculum. Their role is to provide community teaching during home visits and to work with health committees in identifying health issues which are to be addressed within the life of the project. The inductive method is used to facilitate problem solving. (See Appendix F - Training Curriculum for CFs.)

For home visit teaching the community facilitators are provided with a "facilitators kit" consisting of a five-liter plastic container (common in the area) for measuring water and two one-liter containers to carry sugar and salt. The kit also contains immunization and growth cards and measuring instruments for home visits and teaching sessions.

### **D. Linkages to Other Health and Development Activities**

#### **Ministry of Health**

WV Tete CSP has agreed to provide transport, equipment and staff to assist the MOH in administration of immunizations. Tete CSP also supplied the MOH with high-protein biscuits that were distributed to health centers and the provincial hospital during the last quarter of fiscal 1991.

#### **Ministry of Education**

An agreement has been reached with the MOE that WV Tete CSP will expand their efforts with the supplemental school feeding program to all schools in the three target zones.

#### **LWF/Agua Rural**

Areas for latrine construction are currently being coordinated with Agua Rural, who also targets villages along the Harare-Blantyre corridor. It has been agreed that Tete CSP would not begin any new water projects in areas where Agua Rural is presently working. Latrine construction and training in water and sanitation is the primary thrust of Tete CSP. World Vision has already constructed over 1,100 latrines in the target areas since 1989. Tete CSP plans to complete 1,000 latrines by the end of September 1992.

### **DPCCN**

New discussions regarding dry rations for the chronically malnourished were initiated between the DPCCN and Tete CSP in June of 1991. Prior to this, the DPCCN distributed rations to the acutely malnourished. An agreement was reached in July 1991 to supply all malnourished identified by the CSP staff with a dry ration which includes bean and oil on a monthly basis. Maize was removed from the dry ration list due to a current surplus of maize in the target community.

### **Tete Provincial Hospital**

Pharmaceuticals supplied through MAP International were donated to the Provincial Hospital during fiscal 1991. They included several antibiotics, antihistamines, ointments and lozenges as well as dental hygiene instruments.

### **WV Commodities**

WV Commodities has assisted Tete CSP in food distribution to malnourished children through their close collaboration with the Tete DPCCN. Commodities and CSP are also working jointly on an extension of the supplemental school feeding program. Commodities will provide products, equipment and logistics, while CSP monitors the nutritional and health status of the students.

### **WV AgRecovery Program**

Discussions with WV AgRecovery Division regarding the development of a home garden and improved gardening techniques were reinitiated in August 1991. It is hoped that a agricultural technician in Changara will be able to assist mothers of children enrolled in the therapeutic feeding program, to plant and maintain vitamin rich gardens. A demonstration plot near the facility where the severely malnourished are fed is also under consideration.

### **Carataz**

Carataz, a international Catholic relief/aid organization supplied Tete CSP with sugar during the month of August because of a deficiency in DPCCN stocks. They have made a commitment to supply the program with rations when emergencies arise.

### **III. PROGRESS IN HEALTH INFORMATION DATA COLLECTION**

#### **A. Baseline Survey**

The results of the baseline survey are discussed in the DIP. Technical assistance in questionnaire design, sampling, data collection, data entry, tabulation and analysis was provided by Drs. Dennis Holdenried and Virginia Canlas. A workshop with the CSP staff conducted in January 1991 provided detailed information on the above topics and prepared CS staff and volunteers to implement the baseline survey. A copy of the baseline survey report and of the survey instrument are attached (Appendix G).

#### **B. Routine Data Collection**

##### **1. Community and Clinic Level Data Collection**

A monitoring system at the community level exists which enables CSP teams to identify and refer high-risk women and children to receive CS interventions or clinical treatment. This system includes tracking growth (weight and height), screening for chronic diarrhea, an ocular survey for malnutrition, review of current immunization status, and morbidity surveillance for the six vaccine preventable diseases. Malaria, other infectious diseases and pregnant women are referred to the local hospital or clinic. Data regarding maternal-child CS interventions are collected, logged and filed each month by target area. Statistics by intervention and locality are also prepared on a regular basis. This information is summarized monthly on tally sheets. Information is gathered in the target villages by the CSP teams and community facilitators and collated and analyzed monthly by the HIS Coordinator. Monthly reports and statistics are then distributed to collaborating parties at the province, district and local level.

Health clinics/posts maintain records of pregnant women evaluated or admitted. The records include antenatal physicals, births and deaths (within the hospital/clinic), diseases treated at the health facility and immunization status. Although recommendations for data collected by Tete CSP were determined in conjunction with the MOH, some CSP information overlaps with data collected by the MOH. To avoid duplication, information on CS interventions and EPI disease surveillance is collected by Tete CSP and shared with the MOH.

Currently, the health clinics/posts are unable to track or follow-up interventions that CS teams implement. Because of a shortage of technical staff and funds health clinics/posts are focusing curative and maternal care and rely on Tete CSP to provide much of the primary health care interventions for the under five population. This minimizes

duplication of health care efforts between the MOH and CSP and maximizes health care coverage of target populations.

**2. Reporting Information System on Activities of Community Health Workers**

The community facilitators program was reinitiated during the latter part of fiscal 1991. Due to the restructuring of Tete CSP, security problems, the need for additional training and lack of technical staff, the program did not function optimally between the months of October 1990 and February 1991.

Groups of CFs are trained on a monthly basis. They explain and promote CS interventions at the community level via house to house visits and participation in community Health Committee meetings. The activities accomplished by the CF during any given month are logged, collated and analyzed. Data includes (1) number of community organizing sessions (2) number of home visits (3) number of education sessions with return demonstrations on CS interventions (4) total number of families serviced and the health and (5) information on nutritional practices of the target population.

**3. Difficulties and Planned Improvements for Data Collection**

Indicators which have been most difficult for the Tete CSP staff to collect this year include the number of cases of diarrhea within the last month treated with ORT, number of cases of malaria, number of cases of vaccine-preventable childhood disease and the effectiveness of the CF training sessions.

The number of cases of diarrhea treated with ORT in target populations during any given month was challenging to ascertain because it depended on the mothers' knowledge about the disease and on the accuracy of hospital/clinic reporting systems. Mothers who did not recognize the disease did not report it to their community facilitator which led to inaccurate numbers of actual cases of diarrhea. Because health information systems in Mozambique are constantly revised, proper reporting is sometimes neglected. Lack of technical staff and duplication within the MOH also interfere with proper reporting. A reporting bias results which shows a very low incidence of diarrhea within any given community.

Reduction in the number of cases of malaria and vaccine preventable diseases was also a challenge to track because Tete CSP again relies on the mothers' knowledge of the disease and MOH figures. Only cases that are clinically verified in a hospital or clinic are counted; one can assume that actual number of cases is much greater. In addition, no active

disease surveillance system was in place for the above illnesses during the first three quarters of the fiscal year.

Because CF training sessions were started recently, only two sessions have taken place during fiscal year 1991 and the effectiveness of the training has not been fully evaluated. The first two groups of CFs were trained in August and September 1991. They learned about their role and the use of the CF monthly summary forms (see appendix I) which they are currently testing in two "bairros" (village subsectors) of Changara.

It is impossible to tally births and deaths (by cause) on a monthly basis. Health teams service large populations which are separated by long distances; this means that CSP staff can only visit each site every other month. Births and deaths in off months are therefore not recorded in the current month's statistics. The cause of death is also difficult to verify unless the patient dies in the hospital or clinic. Information gathered from mothers or families must be relied upon in some cases.

#### **4. Service Performance and Sustainability Indicators**

Tete CSP recently implemented a system to track service performance and sustainability indicators of the program. The system includes (1) number of trained community facilitators that are active in house-to-house visits (2) number of immunizations given to patients with at least one default and (3) number of cases of vaccine-preventable diseases that were actually reported and treated.

#### **5. Active Surveillance System**

By the end of the fiscal 1991, Tete CSP had initiated and implemented four active surveillance systems that monitored: (1) incidence of the six vaccine preventable diseases; (2) incidence of chronic diarrheal episodes; (3) number of cases of malnutrition and (4) number of cases of malaria.

The surveillance of the six vaccine preventable diseases is a new system implemented in August 1991. Team leaders are responsible for identifying, reporting and following-up occurrences of any of the six vaccine-preventable childhood diseases in their target area. Previously, the number of cases of measles in the target population had been reported by the health hospital or clinic. This system, of course, included only those patients who actually arrived at the hospital for treatment.

World Vision's health projects have been reporting the incidence of diarrhea since 1988. This data, however had been collected from the hospital or clinic and not from the community. The hospital and clinics only report cases admitted or referred to them and thus miss those cases that occur at home. In August 1991 we piloted a new report form which

monitors interventions actually implemented by mothers as well as the occurrence of chronic diarrhea.

The number of cases of all types of malnutrition are continually monitored. This information is accurate because it is collected by trained CS staff during growth monitoring rounds and work in the therapeutic feeding program. Patients admitted to the program are classified by type of malnutrition and placed on a feeding schedule. Some cases of malnutrition may not be detected because the patients fail to participate in the bimonthly nutrition screenings and do not seek assistance from the hospital or clinic.

Malaria surveillance has also continued in Tete CSP. Information on the incidence of disease is obtained from the district hospital and/or clinic.

#### **6. Data Collection, Compilation and Analysis**

Measuring instruments for each CS intervention were revised or adapted by the HIS Coordinator during the months of July and August. An attempt was made to minimize duplication and maximize use of MOH forms. The CSP forms were field tested in August and will be implemented at all levels of the project by October 1991.

Data for the CSP interventions is collected by the health teams which include a health technician. Several MOH and CSP forms are used in the field and then summarized at the end of each day. Summary forms are collected at the end of the month or when the team has completed interventions (rounds) in a particular village. The HIS Coordinator is responsible for data entry, compilation, management, analysis and reporting on a monthly basis.

#### **7. Monitoring the Quality of HIS**

The HIS Coordinator and the Project Manager are responsible for monitoring the quality of the data in the information system. Monthly (or sometimes bimonthly) spot checks on the data collected, forms used, calculations and flow of information are all a part of quality control. Progress toward goals is assessed on a quarterly basis using statistical percentages. This information is analyzed at the project level and distributed to WVRD headquarters and other parties. The HIS Coordinator, in conjunction with the Project Manager and/or Health Officer disseminates monthly progress reports to the MOH departments and the Health Committees.

#### **8. Feedback**

Feedback from the CSP teams, Community Facilitators (CF's) and community have been helpful in the development and implementation of the revised HIS. The CSP technical staff have participated in two training sessions conducted by the HIS Coordinator, which outlined purpose, proper use, compilation and other reporting procedures for the CSP. Data collection and standardization techniques were also discussed. Several health aids were selected to assist the team leaders in the proper and timely collection and compilation of data. Intensive training sessions for these auxiliary workers will commence in November 1991.

CF feedback has been limited due to the recent recommencement of this program. Comments regarding the new CF monitoring forms (Appendix H) include:

- a. CFs and CSP staff desire to track individual children instead of reporting on individual interventions.
- b. CFs need to receive regular training on the CS interventions especially those posted on the CF monthly summary form.
- c. CFs should learn about effective methods of training other members of their community.

Possible revisions of this monitoring system may occur in the future depending upon feedback from the CF and other CSP staff. Feedback from the communities in the project areas is listed below:

- a. Several men in a few of the target villages are also interested in learning more about health and nutrition. They would also like to participate in training sessions on interventions.
- b. Numerous people wanted Tete CSP to assist their families with health care needs outside the scope of traditional CS interventions. This minority were suggesting that we broaden the scope of the program to fit all of the health needs of their community.

#### **9. Expenditures on HIS**

Approximately 11 percent has been spent on the project's HIS. This figure includes the cost for the baseline survey, consultant fees for the survey and the salary of the new appointed HIS Coordinator.

### **IV. IMPROVEMENTS IN PROGRAM QUALITY AND TECHNICAL EFFECTIVENESS**

#### **A. Lessons Learned**

##### **1. Staff**

**Staff motivation was improved through several activities which included workshops, retreats and one-on-one training. The restructuring of Tete CSP into three areas also served to motivate team leaders and their staff to more actively promote the CS activities in their designated areas. Diplomas upon completion of workshops, attendance to seminars, and one-on-one training for staff development will be offered as incentives for CSP staff motivation.**

**Staff development and training must be improved to increase the sustainability of the CS program. Committed staff should be closely mentored by expatriate counterparts who have expertise in various health and management areas. At least two CSP and/or MOH staff should be paired with the technical expatriate staff during the first year of the program. A skeleton curriculum should be developed by the mentor and counterpart and used as a guideline for joint sessions.**

**Measuring the level of technical skills of the CS staff prior to initiating the interventions was an important lesson learned. This can be accomplished by evaluating each technical staff person before the staff before the program begins. Strengths and weakness are accessed and training session are designed to assist with weak areas. Improvement in technical skills should also be a regular and ongoing activity of the CS programs. Recently implemented was a monthly staff training module on community health care topics. This has helped to improve the technical capacity of the health staff using the CS interventions as a curriculum.**

**Long-term technical staff are essential to the success and sustainability of Tete CSP. Financial, and professional investments should be made on behalf of highly motivated CS staff that exhibit leadership ability. These investments can come in the form of incentives, training, education and promotions. CSP Tete is concerned about the development of the staff and has made a renewed commitment to development committed long-term technical staff in areas that would assist them in assuming greater leadership in community-based care in Mozambique.**

**Short-term workers completed clerical work as well as a number of tasks that would normally impede the team leader or the CS management. Effective use of short term/non-permanent staff provides the technical staff with more time to focus on the technical, managerial and evaluative parts of the program.**

**Cross-training of the technical staff proved to be profitable for the overall management and success of the CS efforts this year. This was particularly evident when several team members took vacations this year, their counterparts from other zones quickly stepped in and continue the CSP interventions in their target areas. When the "technical staff" became "intervention team leaders (with stationary or fixed teams)" they were**

required to be cross-trained (learn all the CS interventions) and take ownership of their communities. Previously they were responsible for conducting one intervention in all of the target areas. Under the current structure, however, they provide several CS interventions including: immunizations, ORT, nutrition and health training. The mobile team who is responsible for administration, data collection and analysis, reporting, health education and water and sanitation interventions are also planning to be cross-trained during 1992. If this team would have been cross-trained during the last quarter of the fiscal year, when the former water and sanitation technician suddenly resigned the difficult transition involving finding and training a replacement may not have been so difficult.

## **2. Systems**

Implementation of a revised HIS as a result of the recent arrival of the HIS Coordinator has been of great value to the Tete CSP. Due to the late arrival the HIS Coordinator several of the reporting systems and standardization of procedures were not tested or implemented during the first three quarters of the fiscal year. There is a great need for a solid quality control system as well as training on the importance and effective collection and use of data. We have learned this area of the CSP is vital and we trust it will continue to be improved over the remainder of the project.

Translation of health literature is a large part of the process of staff training and development. It can be a great problem in countries such as Mozambique that have an official language not widely used, thus literature and audio-video materials are very limited and difficult to acquire. Hiring a part-time translator during the early stages of the project to assist in translation of primary health care literature for staff teaching/training sessions would be ideal. Currently, we are seeking a local hire to fill this position.

Decision making would have been more profitable if two expatriate health staff were in place from the initial stages of the program. There were several problems and miscommunications because of the lack of management on site and the difficulty experienced when one person must make all of the major decisions without consultation with a local colleague.

Monitoring and evaluation has two aspects. The first is the monitoring and evaluation of the CS interventions and program as a whole. A major part of this is the role of the HIS Coordinator, the program manager and internal and external consultants. This is a large task that requires the full attention of a staff person to complete all of the required tasks. The second, is the monitoring and evaluation of CSP staff. This system appears to be quite biased toward Western methods of measuring

employee performance. It might be helpful to revise the format of the personnel evaluations so that it more closely correlates with the work and the staff that are carrying out the program objectives.

### **3. Capital Expenditures**

Office, field equipment and vehicles are needed prior to the initiation of the program. The CS staff ran into numerous difficulties as a result of the lack of equipment and vehicles such as photocopy machine, typewriter or computer/printer and four wheel-drive vehicles and motor bikes. This equipment should be ordered four to six months in advance and/or functioning properly at the initial stages as well as throughout of the program.

Adequate office space is essential for carrying out the objectives of CSP. The field staff need to have a work room or desk when they prepare reports, statistics, health education sessions or day-to-day paperwork. There should also be a training/meeting room that is easily accessible and functional for teaching/training of technical as well as non-technical staff.

### **4. Linkages/Collaboration**

Government and other recognized community organizations should be included in all of the decisions and activities that WV CS programs make or have. This was implemented by ensuring that the CSP staff had regular meetings with these bodies and distributed reports that relate to the project. It was helpful to have minutes of the meeting typed and distributed to all attendees after the meeting and to keep one another abreast of sudden changes in the program. It was valuable to inform collaboration parties of vacation/holiday plans in which might temporarily interrupt meetings or the implementation of the CSP. It was also important to determine which party is responsible for carrying out specific tasks. Scheduling future meetings well in advance was also a wise practice.

Tete CSP attempted to collaborate with other NGO's/PVO's on a regular basis. The aim was to guard against unnecessary duplication and it fosters good relationships. Tete CSP did not institute regular meetings during this fiscal year, but did have several meetings when a pressing issue arose. In the future we will make an effort to meet with other health and development organizations that service the same target areas or are involved in health, water or sanitation projects.

### **5. Communication**

Communication systems have improved over the course of the last few years, however, rapid and effective communication within or outside of

**Mozambique is still challenging due to war/developing country difficulties. In response WVM has installed several communication devices including a short wave radio, telephones and a radio telex. These function most of the time, but are often tied up or difficult to use, consequently important information is sometimes delayed or communicated much too late.**

**The lessons learned are to take advantage of communication equipment when it works, to work with other WVM divisions by assisting one another with the time-consuming task of communication and not to become upset when the communication systems fail to work. WVM has a couple of alternative communication strategies which serve as back-ups to the ones listed above. A mailbag is transported by staff members who travel between the project sites up country and Maputo. This is a very reliable communication systems, but depends on flight schedules, size of documents to be transported and the travel itineraries of the staff members. There are a few fax machines in parts of Mozambique, however, they are rare, expensive and often non-functional.**

**Communicating reports to government officials, CS staff, community leaders and the community itself provided to be very profitable over the course of this year. The challenge is to effectively communicate the CS intervention progress to very different audiences (from the highly educated to the illiterate). This was accomplished by preparing appropriate reports for each population as well as utilizing the national staff to communicate information that expatriates cannot often relate.**

**Regular meetings with various groups, including community leadership, is also important, but too many meetings with officials or community leaders in a short period of time could cause the administration and implementation of the CS interventions to suffer. Community meetings should not be scheduled too far in advance because communities often forget. Scheduled community meetings two or three days in advanced and a visit tot eh village one day before the meeting as a reminder seems to work well. There should be an open forum for discussion and individuals should feel uninhibited about sharing their opinions.**

## **6. Community Organization/Mobilization**

**Pre-planning of activities has been a great challenge with CSP Tete due to the lack of staff, poor communication systems and inadequate equipment and vehicles. As these factors improve (and many are) it is hoped that the staff will be more proactive, and schedule and plan activities and events several months in advance. Four planning/strategizing sessions are also planned during the course of fiscal 1992.**

**Recording what occurred in community organizing meeting can be of great benefits to current and future CS staff members as well as the**

overall sustainability of the program. This information should be discussed and/or distributed during staff meetings and CSP staff should follow-up on all commitments.

## **7. Implementing a CSP in a War Zone**

Implementing CSP in an area of continued rebel activity, banditry, political and economic instability and constant fluctuations of the target populations has been challenging. The lessons learned about the implementation of a CSP in a war situation are discussed below. It is hoped that these points might be of use to other CSP in countries with similar circumstances.

The rebels campaign to destabilize in the villages and districts of Mozambique has served to virtually paralyze all curative and preventative health care services. The Primary Health Care campaign launched following independence in the late 70's was among the best in all of Africa, today however it has come to a grinding halt. Over two-thirds of the health clinics and post have been destroyed and others have been badly damaged. Health vehicles have also been destroyed.

Restructuring of the health care system is not truly feasible until peace has come to Mozambique. But even after peace it is estimated that it will take eight to ten years to rehabilitate the health infrastructure of Mozambique. This will require a good portion of the national budget to reconstruct destroyed transportation and community facilities, to train health professions and to resettle returning refugees for Malawi, Zimbabwe, Swaziland, and Tanzania. Until then the MOH relies heavily on sharing the health care responsibilities with international government and private organizations. Maintaining health programs that benefit the Mozambicans is a vital, yet challenging struggle for the MOH and its partner agencies.

The assistance provided by these agencies will not be easily phased out, however in order to achieve sustainability these agencies must not work outside of the MOH infrastructure. They must remain in close contact with the government and also coordinate efforts among themselves. International agencies must foster community ownership, promote national leadership, provide technical training, assist in health care planning, provide technical assistance in curative, preventative and evaluative processes, promote community-wide health and development activities and assist with the construction of health clinics/posts.

A combination of the factors listed above along with the strong and focused determination of the Mozambican government and people will undoubtedly reap great benefits. However until the Mozambicans can

**stand alone international health and development agencies must stand with the most vulnerable within this country.**

**Transportation and logistics must be coordinated well in advance and confirmed at least twice close to the date that the vehicle is needed. Necessary government officials including the governor of the district or province, the Minister of Information, immigration authorities, airport officials, the district administrator and community leaders must all be informed of transportation plans as well as other activities that are to occur within their jurisdictions. Failure to contact these parties in advance could result in severe financial penalties, loss of person hours, loss of organizational property and damage to professional relationships.**

**Population shifts can be a challenge to any CS program, but particularly to those in war zones, where there is an unusually high incidence of relocation of families and entire villages. "Deslocado" and "affectado" populations often migrate into target areas many of which are along main road and are thus more secure. Many of these people arrive with desperate health care needs and begin to attend CS interventions with the target residents. Quite often, the secretary or jefe of this "deslocado" or "affectado" population will request assistance for his village. Generally, the needs of the young children and women in these dislocated populations are identical to the target population and often more severe due to the instability experienced by this group of people.**

**Needless to say, these populations, which are generally under 2,000 people are helped by CSP or referred to agencies or organizations that can meet their health care needs. WVM CSP policy is to assist these populations with the necessary CS interventions, but not to include them in the official target populations until they have achieved permanent resident status. Data is collected and compiled on this group, but is kept separately and they are not counted in the denominator which is used for calculating rates for CSP interventions.**

**A practical and inexpensive Health Information Monitoring System is essential for any CSP. When the program is being conducted near a war zone it is important to keep track of the population flow into and out of the target area, to communicate frequently with the community leaders, to provide alternative meeting places for the CS interventions, to actively promote health as the responsibility of the villagers (should they need to flee rapidly) and to closely monitor health trends in each community making the necessary comparisons among the villages in order to forecast problems and make decisions about the health needs of a community.**

**In war situations in developing countries the health care budget is generally not a priority during any given year. As a result, war cost the most vulnerable citizens a very high price--good health and nutrition.**

Decisions regarding the amount and distribution of the health care budget is extremely fragmented in Mozambique. According to the MOH report published by the MOH in 1990 the planning of health care expenditures is almost totally independent of the program and activities; the budget is the provision for expenditures in the traditional mode, i.e., the expenditure should be only a little bit higher than the previous year. The concept of the program-budgeting is still far from the method of planning within the MOH. However over the last decade the amount of funding allocated to health care has not increased. Instead, it has decreased.

Very often in war situations the health professionals who can flee from the country, do flee, leaving behind their livelihoods and the desperately impoverished and unhealthy population. Mozambique is grossly understaffed with respect to health professionals. At the time of independence there were only two Mozambican physicians in all of the country. This deficit is not only the result of the war, but a remnant of the harsh colonial system that oppressed the Mozambican for nearly 500 years. Today, it is estimated that there are approximately 130 Mozambican and 50-65 expatriate physicians living and working in the country. Even with the expatriate physicians, the ratio of doctors to populations is a mere 1:84,200. Professional and technical staff training and development should and must be a priority if primary and tertiary health care is to be sustainable.

#### **B. New Steps to Strengthen Technical Quality**

Monthly training sessions for technical staff were reinstated during the last quarter of fiscal 1991. Topics covered during the last three months included (1) review of immunizations and the EPI, (2) data collection, compilation, and quality control, and (3) ORT.

In addition several workshops with the MOH and Zambezia Province CSP have been conducted. Topics discussed and studied include (1) adult learning and communication of health messages, (2) skills and methodologies, and (3) community-based and primary health care concepts.

### **V. WORK SCHEDULE**

#### **A. Problems/Constraints**

The continued, sporadic rebel attacks, banditry and other acts of violence resulting from the war have caused a number of problems/constraints many of which were discussed under the section entitled "Lessons Learned: Implementing CSP in a War Zone." Below is a list of the major problems/constraints followed by an explanation of those challenges that were not previously discussed.

**1. Problems/Constraints hindering CSP implementation and/or progress:**

- War/destabilization
- Clearances for transportation (air travel)
- Lack of safe transport to some project sites
- Continuous fluctuation of population
- Lack of health clinics/posts to handle curative needs
- Lack of funding or MOH (health care low budget priority)
- Duplication within the MOH and with other agencies
- Inadequate number of health professionals
- Recently implemented HIS
- Lack of technically competent health staff (fast turnover of personnel)

**2. Other Problems/Constraints**

There is a need to closely coordinate vacations/leaves with MOH officials and other government officials who Tete CSP work closely with and depend on for information and feedback. This proved to be a large problem in one of the zones where the district health official was unavailable for about four months of the fiscal year and a reliable counterpart was not in place.

Unreliable vehicles were also a constraint for the program during this fiscal year. There were a number of accidents which lead to one truck being out of order sporadically for a number of weeks. Also the trucks that are currently available are inadequate for the terrain and wet season in Mozambique.

New government appointees must be oriented about WVM health programs which have functioned in the Tete Province for three years now. There was a bit of confusion during the last quarter of this fiscal year on behalf of newly appointed government officials who knew little about our program, commitment and success in the Changara District. After a series of meetings this issue was resolved, but it took a great deal of effort and person hours before it was over.

A cholera epidemic swept through the Changara district in March and April of 1991. Five deaths and 85 suspected cases were reported. Many patients flooded the hospitals and clinics and part of our CS activities were suspended while our staff assisted the MOH who were woefully understaffed.

**B. Critical Activities for Fiscal 1991/1992**

Critical activities to be initiated or conducted during fiscal 1992 are listed below:

- School Feeding (Expansion)
- Therapeutic Feeding Centers (Expansion)
- Pregnant Women's Supplemental Feeding (Reinitiation)
- CF Training (On-going)
- Construction of Latrines (1,000)
- Baseline Survey (Repeated)
- Language Training (English for Portuguese speakers)
- Supplemental Rations for Chronically Malnourished (Solidified)
- Demonstration Garden (Initiated)
- Distribution of Mosquito Nets
- CSP Staff/MOH Training (On-going) possible topics include:
  - Vitamin A
  - AIDS/HIV
  - Cost recovery/organizational cost
  - Introduction to sustainability
  - Health care system in Mozambique
  - Counterpart system expatriate/national
  - Implementing CSP and health programs in a war zone
  - Emergency response/nutrition
  - Data analysis and trends

A work plan and timeline for the planning and implementation of these activities is attached (see Appendix I).

## **VI. CHANGES IN PROJECT EXPENDITURES AND JUSTIFICATION FOR BUDGET CHANGES**

### **A. Pipeline Analysis**

Please see the attached pipeline budget analysis (appendix M).

### **B. Budget Revisions**

No revisions to the grant budget have been made.

## **VII. SUSTAINABILITY**

### **A. Recurrent Costs**

#### **1. Projected Cost and Revenues to be Maintained**

The cost and revenues that are needed to maintain the CSP after the CS funding ends are estimated to be approximately \$100,000 per year assuming no appreciable change in the political/economic environment.

#### **2. Possible Project Components**

If the program were to end in September 1993, the community would not be capable of maintaining vaccination campaigns, nutritional screening, distribution of mosquito nets, CF and MOH training sessions, therapeutic and school feeding program and an intermediate health and information system at its current level of efficiency/effectiveness without considerable outside funding.

### **3. Project Components (Government)**

(See section ii above).

## **B. Strategies for Reducing Sustainability Concerns**

### **1. Approach to Creating Sustainability**

Tete CSP's approach to creating and maintaining sustainability is in its infancy, however, a major part of the project's approach will be the training and development of community facilitators and the local health committees. Staff development will also be a priority.

### **2. Training for Understanding of Organizational Cost**

A training session on organizational cost and cost recovery is scheduled within the next year.

## **C. Cost Recovery Activities**

Due to the newness of the CS project no progress has been achieved with cost recovery mechanisms.

## **VIII. CONCLUSION**

Tete CSP, although in its early stage, has significantly impacted the lives of thousands vulnerable victims in this war-torn province. Despite the change in target sites during the second quarter of this year the project has achieved significant success with immunizations, nutritional improvement, ORT, community organizing/mobilizing and limited progress with training and water and sanitation (figure 1).

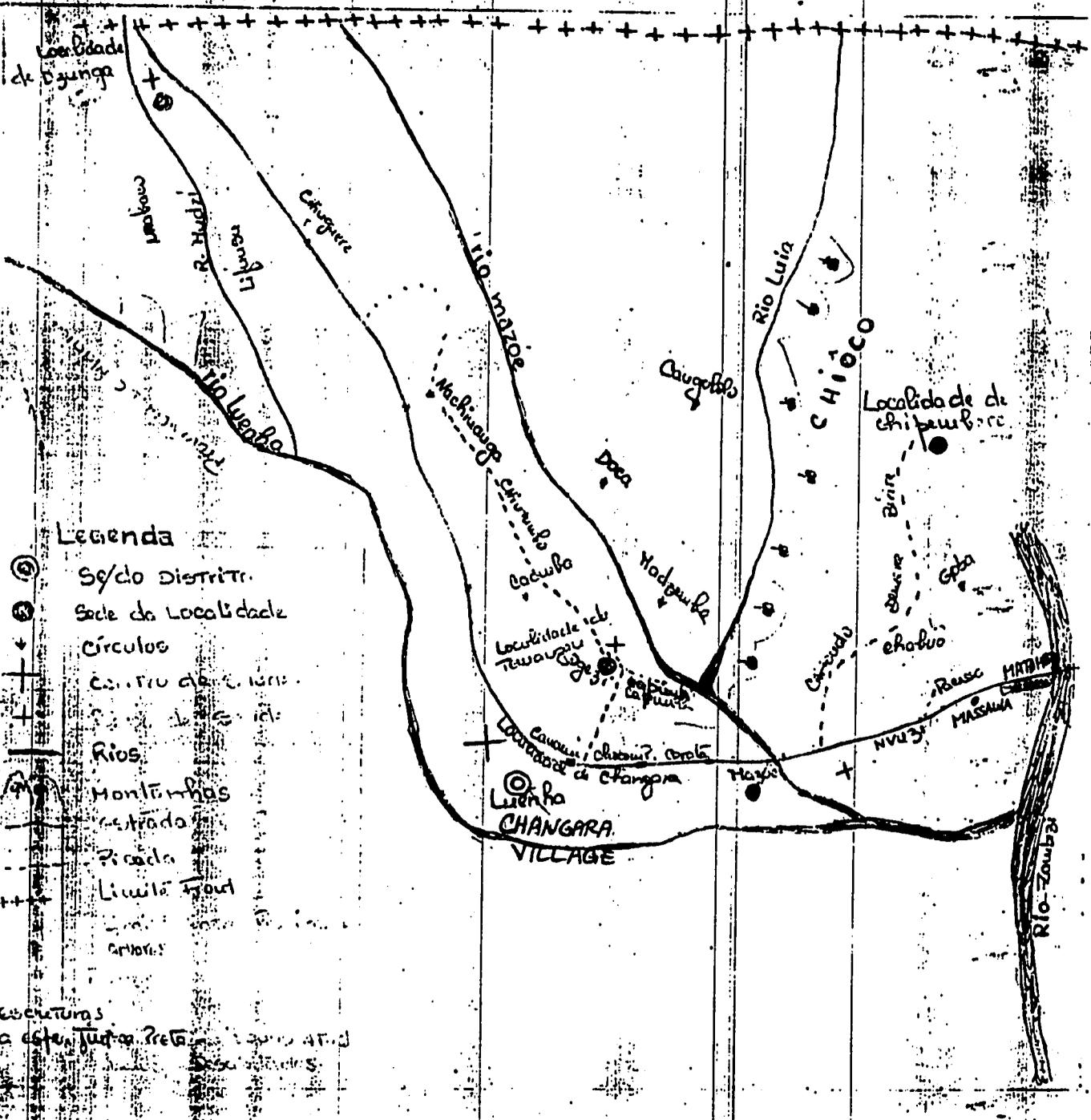
To date there has not been much progress with malaria control, full development of health committees or progress toward ensuring sustainability. And latrine construction was impeded during the last six months due to a lack of staff.

The overall health of the target population in the three zones is improving. The cholera outbreak in April of this year which began in Changara and affected several surrounding villages was effectively controlled within one month and eight deaths were reported.

**The project has achieved success in its effort to work closely with the MOH and other government officials. A HIS has been introduced and is being implemented. Three senior positions have been filled. Linkage with other WVM divisions, as well as other PVO's and NGO's has also increased. Over 100 community facilitators have been identified and two groups of 15 have been trained. We have learned many lessons about conducting a CS program in a war zone, but none more important than remaining flexible, working within the existing structures, continuing staff development and communicating one all levels.**



Provincia de Terr  
 Distrito de Changara  
 Área do Centro de Saúde de  
 Changara



Legenda

- ⊙ Sede do Distrito
- ⊕ Sede da Localidade
- Centros
- - - - - Rios
- Montanhas
- == Estrada
- ~~~ Caminho
- +—+—+ Centro de Saúde
- Árvores

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 a este lado do rio

APPENDIX B

SUMMARY OF VILLAGES AND PILOT AREAS

TEAM 1

1. MUNHACUA
2. CATAL
3. JULIAO
4. LUTA CONTINUA
5. POSTO CAMPO
6. LUELA

PILOT VILLAGE POPULATION 533

TOTAL POPULATION 10,486

TEAM 2

1. CURRUNGO
2. 25 DE JUNHO A
3. 25 DE SETEMBRE
4. MURRUMBALE
5. MARUBA

NO PILOT VILLAGE

TOTAL POPULATION (ALL VILLAGES) 13,665

TEAM 3

1. MANINGUE \*
2. MUNHONHA SEDE
3. 25 DE JUNHO B
4. SUMINI
5. MANTA
6. ROGUE
7. NANTIDE

PILOT VILLAGE POPULATION 650

TOTAL POPULATION (ALL VILLAGES) 14,577

TEAM 4

1. MUTONGA \*
2. NHANGUO
3. MILANGE
4. DERRE
5. NASSORIA I
6. NIAFOBA
7. MACHINDO
8. MUSSUSANE

PILOT VILLAGE POPULATION 1138

TOTAL POPULATION (ALL VILLAGES) 12,991

TEAM 5

1. MUCELO NOVO \*
2. RIO MOMED
3. BATE-MUSSIVA

PILOT VILLAGE POPULATION 14,858

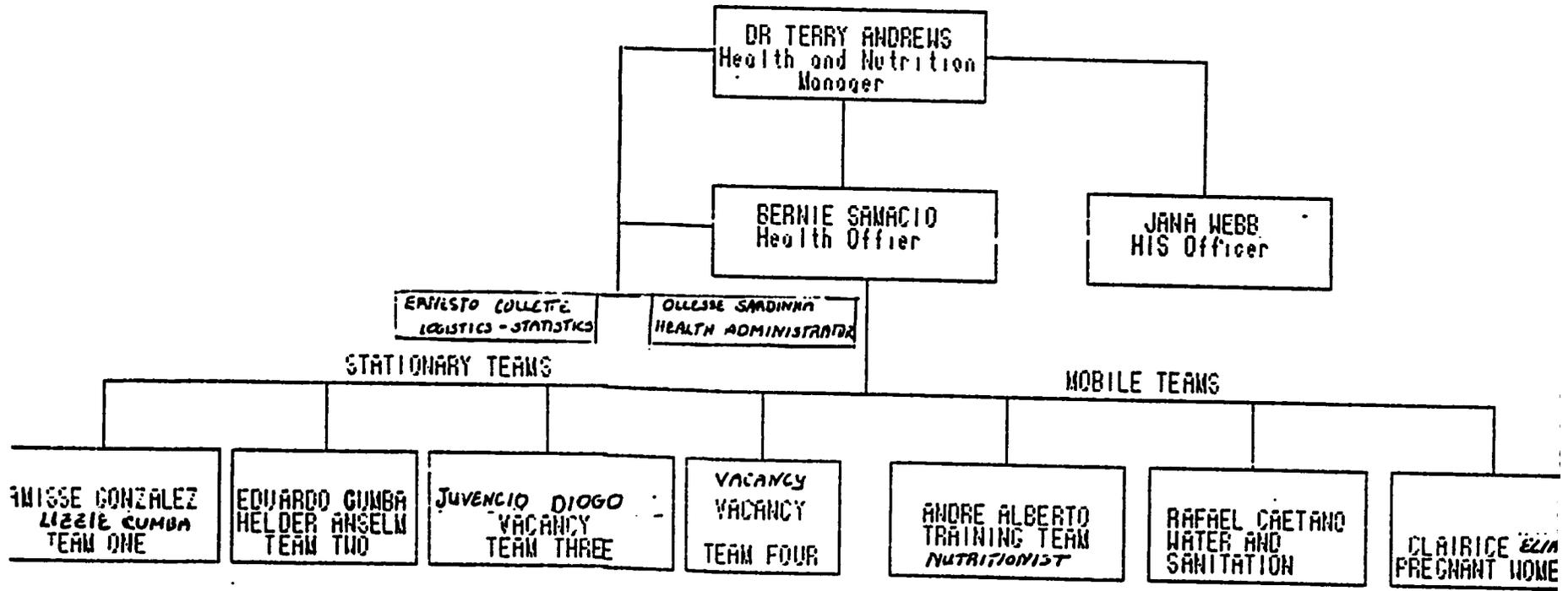
TOTAL POPULATION (ALL VILLAGES) 30,000

TOTAL NO. OF VILLAGES - 29 TOTAL PILOT POPULATION - 17,179  
TOTAL POPULATION OF ZAMBEZIA CSP VILLAGES - 81,719 = APPROX. 82,000

**APPENDIX C**  
**REVISED COUNTRY PROJECT SUMMARY TABLE**  
**PLANNED INTERVENTIONS AND SIZE OF THE BENEFICIARY POPULATION**

INTERVENTION	0-11 MONTHS	12-23 MONTHS	24-59 MONTHS	WOMEN 15-44 YRS	TOTAL BENEFICIARY POP.
ORT	3,280	2,460	9,830	-	15,570
IMMUNIZATION	3,280	1,970	7,870	16,390	29,500
NUTRITION	3,280	2,460	9,830	16,390	31,960
MALARIA CTRL	690	520	2,060	3,440	6,710
TOTAL	10,530	7,410	29,590	36,220	83,750

WORLD VISION MOZAMBIQUE  
ZAMBEZIA CHILD SURVIVAL PROGRAM  
ORGANIZATIONAL CHART



APPENDIX D

APPENDIX E-1

POSITION DESCRIPTION

**Title:** Health Officer

**Reports to:** H/N Manager

**Scope of Position:** To support the H/N Manager in implementing health and nutrition program in the assigned geographical area. To include planning, designing, documentation, evaluation, research and liaising with government entities to ensure that WVM's ministry meets the needs of the neediest efficiently and adequately.

**Critical Objective:**

1. Supervise project staff.
2. Assist H/N Manager in establishing and maintaining standards for health and nutrition and ensures that project staff, partner agencies and recipient communities understand, accept and adhere to these standards.
3. Assist H/N Manager in conducting project research and liaising for the assigned project area.
4. Assist H/N Manager in planning and designing health and nutrition projects in the assigned geographical area and assist in redesigning them when necessary.
5. Ensure that assigned project adheres to WVI, GRPM and other funding agencies reporting requirements.
6. Assist H/N Manager in establishing and maintaining an evaluation system.
7. Ensure that technical information pertinent to the project are obtained, disseminated to staff and stored as required.
8. Assist H/N Manager in identifying potential health and nutrition projects in the assigned geographical area.
9. Liaise with WVM program officers for agriculture and emergency food aid in the assigned geographical area.
10. Provide technical support to WVM non-health projects.

**Knowledge/Skills/Abilities:**

Must be a committed Christian and sensitive to local culture and knowledgeable of context and needs of rural population. Requires a degree in Nursing, preferably with MPH or a Medical Doctor with at least 3 years experience in public health managing large community health project. Good knowledge of Portuguese or other Romance language. Must have abilities to negotiate ideas with WVM and other partners.

APPENIX E-2

POSITION DESCRIPTION

**Title: Liaison Officer for Health**

**Reports to: H/N Manager**

**Scope of Position: To provide the Health and Nutrition Program an official link with government entities (from the national to local levels) and ensure that WVM understands government philosophies and policies.**

**Critical Objective:**

1. Assist H/N Manager in establishing and maintaining standards for health and nutrition and ensures that project staff, government bodies, partner agencies and recipient communities understand, accept and adhere to these standards.
2. To liaise with government entities during all stages of project development, from research to implementation to evaluation.
3. Assist H/N Manager in planning and designing health and nutrition projects making sure that government policies are adhered to.
4. Ensure that information disseminated by the government, that are pertinent to the project are obtained in a timely manner and understood by management and staff.
5. Assist H/N Manager in identifying potential health and nutrition projects.
6. Assist H/N Manager in resolving administrative issues and represent him/her in staff management as required.
7. Provide technical support to WVM non-health projects.

**Knowledge/Skills/Abilities:**

Must be a committed Christian and sensitive to local culture and knowledgeable of context and needs of rural population. Requires a degree in Nursing, or other health related field with at least 3 years experience as senior manager in a large community health project. Fluent in Portuguese or other Romance language. Must have excellent knowledge of government structure and good abilities to negotiate ideas.

POSITION DESCRIPTION

**Title: Health Assistant (Nutrition)**

**Reports to: Health Officer**

**Scope of Position: To implement program interventions defined in the project document and ensure that WVM's ministry meets the needs of the neediest, efficiently and adequately.**

**Specific Objectives:**

1. Organize, plan and coordinate the implementation of specific interventions in the area of nutrition.
2. Liaise with district and provincial MOH counterparts.
3. Assist the Health Officer in identifying potential nutrition project areas.
4. Participate in the preparation and evaluation of technical reports and recommend appropriate interventions.

**Knowledge/Skills/Abilities:**

1. Must be a committed Christian with sensitivity to local culture and knowledgeable of the needs and context of rural population.
2. Requires a certificate in nutrition, nursing or agente de medicina preventiva/curativa.
3. Must have good knowledge of local language and fluent in oral and written Portuguese. Fair knowledge of English an advantage.

APPENDIX E-4

POSITION DESCRIPTION

**Title: Health Assistant (Water and Sanitation)**

**Reports to: Health Officer**

**Scope of Position: To implement program interventions defined in the project document and ensure that WVM's ministry meets the needs of the neediest, efficiently and adequately.**

**Specific Objectives:**

1. Organize, plan and coordinate the implementation of specific interventions in the area of water and sanitation.
2. Liaise with district and provincial MOH counterparts.
3. Assist the Health Officer in identifying potential water and sanitation project areas.
4. Participate in the preparation and evaluation of technical reports and recommend appropriate interventions.

**Knowledge/Skills/Abilities:**

1. Must be a committed Christian with sensitivity to local culture and knowledgeable of the needs and context of rural population.
2. Requires a certificate in water and sanitation, nursing or agente de medicina preventiva/curativa.
3. Must have good knowledge of local language and fluent in oral and written Portuguese. Fair knowledge of English an advantage.

7/27

POSITION DESCRIPTION

**Title:** Health Assistant (Maternal and Child Health)

**Reports to:** Health Officer

**Scope of Position:** To implement program interventions defined in the project document and ensure that WVM's ministry meets the needs of the neediest, efficiently and adequately.

**Specific Objectives:**

1. Organize, plan and coordinate the implementation of specific interventions in the area of MCH.
2. Liaise with district and provincial MOH counterparts.
3. Assist the Health Officer in identifying potential MCH project areas.
4. Participate in the preparation and evaluation of technical reports and recommend appropriate interventions.

**Knowledge/Skills/Abilities:**

1. Must be a committed Christian with sensitivity to local culture and knowledgeable of the needs and context of rural population.
2. Requires a certificate in MCH nursing.
3. Must have good knowledge of local language and fluent in oral and written Portuguese. Fair knowledge of English an advantage.

POSITION DESCRIPTION

**Title:** Health Assistant (Immunization)

**Reports to:** Health Officer

**Scope of Position:** To implement program interventions defined in the project document and ensure that WVM's ministry meets the needs of the neediest, efficiently and adequately.

**Specific Objectives:**

1. Organize, plan and coordinate the implementation of specific interventions in the area of immunization.
2. Liaise with district and provincial MOH counterparts.
3. Assist the Health Officer in identifying potential immunization project areas.
4. Participate in the preparation and evaluation of technical reports and recommend appropriate interventions.

**Knowledge/Skills/Abilities:**

1. Must be a committed Christian with sensitivity to local culture and knowledgeable of the needs and context of rural population.
2. Requires a certificate in nursing or agente de medicina preventiva/curativa.
3. Must have good knowledge of local language and fluent in oral and written Portuguese. Fair knowledge of English an advantage.

APPENDIX E-7

POSITION DESCRIPTION  
HEALTH DEPARTMENT  
WORLD VISION MOZAMBIQUE

**Title:** Health Logistics/Statistics Officer/Translator

**Reports to:** Health/Nutrition Manager

**Scope of Position:** To coordinate and administrate logistics of the Emergency projects in Tete and Zambezia Province. To collate and present statistics for Emergency and CSP projects. To translate official and technical documents into Portuguese.

**Specific Objectives:**

1. To coordinate with commodities and provide logistical support for monthly delivery (airlift) of products and supplies for each emergency response project. A monthly report of supplies sent will be prepared for commodities.
2. Manage the delivery of office and personnel supplies (to be organized and purchased by the Health Administrator) from Quelimane to all Emergency and CSP projects.
3. Assimilate statistics and assemble documents required in the preparation of all H/N reports (Emergency and CSP).
4. Translate monthly reports and other official and technical documents from English into Portuguese.

**Knowledge/Skills/Abilities:**

1. Must be a committed Christian with sensitivity to local culture and knowledgeable of the needs and context of rural population.
2. Requires completion of secondary school and at least some years of university education or equivalent training.
3. Must have previous experience in logistics/administration.
4. Must be fluent in oral and written Portuguese and English.

APPENDIX E-8

**POSITION DESCRIPTION**  
**HEALTH DEPARTMENT**  
**WORLD VISION MOZAMBIQUE**

**Title:** Administrative Assistant for Health

**Reports to:** Health/Nutrition Manager

**Scope of Position:** To administrate the Health and Nutrition Office to include; planning, staff support, purchasing, bookkeeping liaising and reporting.

**Specific Objectives:**

1. Receive, redirect and respond when appropriate to incoming communications from all H/N projects. This will include office supplies, vehicle maintenance issues and other personal needs. Confer with H/N Manager when necessary to resolve issues.
2. Take responsibility for all purchasing for Emergency and CSP projects. This includes purchasing related communications from Maputo.
3. Maintain a bookkeeping system for Emergency and CSP expenditures by line item. Provide a weekly and monthly summary of expenditures by line item.
4. Maintain an office filing system.
5. Represent the H/N office in the absence of the Manager.

**Knowledge/Skills/Abilities:**

1. Must be a committed Christian with sensitivity to local culture and knowledgeable of the needs and context of rural population.
2. Requires completion of secondary school and at least some years of university education or equivalent training.
3. Must have previous experience in administration.
4. Must be fluent in oral and written Portuguese. Some knowledge of English is an advantage.

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TRAINING OF TRAINERS MANUALTHE BASIC WORKSHOPS ARE ON:

1. COMMUNITY BASED HEALTH CARE
2. COMMUNICATION
3. SKILLS AND METHODOLOGY
4. NUTRITION
5. VITAMIN A
6. DIARRHOEA AND CHOLERA
7. IMMUNISATION

The choice of which subjects to commence with will depend on the assessment of the needs of the group the trainer will be training.

PLACE

All workshops should be held, if possible with in an office building on where chairs or mats, desks or tables and stationary are available. The arrangement will be in an informal setting such as in a circle or in small groups.

TIME

This will depend on the training time schedule. It could be done in  
 (a) blocks of 3 days - 1 week  
 (b) or if time does not allow this, then the workshop subjects could be covered once a week with the staff, until the whole workshop subjects have been covered.

THE OVERAL OBJECTIVE

By the end of the workshops the health staff will be able to put into practice the subjects taught and pass it on to their local facilitators and selected subjects will be passed on to the local health committees.

COMMUNITY BASED HEALTH CARE WORKSHOP

TOPICS

1. WHAT IS COMMUNITY BASED HEALTH CARE
2. WHAT IS A COMMUNITY HEALTH COMMITTEE
3. WHAT AND WHO ARE COMMUNITY HEALTH FACILITATORS
4. PREVENTATIVE HEALTH VERSUS CURATIVE
5. RELIEF, REHABILITATION AND DEVELOPMENT
6. DISCOVERING PROBLEMS IN THE COMMUNITY

TOPIC

1. WHAT IS COMMUNITY BASED HEALTH CARE

TIME = 1HR

OBJECTIVES:

- By the end of this session the group will be able to
- a. See the differences between health care that is ~~community~~ based and that which is hospital based.
  - b. Be able to list or say the advantages of having ~~community~~ based health care.

MATERIALS:

1. 2 posters taken from the cover of the book "BEYOND THE DISPENSARY"
2. 1 POSTER SHOWING A PYRAMID.
3. 1 POSTER SHOWING ROOD BUILDING. (EXAMPLES ATTACHED)

STEP 1 -- Get the group to define "what is a community" and "who makes up a community".  
Topic: *Q*

STEP 2 - Divide the group into 2 and give each group a "different view of health" poster. Allow the group 15mins to look at the picture and discuss and list the advantages and disadvantages of their health picture.

STEP 3 - Get them to choose a group leader to share their thoughts back to the whole group.

STEP 4 - The trainer then summarizes by stating the main points: (a) the distance noticed between health structures. (b) the program being stopped due to logistical problems such as the c. breaking down.

VITAMIN A WORKSHOPTOPICS

1. WHAT IS A VITAMIN
2. WHY DO WE NEED VITAMIN A
3. HOW IS IT ABSORBED
4. WHAT FOODS CONTAIN VITAMIN A
5. WHAT CAUSES VITAMIN A DEFICIENCY
6. HOW WIDE SPREAD IS THE PROBLEM
7. WHO IS MOST AT RISK AND WHY
8. WHAT CAN BE DONE ABOUT VITAMIN A DEFICIENCY

1. TOPIC - WHAT IS A VITAMIN

TIME - 15MINS

OBJECTIVE

The group will be able to see that vitamins are needed for health.

MATERIALS

- Posters
- (a) of sickly plants
  - (b) plants with fertiliser put on it
  - (c) plants strong and healthy after fertiliser.

Step 1

Show poster (a) and ask group what they see in the poster and how should they improve the situation.

Step 2

Show poster (b) and (c) to recap what they said.

Step 3

Ask "People need what to be healthy?" the answer may be food or vitamins. If the answer is food explain that vitamins is the goodness found in food.

~~Likened vitamins to fertiliser i.e., plants need fertiliser to be healthy, people need vitamins to be healthy.~~

NUTRITION WORKSHOP

Taken from "NUTRITION FOR DEVELOPING COUNTRIES" AND  
HEALTH WORKERS TO LEARN"

TOPICS:

1. OBSTACLES IN NUTRITION TRAINING.
2. ATTACKING THE RIGHT NUTRITION PROBLEMS.
3. HOW TO MAKE FOODS MORE NUTRITIOUS.
4. HOW DO CHILDREN GROW.
5. THE UNDER WEIGHT CHILD.
6. BREAST FEEDING.
7. A YOUNG CHILD'S FEED.

1. TOPIC:

OBSTACLES IN NUTRITION TRAINING

TIME = 30 MINS

OBJECTIVES

- By the end of the session the group will be able to:
- (a) visualize that a nutrition talk may be misunderstood, and therefore not followed.
  - (b) discuss the problems of what can happen in a talk and how to overcome it.
  - (c) list the different ways to teach nutrition effectively.

MATERIALS

POSTER ON "WHAT DIFFERENT PEOPLE THINK ABOUT NUTRITION TALKS"

STEP 1

Show the poster and discuss the problems with the way the different people thought about the nutrition talk.

STEP 2

Divide the group into 3 groups each group 1 thought.

- (a) "I CAN'T AFFORD IT"
- (b) "I DON'T BELIEVE IT"
- (c) "I DON'T LIKE IT"

APPENDIX G

world vision mozambique  
child survival project  
changara - tete province

funded by the united states  
agency for international  
development

baseline survey workshop  
20 january - 4 february 1991

'44'

**WV/Mozambique Child Survival Knowledge, Attitudes and Practices Survey**

**Participants:**

**Survey Coordinators:**

Hector Jalipa, MD	WV/Mozambique Health & Nutrition Manager
Vivien Wilson, RN	ProjecWV/Mozambique Health Officer, Tete CS
Bernie Simacio, RN,MPH	WV/Mozambique Health Officer, Zambezia CS Project
Virginia Canlas, MD,MPH	WVRD, USA, Project Officer
Alberto Siteo, RN	WV/Mozambique, Assistant to the Health and Nutrition Manager
Denis Holdenried,MD,MPH	Johns Hopkins University

**Survey Supervisors:**

Sandre Antonio, Tech.Med.Prev.	Responsible for Prev. Med., Changara District
Jose Cubertino, Ag.Med.Prev.	WV/Mozambique Health Staff, Tete
Lizi Cumba, RN	WV/Mozambique Health Staff, Quelimane

**Interviewers:**

WV/Mozambique staff and representatives of the Ministries of Health of Tete and Zambezia Provinces

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## 1. EXECUTIVE SUMMARY

In cooperation with the WV/Mozambique Child Survival (CS) Project a Knowledge, Attitudes and Practices (KAP) survey was conducted in the Changara District, Tete Province in western Mozambique, from January 26 to February 9, 1991. The purpose of this survey was to assess project impact on the target population and to collect baseline data for future interventions.

The PVO Child Survival Support Program, in collaboration with World Relief and Development and the WV/Mozambique country staff, was responsible for the design of the survey questionnaire, data analysis tools, field staff training, pilot testing and survey implementation. The WV/Mozambique CS project plans to use KAP surveys for annual assessment of project impact on this target population. In addition, WV/Mozambique is preparing a similar sample survey for their Child Survival project in Nicoadala District, Zambezia Province.

The WV/Mozambique Changara CS project is one of 71 CS projects receiving funding from the Bureau for Food for Peace and Voluntary Assistance/Office of Private Voluntary Cooperation (FVA/PVC).

Part of FVA/PVC's strategy is to provide specialized technical assistance in areas of project monitoring training and evaluation. Funding of the WV/Mozambique CS project began in 1990. The primary goals of the project are: to reduce infant and child morbidity and mortality for high risk children under five years of age (focusing on children under two years of age); to educate women in health and nutrition practices and to immunize women 14 - 49 years of age with tetanus toxoid. The interventions used to achieve these goals are: Control of Diarrheal Diseases (CDD); Expanded Program on Immunization (EPI) for children under two and women 14 - 49; nutrition education; growth monitoring and promotion (GMP); malaria control and environmental sanitation.

The WV/Mozambique Changara CS Project serves a population living in the Central Western Region of Mozambique, 700 kms north of Maputo, and 50 kms south of Tete, the provincial capital. As a consequence of Mozambique's longlasting civil war Tete can only be reached by air from Maputo. There are no long distance road connections in Mozambique which could be used without risk. The Changara impact area can be reached from Tete by road in less than one hour. Currently, however, the route is considered at risk for attacks after the recent withdrawal of Zimbabwean forces from the region. As a consequence, expatriate staff has to be transported by air between Tete and Changara.

The part of the project area which is currently considered accessible without excessive risk, is divided into four villages

and is completely rural. Other villages will potentially be included in the CS activities, if a change in the country's security situation will allow. The total population is about 15,000.

The KAP survey covered all four villages. WV's target population includes women 15 - 49 years of age, children under two and those under five years of age identified as being at "high risk".

In preparation for this assignment, from December 7 to December 21, Dr. Denis M. Holdenried, PVO CSSP, in close cooperation with Dr. Milton Amayun (WV headquarters) and field staff, designed the questionnaire, EPI-Info program, a general schedule and training modules to be used for the survey. Between November 1990 and January 1991 frequent telephone and telefax communications between the PVO CSSP, WVRD and the WV/Mozambique project allowed an on-going exchange of information and the coordination of preparatory activities. WV/Mozambique health and nutrition manager Dr. Hector Jalipa, WV/Mozambique Health Officer Ms. Vivien Wilson and WV/Mozambique Health Officer Ms. Bernie Simacio had approved the questionnaire and translated it into the Portuguese and Nhungue languages which are spoken in Changara district. They also identified and selected appropriate persons for supervisory and interviewing tasks during the survey. WV field staff obtained some population data for Changara, based on previous registration of mothers and children in the area. As a consequence of the civil war and the difficult political situation in Mozambique no official recent data and maps were available.

After Dr. Holdenried's arrival in Mozambique the first three days were spent for final arrangements and adjustments of the Portuguese and Nhungue versions of the questionnaire. During the following three days the training of supervisors and interviewers and a pilot field test of the questionnaire were performed. The execution of the survey in Changara district required two days. Finally Denis Holdenried and the WV field staff spent four days for data entry, computer analysis and the compilation of this draft report.

Experts from WHO, PAHO, A.I.D., The Centers for Disease Control, The Johns Hopkins School of Hygiene and Public Health, Georgetown University, Pennsylvania State University, and University of California at Davis participated in the design of the questionnaire (see appendix A1).

The questionnaire is comprised of 39 questions designed to collect information on socioeconomic status as well as knowledge and practices regarding diarrhea and oral rehydration therapy, immunization, nutrition, malaria control and environmental

sanitation. The questionnaire in the final Nhungue and Portuguese versions took an average of 15 minutes to administer. The questionnaire was easily understood by both interviewers and interviewees.

A sample of 300 women ranging in age from 14 - 49 years with a child less than two years old was selected. Since the project area included only four large villages, and no recent data were available about the composition of these villages, it was not possible to follow the WHO 30 cluster sampling technique. Instead, the survey coordinators inspected the survey area personally and consulted local authorities to collect information about socio-economic and socio-demographic variables. This information was used to delineate areas of distinct social characteristics, and to assure that each of these distinct areas would be proportionally included in the sample. Within this framework 12 starting points for interviewing were chosen. The 300 interviews which were completed covered about 30-50% of the eligible population. The survey was conducted in one and one half days.

Data analysis was performed with the EPI-Info software program. Tables and frequency distributions as well as cross-tabulations which appeared of interest for the WV/Mozambique project were produced. WV field staff were trained to estimate confidence limits of actual rates.

The survey workshop was concluded with a presentation and discussion of the results among all participants. The WV field staff will present the results of the KAP survey to the Health authorities of Tete Province and of Changara District, as well as to representatives of the Changara community. Dr. Denis Holdenried forwarded the results of the survey to Ms. Mary Pat Selvaggio, the local USAID PVO liaison person.

The CS WV/Mozambique project field staff were trained to conduct and analyze the results of the KAP survey during a two-week period. The simplistic design of the KAP survey provided speedy and efficient implementation while also meeting rigorous scientific standards.

## II. Introduction

### A. Background Information:

The WV/Mozambique project is located in Changara District, 700 km north west of Naputo and 90 km south of the provincial capital of Tete. Changara can be reached by road from Tete in one hour. Due

to the civil war, however, the road is not considered safe so that travel by car is usually impossible for non-locals. There is no electricity in Changara. No telephone lines exist. The only way to communicate with the outside world is by shortwave radio.

The Changara area is completely rural. The population lives in four traditional villages. The overwhelming majority of people in Changara are farmers who grow their own food. There is little commercial activity other than the sales of cooked or raw agricultural products. Also, there are a few stores that carry articles for basic household needs.

In addition to a very rapid natural growth, the population in the Changara District has been increasing steadily as a consequence of migration. Families from other regions in Mozambique have been moving to Changara to escape the dangers, hardship and poverty which result from the civil war. The population increase was particularly concentrated in Bunga, one area (Bairro) of Changara village.

Changara District is situated in a plain area of central Mozambique. Most of the impact area is flat; all the villages can be reached by road. The temperature in the region is very hot during the summer months, the relative humidity is low. There is little rainfall in Changara.

#### B. Purpose of the survey

A population based sample survey is one method of collecting information, which is an important part of a project's health information system. The data yielded from a sample survey can be used for management purposes.

The present survey is providing WV Mozambique with important information about the following aspects:

- Knowledge of mothers of children under two about major threats to infant and child health and ways to prevent illness or to limit its consequences through immunization, proper treatment of diarrheal diseases (ORS), growth monitoring and healthy nutrition, and the prevention of malaria;
- actual practices of mothers with regard to the intervention areas mentioned above,
- target groups for health education action messages,
- coverage rate of children under two with BCG, DPT, OPV and measles vaccines,
- estimated incidence of diarrheal disease and of malaria in children under two;

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- an estimated prevalence of latrine facilities and water sources used.

The survey at the same time establishes a baseline at the beginning of the AID funding of the project's primary health care interventions. The data collected will help WV/Mozambique plan, manage and evaluate its activities and assess any progress made during the project.

Finally this survey is part of an attempt by the PVO Child Survival Support Program to develop a simple and quick methodology for sample surveys which can be administered by PVO field projects at low cost, without or with limited outside technical assistance. Therefore, one of the prime goals of this survey was to train WV field staff in the preparation and implementation of this rapid assessment technique. Data analysis and the compilation of a preliminary report are considered integral components of the survey, so that it was set as a goal to have both completed seven days after the execution of the survey.

#### C. Geographic area and population to be surveyed

The project's target area is the Changara District area, 90 km south of the provincial capital of Tete in central Mozambique. The target location has an estimated total population of 15,000. About 2800 of those are women aged 14 - 49; approximately 1200 are children under two years of age.

The survey area consists of four individual villages. The population within the area is rather heterogeneous. Most people speak Nhungue as a native language, some speak other African dialects or Portuguese.

Since the overwhelming part of the population is not pursuing any income generating activities other than the sales of home grown agricultural products, most mothers spend the day in the fields close by. If a mother who was randomly chosen for the survey could not be found at home, an attempt was made to contact her in the surroundings of her home.

#### D. Schedule of activities

24.1.91            Arrival of Denis Holdenried in Maputo.

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- 25.1.-27.1. Travel to Tete city; final preparations, finalization of Nkhungue and Portuguese versions of survey, logistical arrangements
- 28.1.-30.1. Training of Supervisors and interviewers; field testing of the questionnaire
- 31.1.-2.2. Travel to and from Changara; implementation of Survey in Changara
- 3.2.-4.2. Data entry into EPI-Info software program and data analysis. Compilation of draft report; meeting with survey participants to discuss results;
- 5.2.-6.2. Travel to Maputo; de-briefing with USAID

### III. Methodology

#### A. The Questionnaire

The questionnaire, which contained 39 questions, was designed to collect information about maternal and child health relevant for WV/Mozambique's primary health care Child Survival interventions.

The questions were developed and selected by the PVO Child Survival Support Program, with the assistance of US and international experts for the various intervention areas (see list in appendix 3), and in cooperation with WV field and headquarter staff. (see questionnaire in Appendix 2).

The first nine questions ask about household identification information, as well as demographic and socio-economic indicators. Questions ten to 13 deal with breastfeeding practices and nutrition. Questions 14 - 21 refer to diarrheal diseases and treatment; the following nine questions ( 22 - 30) cover the intervention area of malaria, questions 31 - 36 ask about immunizations, and finally questions 37 - 39 pertain to birth care practices and environmental sanitation (see Table about breakdown of types of questions in appendix 4).

The questionnaire was originally compiled in English and sent by telefax to Maputo. Upon arrival of Dr. Holdenried WV/Mozambique field staff had already arranged a translation into Portuguese and Nkhungue, a tribal language which is mainly spoken in Changara District. An independent re-translation into English was done to validate the translations. This way, potential mistakes and misunderstandings of the initial translation could be rectified. In addition, all interviewers and some supervisors spoke Portuguese and Nkhungue, so that minor adjustments could be made

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during the training phase, following their recommendations. It was difficult to translate the English version into a tribal language, which uses different ways of expression. Some questions could not be translated word by word, occasionally clarifications were necessary. The final Ngunge version, as well as the Portuguese translation, however, were as close to the English original as possible. Potential misunderstandings of certain questions were discussed during the training of interviewers and supervisors.

#### B. Determination of sample size

The survey covers multiple Child Survival intervention areas which all have different sample size requirements. Sample sizes were calculated with the following formula:

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

where n = sample size; z = statistical certainty chosen;  
 p = estimated prevalence/coverage rate/level of knowledge;  
 and d = precision desired.

p was defined for the intervention that needed the largest sample size (i.e. the maximum would be a p of 0.5). Depending on the desired precision "d", the following sample sizes are needed:

d	p = 0.25	p = 0.4
0.05	288	367
0.06	200	256
0.075	128	164
0.10	72	92

The precision d which one has to choose depends on the purpose of the survey. If the goal is to find rates for epidemiological studies, where a 1 or 2% difference of prevalence or incidence could influence the significance of a relationship, "d" must be small. In a KAP survey which is used to provide data for planning and management of a community health care project a "d" of 0.1 should suffice. Using d = 0.1 means that a possible change of a coverage rate which we find with a certain sample size (based on d=0.1) can only be measured with statistical certainty if the change is larger than 10%.

Using a "d" = 0.1 and assuming a "p" of 0.5, our KAP survey would need a maximum sample size of about 100. The problem is that we

want to compare subgroups of questions which will not include all persons interviewed. Furthermore the set-up of the questionnaire asks interviewers to "go to" another question, disregarding questions in-between. This means that some of the questions will not be answered by all interviewees. In order to reach the necessary sample size of 90 - 100 in all questions and subgroups of questions it is usually considered appropriate (based on empirical findings) to use a sample size of no less than 210. In this case the goal was set for 240 interviews. As a consequence of the short distances between houses and the short time required for each interview, 300 questionnaires could be completed in less than two days.

95% confidence limits:

the estimates of confidence for the survey results were calculated using the following formula:

$$p = p^* \pm z \sqrt{pq/n}$$

where  $p^*$  = proportion found in population.

#### C. Method for data analysis

In agreement with the WV/Mozambique headquarters and field staff the survey consultants decided to use the EPI-Info software package to analyze the data. As opposed to D-Base, EPI info is very user-friendly and easy to learn. Its features are sufficient for the kind of analysis needed for this survey. The data were analyzed according to the project's needs. The goal was to keep the analysis as simple as possible. The PVO Child Survival support program had previously established certain rules to standardize the analysis of the survey questions, whereby cross-tabulations of different questions were only done if this is of immediate interest to the project. These standardized rules were followed during the analysis of this survey.

#### D. Selection of target population and sample

All women aged 14 to 49 who had a child under 24 months of age were chosen as a target population.

As a consequence of the on-going civil war in Mozambique, no recent information about the population in Changara district could be obtained. No maps were available. The only knowledge about the population composition was based on previous registration of mothers and children by world vision in the area. The survey coordinators decided to obtain additional knowledge about the structure of the area by consulting local authorities and by inspecting the area personally. Based on these sources, it

was estimated that about 800 - 1000 mothers with a child under two would be living in the area. A map was drawn to delineate the different Bairros (administrative areas), which appeared to be socio-economically quite different. It was also estimated that about one half of the population was living in Changara Center, the largest of the four villages; the estimates for the other villages were: Cancune 25%, Chiocompendi 12.5% and Carata 12.5%. Consequently, the survey coordinators decided to do half of the interviews in Changara center, and a number proportionate to the village's size in each of the other three villages. In order to cover each one of the socio-economically very different areas of Changara center, starting points were chosen in a stratified way, assuring the collection of information in each Bairro. In the end, 12 random starting points were used and the interviewing process covered about 30-50% of eligible mothers. There was no frame of information to allow a classic 30 cluster sampling methodology, and the number of distinct areas, which were delineated after personal inspection, was too small for 30 clusters. A further sub-division of Bairros based on personal inspection seemed arbitrary and useless. It was considered, that a possible loss of precision due to the reduced number of random starting points (clusters) would be compensated by the adjustment factor for small populations, i.e. the fact that the total population of eligible mothers was only two to three times larger than the sample (see appendix 5 for list of areas and villages, as well as map indicating the final delineation of areas; see also appendix 5B for list of starting points selected). Interviewers and supervisors were taken to each starting point by the survey coordinators to assure proper supervision and initiation.

Supervisors and interviewers were told to go to each household in the selected direction, until they had found a certain number of households with mothers included in the target population (the number after each starting point was proportionate to the area's estimated size). If a household had an eligible mother who was not home or not able to answer questions at the time of the visit, interviewers were told to try to contact the mother in the nearby surroundings or to schedule a re-visit. If, after one such appointment, the interview could not be completed, additional households in the cluster were used to reach the number of interviews needed.

#### IV. Survey execution

##### A. Training of supervisors and interviewers

The training of supervisors and interviewers lasted three days.

The WV/Mozambique had pre-selected four supervisors and eight interviewers who spoke and read Ngunwe fluently. In addition, there were observers from the Ministries of Health in Tete and Zambezia Provinces and WV/Mozambique staff from Zambezia province, where WV/Mozambique is planning to implement another baseline survey for its child survival project in Nicoadala. All these observers were fully trained to perform interviews in Portuguese.

The first day was used to train the four supervisors and all observers.

The second day was reserved for joint training of supervisors, observers and interviewers. A number of 12 supervisors and interviewers were chosen from among WV's health staff. A ratio of supervisors to interviewers of roughly 1:2 was not initially required, but due to the availability of qualified people such a ratio was considered advantageous for the quality control during the data collection. Supervisors were trained to guide the interviewer assigned to them; at the same time supervisors also performed some interviewing, which was supervised by other supervisors or by the survey observers and coordinators.

The second day of training focused on understanding the questionnaire and on the proper way to ask the questions without introducing biases. Role plays were used to acquaint the interviewers with the questionnaire.

The third day of training started with a field test of the questionnaire in the morning. An area close to Tete City (outside of the survey area) was chosen and each one of the interviewers and supervisors (and the observers, if mothers with Portuguese language skills could be found) completed three questionnaires. In the afternoon experiences were exchanged. Problems that had been found during the field test were discussed, misunderstandings were clarified (see appendix 6 for training schedule and manual).

## B. The Survey Interviews

The survey was conducted during two consecutive days, Thursday, and Friday. Dr. Hector Jalipa, Ms. Vivien Wilson, Ms. Bernie Simacio, Mr. Alberto Siteo and Dr. Denis Holdenried coordinated the activities of the teams. Each morning all interviewers and supervisors were taken to their designated starting points in Changara.

The supervisors were responsible for following the requirements of randomness of the sampling. Furthermore the supervisors

observed at least 25% of all interviews conducted. They also conducted about 25% of the interviews themselves. Each questionnaire was checked by supervisors and coordinators for completeness within one hour after the end of the interview, so that, in the case of missing or non-sensal information, the interviewee could be visited again.

In general, the quality of interviews was quite satisfactory. Few answers were marked wrong or inappropriately, few check marks were missing. Random checks of answers recorded yielded very high accuracy rates.

About 80% of the interviews were conducted in Nhungue, 20% could be conducted by fully trained and supervised survey observers in Portuguese.

There were few logistical difficulties due to the short distances between starting points and villages. The biggest logistical problem was to reach the Changara District from Tete. Small aircraft had to be chartered to transport non-local participants by air, since the road was not considered safe by local authorities.

Moving from each starting point in a randomly determined direction, a certain pre-determined number of households with eligible mothers were identified and all the mothers who were at home could be interviewed. If the mother was not at home the interview team attempted to contact her in the surroundings of her house. Otherwise an appointment for an interview later in the day was made. If no appointment was possible, or if the appointment was not kept by the mother, additional households were chosen in each cluster.

### C. Data Analysis

Following the survey WV field staff, representatives of the MOH who had participated in the survey as observers, as well as the survey consultant spent three days to enter the data into a personal computer and to analyze them with the help of the EPI-INFO software package. This report was prepared using WordPerfect 5.1 software. Epi-Info was easy to use and adequate for the needs of this survey.

For each of the questions frequency distributions were produced. In some cases the results were stratified for age. Cross tabulations of selected questions, whose correlation was of immediate importance to the WV Mozambique Child Survival project, were made (see appendix 7).

V. RESULTS:

The following answers were given for the 36 questions (three questions only of interest for household identification and therefore not specified here):

1. Ages of mothers: 277 answers; mean = 26.68; distribution see appendix
2. Ages of children: 298 answers; mean 10.34; distribution see appendix
3. What was the highest educational level you attained? (298)
  1. none [62.1%]
  2. primary reads [4.7%]
  3. primary does not read [25.5%]
  4. secondary [7.4%]
  5. other [0.3%]
- possible you doing any income generating work? (multiple answers)
  - a. selling of consumer products [2.7%]
  - b. selling of other agricultural goods [4.7%]
  - c. other (specify) [70.1%]
  - d. no [23.8%]
5. Is your main income generating work done at home or away from home? (224)
  1. away from home [93.8%]
  2. at home [6.3%] (go to 7)
6. Who takes care of (name of child) while you are working away from home? (281)  
(multiple answers possible; record all answers)
  - a. mother takes child with her [69.8%]
  - b. husband/partner [1.0%]
  - c. other relatives (specify) [8.9%]
  - d. nursery school [0%]
  - e. neighbors [0.4%]
  - f. friends [0.4%]
  - g. maid [5.7%]
  - h. older child(ren) [14.6%]
  - i. other (specify) [1.4%]

\*\*\*\*\*  
NUTRITION

7. Are you breastfeeding (name of child)? (298)
  1. yes [96.6%] (go to 9)
  2. No [3.4%]
8. Did you ever breastfeed (name of child)? (9)
  1. Yes [88.9%]
  2. No [11.1%] (go to 10)
9. When did you breastfeed (name of child) for the first time? (298)
  1. immediately after birth (10 minutes) [50.0%]



- 2. during the first hour after delivery (22.8%)
- 3. during the first eight hours after delivery (11.1%)
- 4. from 8 to 24 hours after delivery (8.7%)
- 5. more than 24 hours after delivery (3.7%)
- 6. do not remember (3.7%)
- 7. not breast feeding the baby (0%)

10. a. How old was (name of child) when you first gave water?(297)distributions see appendix  
 \_\_\_\_\_ months never given [ ] do not know [ ]
- b. How old was (name of child) when you first gave juices or soup?  
 \_\_\_\_\_ months never given [ ] do not know [ ]
- c. How old was (name of child) when you first gave milk other than breastmilk?  
 \_\_\_\_\_ months never given [ ] do not know [ ]
- d. How old was (name of child) when you first gave phala?  
 \_\_\_\_\_ months never given [ ] do not know [ ]
- e. How old was (name of child) when you first gave nsima or mbatata?  
 \_\_\_\_\_ months never given [ ] do not know [ ]
- f. How old was (name of child) when you first gave bananas or mangoes?  
 \_\_\_\_\_ months never given [ ] do not know [ ]
- g. How old was (name of child) when you first gave khwanya or mnkhwani?  
 \_\_\_\_\_ months never given [ ] do not know [ ]
- h. How old was (name of child) when you first gave meat, eggs, beans or fish?  
 \_\_\_\_\_ months never given [ ] do not know [ ]
- i. How old was (name of child) when you first gave sugar?  
 \_\_\_\_\_ months never given [ ] do not know [ ]
- j. How old was (name of child) when you first gave cooking oil?  
 \_\_\_\_\_ months never given [ ] do not know [ ]

\*\*\*\*\*  
 DIARRHEA

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

54

- (298)
1. yes(57.0%) 2. no(43.0%)(go to 18go3tdo18ot remember(0%)
12. During (name of child)'s diarrhea,(168)  
(read the choices to the mother)
- 1. did you breast feed more than usual ? [20.8%]
  - 2. did you breast feed less than usual ? [34.5%]
  - 3. did you breastfeed the same as usual ? [39.3%]
  - 4. did you stop breast feeding completely ? [1.8%]
  - 5. did not breast feed [13.6%]
13. During (name of child)'s diarrhea, did you provide (name of child) with (169)  
(read the choices to the mother)
- 1. more fluids than usual (other than breast milk)?[27.2%]
  - 2. less fluids than usual (other than breast milk)?[44.4%]
  - 3. the same fluids as usual (other than breast milk)?[21%]
  - 4. or did you stop all fluids other than breast milk?[7.7%]
14. During (name of child)'s diarrhea, did you (127)  
(read the choices to the mother)
- 1. provide (name of child) with solid foods more than usual? [15.4%]
  - 2. provide (name of child) with solid foods less than usual? [46.2%]
  - 3. provide (name of child) with solid foods the same as usual? [20.7%]
  - 4. did you stop feeding the child solid foods? [17.0%]
15. When (name of child) had diarrhea, what treatments, if any, did you use? (multiple answers possible; record all answers)
- a. ORS packet (169) [69.2%]
  - b. cereal based fluids [6.5%] specify\_\_\_\_\_
  - c. sugar-salt-solution [18.9%]specify\_\_\_\_\_
  - d. antidiarrhea medicine,antibiotics [18.9%] specify\_\_\_\_\_
  - e. other [11.2%]specify\_\_\_\_\_
  - f. nothing [5.9%]
16. When (name of child) had diarrhea, did you seek advice or treatment for the diarrhea?(162)
1. yes (83%) 2. no (16%) (go to 18) 3. do not remember (1%) (go to 18)
17. From whom did you seek advice or treatment for the diarrhea? (142)  
(multiple answers possible; record all answers)
- a. health center [58.5%]
  - b. hospital [28.9%]
  - c. private practitioner [2.0%]
  - d. pharmacy [0.7%]
  - e. community health worker [1.4%]
  - f. traditional healer [16.2%]
  - g. traditional birth attendant [0%]

60

- h. shop (0%)
- i. relatives (specify) (4.2%) \_\_\_\_\_
- j. other (specify) (0.7%) \_\_\_\_\_

18. What are important actions you should take for (name of child) if (name of child) has diarrhea?(297)  
(multiple answers possible; record all answers)
- a. take the child to the aid post or health center (84.5%)
  - b. give the child more to drink than usual (5.7%)
  - c. withhold fluids from the child (0.3%)
  - d. give the child smaller more frequent feeds (3.4%)
  - e. withhold foods from the child (0%)
  - f. other (specify) (14.5%)
  - g. don't know (0%)

\*\*\*\*\*

**MALARIA**

19. Do you think malaria is a major health problem in your community?(297)
1. yes (86.9%) 2. no (7.7%) 3. do not know (5.4%)
20. What are you currently doing to prevent your family from having malaria? (multiple answers possible; record each answer)(294)
- a. no protection (56.1%)
  - b. window screens (0.3%)
  - c. mosquito nets (0%)
  - d. burning mosquito coils (2%)
  - e. insect repellent sprays (0%)
  - f. destroying all standing water around the house (3.7%)
  - g. take medicine (specify) (9.5%) \_\_\_\_\_
  - h. other (specify) (30.6%) \_\_\_\_\_
21. Did (name of child) ever have malaria?(290)
1. yes (52.0%) 2. no (47%) 3. do not remember (1%)  
(go to 24) (go to 24)
22. Was this diagnosis made because of a fever or was a blood test taken?(154)
1. because of fever (89.6%) 2. blood test (10.4%)
23. During (name of child)'s malaria illness, which signs and symptoms did your child have? (multiple answers possible; record all answers)(155)
- a. shaking chills (shivering, shaking) (11.0%)
  - b. fevers (warm body, high temperature) (85.2%)
  - c. weakness and/or tiredness (21.3%)
  - d. muscle pains and aches (1.3%)
  - e. headaches (10.3%)
  - f. anemia (0%)

61

g. other (specify) [11.6%] \_\_\_\_\_

24. When you or someone in your family has malaria, from whom did you seek advice or treatment? (multiple answers possible; record each answer)(294)

a. hospital	[65.0%]
b. health center	[24.8%]
c. private practitioner	[1.0%]
d. pharmacist	[0.3%]
e. community health worker	[0.3%]
f. traditional healer	[14.3%]
g. family member or friend	[2.7%]
h. other (specify) _____	[3.7%]

25. When you were pregnant with (name of child) did you have malaria?(297)

1. yes [33.3%] 2. no [66.3%](go to 28) 3. do not remember [0.3%]  
(go to 28)

26. Did you take any medication for this malaria?(100)

1. yes [81.1%] 2. no [18.0%] 3. do not remember [1.0%]

27. Where did you get the medicine from?(82)

1. health center/Hospital	[93.9%]
2. private practitioner	[2.4%]
3. community health worker	[1.2%]
4. pharmacy	[0%]
5. shop	[0%]
6. traditional healer	[2.4%]
7. other (specify) _____	[0%]

\*\*\*\*\*  
IMMUNIZATIONS

28. Has (name of child) ever received any immunizations?(297)  
1. yes [95.6%] 2. no [4.0%](go to 32) 3. don't know (go to [0.3%] 32)

29. At what age should (name of child) receive measles vaccine?  
16.5% at 9 months(see appendix) do not know [77.0%] (278)

30. Do you have an "under 5 clinic card" for (name of child)?  
1. yes [96.5%](must see card!) 2. no [2.5%](go to 32)(285)  
3. lost it [1.1%] (go to 32)

31. If the child has an "under 5 clinic card", record the immunization status of the child using the card.(275)  
1. BCG [98.2%] age adjusted rates see appendix  
2. DPT 1 [83.3%] DPT 2 [72.6%] DPT 3 [65.2%]

3. Polio(OPV)1[83.0%]Polio(OPV)2[72.4%]Polio(OPV)3[65.6%]  
 4. Measles [53.3%]

32. Can you tell me why pregnant women need to be vaccinated with tetanus toxoid vaccine? (297)

(multiple answers possible; record all answers)

- |   |         |
|---|---------|
| a. to protect the woman against tetanus               | (9.1%)  |
| b. to protect the child at birth against tetanus      | (12.8%) |
| c. to protect both mother and newborn against tetanus | (13.8%) |
| d. other (specify) _____                              | (9.4%)  |
| e. do not know  | (54.5%) |

33. How many tetanus toxoid injections does a pregnant woman need to protect the newborn infant from tetanus? (295)

- |                  |         |
|------------------|---------|
| 1. one           | (6.1%)  |
| 2. two           | (31.2%) |
| 3. more than two | (39.0%) |
| 4. none          | (1.7%)  |
| 5. do not know   | (22.0%) |

34. At the delivery of (name of child), who tied and cut the cord?(298)

- |  |         |
|--|---------|
| 1. mother herself                                  | (2.0%)  |
| 2. family member                                   | (12.4%) |
| 3. neighbor  | (7.0%)  |
| 4. traditional birth attendant                     | (13.4%) |
| 5. health professional (physician, nurse, midwife) | (61.1%) |
| 6. other (specify) _____                           | (4.0%)  |
| 7. do not know                                     | (0%)    |

\*\*\*\*\*  
 Environmental Sanitation

35. What kind of toilet facility does your household have?(297)

- |                          |         |
|--------------------------|---------|
| 1. improved latrine      | (8.1%)  |
| 2. pit                   | (51.5%) |
| 3. none                  | (39.7%) |
| 4. other (specify) _____ | (0.7%)  |

36. What is the major source of drinking water in your household?(298)

- |                          |         |
|--------------------------|---------|
| 1. unimproved well       | (1.7%)  |
| 2. improved well         | (6.0%)  |
| 3. river                 | (87.6%) |
| 4. spring                | (1.7%)  |
| 5. rain water            | (0%)    |
| 6. other (specify) _____ | (3.0%)  |

For frequency distributions and tables of each question, produced

in EPI-INFO, see appendix 7! See also cross tabulations, age specific immunization rates (fully immunized), and data on exclusive breast feeding. Furthermore, see data on differences by supervisor and village.

#### B. Comments on results, possible problems and biases

In general the WVMozambique team and the survey consultant were very pleased with the process and outcome of the survey. The selection of the sample could not precisely followed WHO recommendations for a 30 cluster survey; nevertheless, an attempt was made to stratify the survey area in a way that a representative cross-section of the population would be included in the sample.

One problem of this survey was the translation of the English original into a Nhungue questionnaire. Nhungue is an old tribal language which is spoken by several million people in Mozambique. Many technical terms cannot be translated from a western language into Nhungue, so that some questions had to be altered somewhat, in order to make them understandable. An independent re-translation from Nhungue into English was made to make sure that the actual content of the Nhungue version was not changed.

One assumption of the survey coordinators was that there are socio-economically different areas within Changara. A stratified sampling approach assured the inclusion of certain numbers of mothers from each such area, proportionate to each areas estimated size. Consequently it was possible to cross-tabulate key results for different areas (Beirros and villages). The cross-tabulations showed that there was little difference between the four villages overall. Within the village of Changara, however, the area of Bunga, which is densely inhabited by recent refugees, proved to be significantly different for a number of variables.

The results demonstrated, however, that for most of the variables measured there was no statistically significant difference of "p" between clusters, other than Bunga.

One important bias to consider in a survey like this, in which the interviewers are lay people who have been trained only for a relatively short period of time, is the interviewer bias. Every interviewer might ask questions very differently, leading mothers to a certain answer rather than neutrally exploring her real opinion or knowledge. As mentioned various times before, the interviewers for this survey were very qualified and motivated so

that the training period seemed to suffice. Furthermore there was a very close supervision, made possible by the supervisor to interviewer ratio of 1:2. Results show that there is no significant difference between interviewers with regard to the results recorded for most questions.

Most questions were easily understood by the interviewees.

### C. WV/Mozambique's use of the data

WV/Mozambique is at the beginning of its child survival project in the Changara District. The data which were collected in this survey will be used as baseline information for the project. Repeated surveys of the same type are planned later (e.g. every year, if possible) to assess progress made through the project's interventions. Furthermore, the data can be used at this point to review the project's goals and targets, as stated in the project proposal, and to re-focus activities towards intervention areas of special need.

Through this and repeated surveys it is possible to manage the project by objectives, i.e. to make decisions based on the needs in the community and on the achievements of the project.

WV Mozambique staff will also communicate the data to leaders of the Changara community to initiate a dialogue about the communities status and needs.

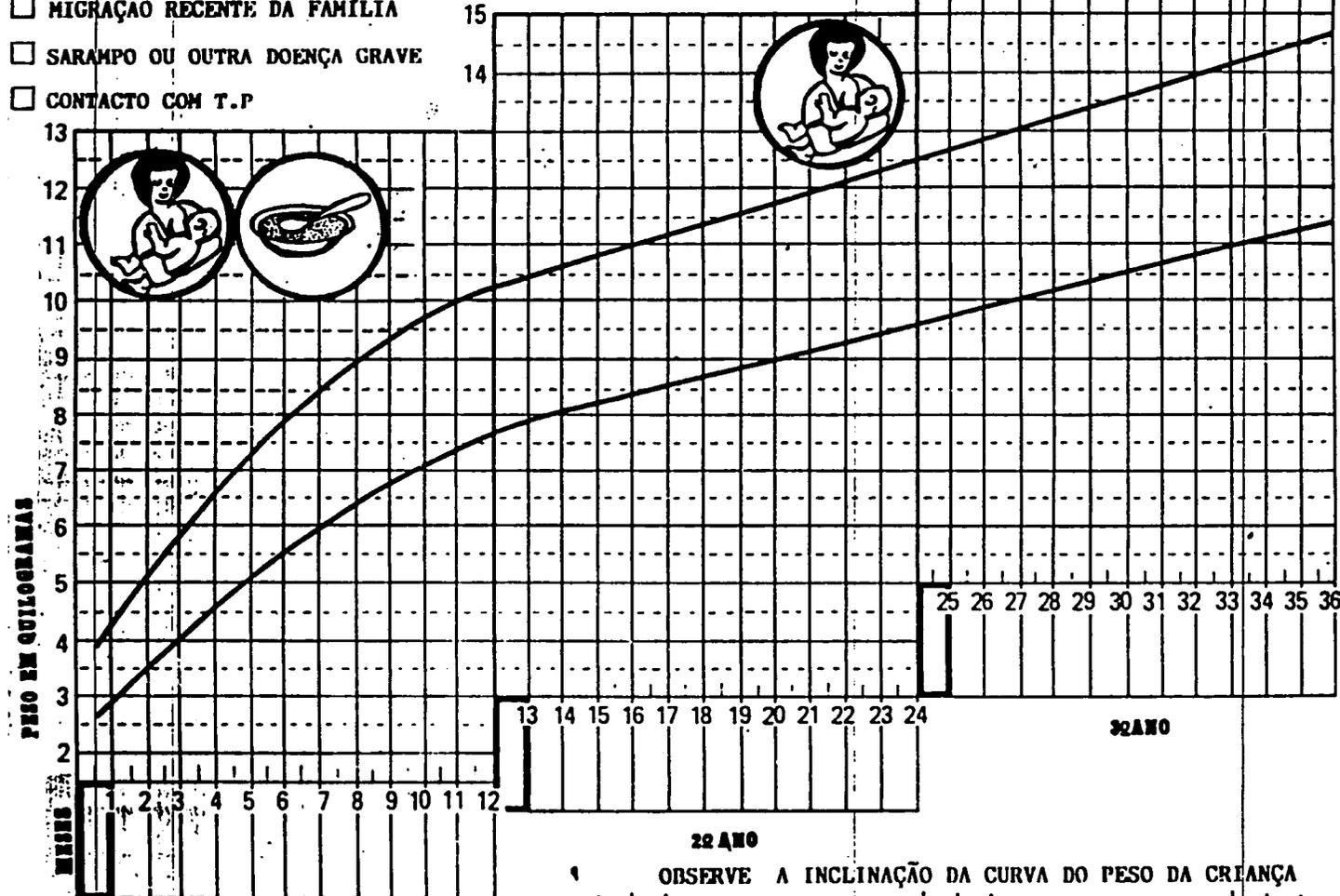
65

**PRESTAR ATENÇÃO ESPECIAL SE :**

- PESO AO NASCER INFERIOR A 2,5 KG
- GÊMIOS
- MÃE AUSENTE
- DESMAME PERCOCE
- MALNUTRIÇÃO
- MIGRAÇÃO RECENTE DA FAMÍLIA
- SARAMPO OU OUTRA DOENÇA GRAVE
- CONTACTO COM T.P

**ESCREVER NA COLUNA DO MÊS APROPRIADO**

- DESMAME
- DIARREIA
- SARAMPO
- PNEUMONIA
- KWASHIORKOR
- NOVA GRAVIDEZ DA MÃE
- TOSSE CONVULSA
- ANEMIA
- OUTRAS DOENÇAS



12 ANO DA VIDA

22 ANO

32 ANO

OBSERVE A INCLINAÇÃO DA CURVA DO PESO DA CRIANÇA

BOM SINAL DE ALARME MUITO PERIGOSO

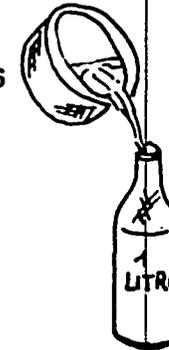
**VACINAÇÕES**

VACINA	DATA	LOCAL	ASSINATURA E CARIMBO
A-P à nascença			
BCG			
DTP 1ª dose			
AP 1ª dose			
DTP 2ª dose			
AP 2ª dose			
DTP 3ª dose			
AP 3ª dose			
A.S			

**DIARREIA?**

DAR A BEBER UMA SOLUÇÃO PREPARADA COM 1 LITRO DE ÁGUA E UM PACOTE DE SAIS.

OU



SAL + AÇUCAR

UMA PITADA DE 3 DEDOS DE SAL E UMA MEDIDA DE MÃO DE AÇUCAR

OU

DAR DE COMER PAPINHA DE ARROZ MUITO AGUADA E EM BOA QUANTIDADE E MANTER A ALIMENTAÇÃO ARTIFICIAL.

APPENDIX H-2

VISÃO EDUCATIVA HUMANIZADORA  
 PROGRAMA DE SUPLEMENTAÇÃO ALIMENTAR INFANTIL  
 FACILITADOR DA COMUNITADE - PROGRAMA MENSAL DE TREINAMENTO

Referente ao Período: \_\_\_\_\_  
 Data: \_\_\_\_\_

Aldéia: \_\_\_\_\_  
 Bairros: \_\_\_\_\_ Quats: \_\_\_\_\_

				
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TOTAL:				



**APPENDIX I**  
**TETE CSP WORK PLAN FISCAL YEAR 1992**

Below is a list of the critical activities to be initiated or conducted during fiscal 1992. This list is by no means exhaustive, but provides examples of the key activities planned for the future. It also includes important programs and activities that were launched during the final quarter of fiscal 1991:

**Fiscal Year 1991:**

July 1991:

CSP/MOH staff training session on adult learning and communication  
Nutrition Screening and Vaccinations  
Revision of the HIS and consultation with local MOH  
Workshop on the proper use of MOH and CSP forms  
Therapeutic feeding center extension/expansion proposal drafted

August 1991:

CF Training  
Nutrition Screening and Vaccinations  
School feeding extension/expansion proposal drafted  
Community Facilitator Training Seminar  
U.S. Ambassadorial delegation visit CS project sites in Changara  
Pilot phase of the CF home visitation form  
Water and Sanitation teaching/training  
Initiation of Boroma therapeutic feeding center

September 1991:

CF Training  
Nutrition Screening and Vaccinations  
Training session on planning of program and visual aids  
Training session on data collection and compilation  
British government delegation tours CS project sites in Changara  
1991 Annual Report prepared  
Latrine construction  
Water and Sanitation teaching/training session

**Fiscal Year 1992**

October 1991:

CF Training  
Nutrition Screening and Vaccinations

**Latrine construction**  
**Water and Sanitation teaching/training session**  
**USAID Delegation visits**

**November 1991:**

**CF Training**  
**Nutrition Screening and Vaccinations**  
**HQ/Regional Office Visit**  
**Latrine construction**  
**Water and Sanitation teaching/training session**  
**CSP/MOH training session**

**December 1991:**

**CF Training**  
**Nutrition Screening and Vaccinations**  
**Latrine construction**  
**Water and Sanitation teaching/training session**

**January 1992:**

**CF Training**  
**Nutrition Screening and Vaccinations**  
**Language Training**  
**Provide community leaders with monthly update**  
**Latrine construction**  
**Water and Sanitation teaching/training session**

**February 1992:**

**CF Training**  
**Language Training**  
**Nutrition Screening and Vaccinations**  
**Baseline survey repeated in Changara**  
**Latrine construction**  
**Water and Sanitation teaching/training session**  
**Initiation of demonstration garden\*\***  
**CSP/MOH training session**

**March 1992:**

**CF Training**  
**Nutrition Screening and Vaccinations**  
**Language Training**  
**Provide community leaders with monthly update**  
**Latrine construction**

**Water and Sanitation teaching/training session  
Draft proposal for Pregnant Women's Supplemental Feeding Program**

**April 1992:**

**CF Training  
Nutrition Screening and Vaccinations  
Language Training  
Water and Sanitation teaching/training session  
CSP/MOH training session**

**May 1992:**

**CF Training  
Nutrition Screening and Vaccinations  
Provide community leaders with monthly update  
Latrine construction  
Water and Sanitation teaching/training session**

**June 1992:**

**CF Training  
Nutrition Screening and Vaccinations  
Family registry update  
Population census/update  
Latrine construction  
Water and Sanitation teaching/training session  
CSP/MOH training session**

**July 1992:**

**CF Training  
Nutrition Screening and Vaccinations  
Provide community leaders with monthly update  
External consultant/Technical assistance  
Latrine construction  
Water and Sanitation teaching/training session**

**August 1992:**

**CF Training  
Nutrition Screening and Vaccinations  
External consultant/Technical assistance  
Latrine construction  
Water and Sanitation teaching/training session  
CSP/MOH training session**

**September 1992:**

**CF Training**

**Nutrition Screening and Vaccinations**

**1992 Annual Report conducted**

**Provide community leaders with monthly update**

**Latrine construction**

**Water and Sanitation teaching/training session**

**CSP/MOH training session**

**October or November 1992:**

**Midterm Evaluation Conducted**



12'

**1991 ANNUAL REPORT FORM A: COUNTRY PROJECT PIPELINE ANALYSIS**  
**W.V.R.D./TETE CHILD SURVIVAL PROJECT (MOZAMBIQUE)**  
**#OTR-0500-A-00-0105-00**

FIELD	Actual Expenditures To Date (09/01/90 to 9/30/91)			Projected Expenditures Against Remaining Obligated Funds (10/1/91 to 08/31/93)			Total Agreement Budget (Columns 1 & 2) (09/01/90 to 08/31/93)		
	A.I.D.	W.V.R.D.	TOTAL	A.I.D.	W.V.R.D.	TOTAL	A.I.D.	W.V.R.D.	TOTAL
<b>COST ELEMENTS</b>									
<b>I. PROCUREMENT</b>									
A. Supplies	0	0	0	1,250	40,200	41,450	1,250	40,200	41,450
B. Equipment	0	0	0	750	20,500	21,250	750	20,500	21,250
C. Services/Consultants	0	0	0	4,500	6,120	10,620	4,500	6,120	10,620
<b>SUB-TOTAL I</b>	<b>2,634</b>	<b>28,505</b>	<b>31,139</b>	<b>3,866</b>	<b>38,315</b>	<b>42,181</b>	<b>6,500</b>	<b>66,820</b>	<b>73,320</b>
<b>II. EVALUATION/SUB-TOTAL II</b>	<b>0</b>	<b>1,394</b>	<b>1,394</b>	<b>10,720</b>	<b>6,826</b>	<b>17,546</b>	<b>10,720</b>	<b>8,220</b>	<b>18,940</b>
<b>III. INDIRECT COSTS</b>									
Overhead on Field (20%)	21,998	19,526	41,246	60,150	4,661	65,089	82,148	24,187	106,335
<b>SUB-TOTAL III</b>	<b>21,998</b>	<b>19,526</b>	<b>41,524</b>	<b>60,150</b>	<b>4,661</b>	<b>64,811</b>	<b>82,148</b>	<b>24,187</b>	<b>106,335</b>
<b>IV. OTHER PROGRAM COSTS</b>									
A. Personnel	0	0	0	269,449	51,394	320,843	269,449	51,394	320,843
B. Travel/Per diem	0	0	0	90,422	15,000	105,422	90,422	15,000	105,422
C. Other Direct Costs	0	0	0	34,400	0	34,400	34,400	0	34,400
<b>SUB-TOTAL IV</b>	<b>107,359</b>	<b>67,733</b>	<b>175,092</b>	<b>286,912</b>	<b>(1,339)</b>	<b>285,573</b>	<b>394,271</b>	<b>66,394</b>	<b>460,665</b>
<b>TOTAL FIELD</b>	<b>131,991</b>	<b>117,158</b>	<b>249,149</b>	<b>361,648</b>	<b>48,463</b>	<b>410,111</b>	<b>493,639</b>	<b>165,621</b>	<b>659,260</b>

\*Note: The project office has reported the field expenditures under the line items in the grant agreement. We have requested a detailed breakdown in the general categories. Due to a change in the finance staff in the field the detailed report will be provided at a later date.

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