

MANAGEMENT SCIENCES FOR HEALTH
A NONPROFIT INSTITUTION

157
9380228
PI 117-922
197-100 13



EVALUATION REPORT
Seventh-Day Adventist World Service

TANZANIA

AID MATCHING GRANT PROGRAM
IN COMMUNITY HEALTH AND NUTRITION

John LeSar, MD, MPH
Nicholas Danforth, EdM, MIA

December 1983

SUITE 700, 1655 NORTH FORT MYER DRIVE, ARLINGTON, VIRGINIA 22209

(703) 841-0723

BOSTON

JAKARTA

PORT-AU-PRINCE

RABAT

SANA

TEGUCIGALPA

MANAGEMENT SCIENCES FOR HEALTH
A NONPROFIT INSTITUTION

EVALUATION REPORT
Seventh-Day Adventist World Service

TANZANIA

**AID MATCHING GRANT PROGRAM
IN COMMUNITY HEALTH AND NUTRITION**

John LeSar, MD, MPH
Nicholas Danforth, EdM, MIA

December 1983

SUITE 700, 1655 NORTH FORT MYER DRIVE, ARLINGTON, VIRGINIA 22209
(703) 841-0723

BOSTON

JAKARTA

PORT-AU-PRINCE

RABAT

SANA

TEGUCIGALPA

TABLE OF CONTENTS

	<u>Page</u>
Abbreviations and Glossary	
I. EXECUTIVE SUMMARY	1
II. BACKGROUND	
A. Description of this Evaluation	3
B. The Seventh Day Adventist Church and the Seventh Day Adventist World Service	4
C. The SAWS Matching Grant	4
D. The Program Environment in Tanzania	5
E. Relevant AID and USAID Policies and Strategies	6
III. THE SAWS/TANZANIA MATCHING GRANT PROGRAM	
A. Goals, Purposes, Outputs, and Strategy	7
B. Planned Resource Inputs	9
C. How the Proposal Development Took Place	10
IV. ACTIVITIES IN THE PROGRAM	
A. The Pre-Training Phase	12
B. The Baseline Survey and Training Phase	13
C. The Community Phase	14
V. RESULTS OF THE PROGRAM	
A. Impact	17
B. Outputs	17
VI. ANALYSIS OF THE PROGRAM	
A. Summary of Results	19
B. Analysis of the MG Proposal and the Proposal Development Process	19
C. Analysis of Program Management to Date	21
D. The Importance of the Program Environment	22
E. The Importance of Financial Constraints	22
VII. CONCLUSIONS AND RECOMMENDATIONS	
A. General Conclusions	23
B. Special Areas of Interest	24
C. Recommendations (to SAWS, AID, and USAID)	25

APPENDIX

A.	SAWS/Tanzania Evaluation Field Visit	28
B.	SAWS/International Organization Chart	30
C.	SAWS/Tanzania Matching Grant Organization Chart	31
D.	Planned and Actual Schedule of SAWS/T MG Activities	32
E.	MG Budget	33
F.	Description of Field Sites	34
G.	SAWS/T MG Logical Framework	36
H.	Planned CHP Selection Criteria and Actual Characteristics	39
I.	CHP Training Curriculum	40
J.	Baseline Community Health Survey Questions	42
K.	Program Outputs and OVIs: planned and current status	50
L.	List of Possible Drugs for Sale by CHPs	51

ABBREVIATIONS AND GLOSSARY

AID	The Agency for International Development, Washington, D.C.
CHP	Community Health Promoter, the front line or primary health care worker in the SAWS program
FPIA	Family Planning International Assistance, an AID-funded U.S. Organization which provided churches, PVUs, and other non-profit government agencies with family planning support and supplies
GOT	Government of Tanzania
MG	Matching Grant from AID
PHC	Primary Health Care
SAWS	Seventh Day Adventist World Service, the SDA's voluntary relief and development agency
SAWS/I	SAWS International Headquarters in Washington, DC
SAWS/T	SAWS Tanzania Country Program
SDA	Seventh Day Adventist Church
Shilling	12.5 Tanzania shillings = \$1.00 U.S.
TBA	Traditional Birth Attendants
USAID	AID missions overseas

EVALUATION STAFF

MSH Project Director: John LeSar, MD, MPH*
MSH Project Coordinator: Nicholas Danforth, EdM, MIA*
SAWS Director for Program Planning and Evaluation: David Syme, MPH, RN
SAWS/Tanzania Country Director: Norman Bunker, BA
SAWS/Tanzania Medical Director: Godfrey Chamba, MD
SAWS/Tanzania Training Officers: Tenga Elinihake and Lewis Makengo

* This evaluation report was written by the two MSH evaluators who are solely responsible for its contents. We thank SAWS headquarters and field staff for their complete, candid support for this evaluation, and for their hospitality and hard work under difficult circumstances in the field.

I. EXECUTIVE SUMMARY

This evaluation is part of a series of evaluations of health and nutrition programs of PVOs under a contract between AID and Management Sciences for Health. The evaluation is of the Seventh Day Adventist World Service (SAWS) country program in Tanzania covered by a Matching Grant (MG) between SAWS and AID. The SAWS/Tanzania MG was designed "to extend family health, nutrition, and agriculture education to the villages around existing SAWS institutions." Its health component consists of training, supervising, and supporting 29 community-level health educators in two rural areas where SAWS has clinics. In September, 1983, two MSH evaluators, a public health planner/ epidemiologist and a health education planner/evaluator, visited the program with a SAWS/International (SAWS/I) representative. The plan in Tanzania was to improve community health in villages surrounding existing Seventh Day Adventist Clinics by working with communities to select village people for Community Health Promotor (CHP) training. The SAWS/Tanzania (SAWS/T) staff would train the CHPs for three weeks and they would then return to their villages where they would promote health in a number of areas. They would be supervised by clinic staff and by their training officers. The Tanzania grant for health was \$273,350 over three years and included salary support for SAWS staff and the CHPs as well as travel and per diem.

At the time of the evaluation, the program had been underway for nine months. During this period it has been difficult to work in Tanzania because of financial and foreign exchange constraints which have caused shortages of drugs, petrol, and spare parts. However, even under these conditions, SAWS/T staff have organized a baseline survey and trained 29 CHPs. The CHPs had been back in their villages for less than one month. The evaluation was undertaken even though it was too soon to measure impact on the population, on institutional development, on Government, or on any policy areas. The outputs for trained CHPs, after revision, have been met but it is too early to meet outputs for functioning village health committees and for expanded MCH services.

Analysis of the program to date finds that the goals, purposes, and overall strategy are sound but that more thought is needed to achieve a functioning primary health care system. The achievement of the baseline survey and training program despite difficult conditions is very positive. The design of the service program, community participation, training, and management control systems -- both supervision and reporting systems-- all need improvement. The post-grant financing of CHP salaries remains to be planned. Most of the areas needing improvement suffer from insufficient management staff in the field, lack of experience of SAWS/T staff in implementation of primary health care programs and lack of selected technical expertise, especially in training, design and analysis of baseline surveys, and management information systems. The amount of the Matching Grant appears satisfactory for a three year program, but a five year program would greatly assist successful implementation.

The overall conclusion is that the program has potential to meet its purposes of a functioning PHC system if it makes certain improvements. Its strengths are its strategy of basing the program on existing clinics, design management, training and financing in the post-grant period. In the world context, the program is straight-forward and predictable, but even at this early stage, it represents a definite improvement in SAWS health activities. The benefits of the program are likely to reach the poorer families but not "empower" them. The program is not likely to significantly enhance the role of women, neither within the family nor in the workforce. The program is potentially cost-effective, sustainable, and replicable. It can be improved during the life of the project, yet it already appears more cost-effective than current public sector approaches. Key recommendations are as follows:

1. SAWS/T should clarify the tasks of the CHP in the village, train them specifically for these tasks, and, in conjunction with the communities, develop supervisory systems for them. In addition, SAWS/T should improve the reporting systems and the relationship of the CHPs to the SDA clinics. The staff should give priority to post-project financing. A better staff development program is needed for local staff.
2. SAWS/I headquarters should expand its monitoring capability and develop, either in-house or through institutional or consultant relationships, and improved technical capability in primary health care management and training. SAWS/I might require field programs to demonstrate improved program planning and management capability before approving country matching grants.
3. AID/W should further consider how to monitor these kinds of MG programs and what information is needed for MG approvals, quarterly and annual reports, and field visits, and the timing and use of evaluations. Lengthening field programs to five years should be considered. AID/W should also consider how to involve USAID health officers in the approval and monitoring process.

II. BACKGROUND

A. Description of this Evaluation

The AID Office of Food for Peace and Voluntary Assistance (FVA) is responsible for the planning, monitoring, and evaluation of centrally-funded Matching Grants to PVOs. In June 1983 FVA contracted with Management Sciences for Health (MSH) (Project No. 932-0100) to:

Design, carry out and synthesize a series of evaluations of AID-supported PVO health sector programs in order to provide information that should lead to improvements in the impact of PVO activities and assist AID and other national and international organizations with policy and program guidance in relationship to PVO health sector projects.

Four PVO country programs were to be evaluated under this contract: two Seventh Day Adventist World Service (SAWS) programs, Haiti and Tanzania; Meals for Millions (MFM) in Honduras; and the International Eye Foundation in Honduras. The first series of evaluation reports, including this one of SAWS, were to be field tests which would be reviewed and revised by the PVOs concerned and by FVA.

The criteria for deciding which PVOs, and which of their country programs, to evaluate, have varied. Programs selected must contain health and/or nutrition activities; programs must not have been over-studied or over-evaluated, but instead must want to have an evaluation. The evaluation should be seen by the PVO headquarters and field staff as a joint, cooperative effort between AID, MSH, and each PVO, to analyze and to improve programs by understanding their strengths and weaknesses.

This evaluation is of the SAWS Matching Grant Program in Tanzania. SAWS' objectives in choosing its Tanzania program for this evaluation were to analyze the strengths and weaknesses of its community health "model" at an early stage, while time remains to correct any problems. AID and MSH objectives were to evaluate a community health program in Africa as part of a geographically balanced evaluation series. A field visit to Tanzania was made in September, 1983.

The field visit (see schedule, Appendix A) required two full weeks. The two evaluators met in Tanzania with the representative of SAWS headquarters, David Syme; Director of Program Planning and Evaluation; the two senior SAWS/Tanzania Staff, Norman Bunker, SAWS Country Director from the U.K., and Godfrey Chamba, MD, SAWS Medical Director from Tanzania; and the two Training Officers, who are the program's two regional supervisors (Lewis Makengo, RN, and Tenga Elinihaki, Medical Assistant). They also interviewed seven out of the program's 29 Community Health Promoters (CHPs), who are the "front line" workers in this project. The team drove 1400 miles in about ten days mostly on dirt roads, many in very poor condition, where they visited homes, inspected latrines, water supplies and gardens, and spoke with village leaders and other local officials.

The appropriate officials in the Ministry of Health in Dar es Salaam and the USAID Health Officer were away when the evaluators were there, and in any case were understood to be unfamiliar with the SAWS health program. The USAID Health Officer had arrived only a month earlier in Tanzania; he had not yet visited the SAWS program. The USAID Director and PVO Officer had been briefed on the program and had seen its log frames. The sole Tanzanian government source of information interviewed for this evaluation was the District Medical Officer in one of the two program areas.

All SAWS staff were exceptionally frank and open at all times with the evaluators concerning the obstacles they face setting up the new program. Many of the findings and recommendations discussed during the field visit and in this report come directly or indirectly from them, and they are already playing a major role in formulating and clarifying systems to overcome those obstacles.

B. The Seventh Day Adventist Church (SDA) and the Seventh Day Adventist World Service (SAWS)

From its beginning 120 years ago, the Seventh-day Adventist Church had as its primary goal that of following the example of Christ, who "went around doing good and healing all who were ill," and who "went through the country teaching everywhere." Adventists now work in 190 countries and operate 345 medical institutions and 441 schools above the elementary level in 70 countries outside North America. SAWS is an international relief and development agency of the Seventh-day Adventist Church and is non-sectarian in its operational outreach. Historically, it developed to help the church meet the needs of its own members following the two World Wars. While the organization has a particular responsibility to SDA members, its resources are available, based on need, to all. While SAWS traditionally provided short-term material relief, it now makes available a wide range of technical as well as material resources in such areas as agriculture, nutrition, community development, maternal-child health, and family planning. SAWS receives funds from contributions and grants. AID grants include ASHA grants, FFP/Outreach, Freight Reimbursement, and OPGs. SAWS is heavily involved in Title II food distribution and is one of the ten largest US PVOs. SAWS constituency is the SDA church headquarters, called the General Conference.

C. The SAWS-AID Matching Grant

In March 1981, SAWS headquarters in Washington, D.C., initiated a request to the PVO office of AID for a matching grant to extend "family health and nutrition education" and "agricultural development" to the communities around existing SAWS institutions in 16 countries. SAWS had sponsored similar programs in health and nutrition education, which it wished to expand, in the Philippines, Vietnam, India, and Guyana. The problems that the MG was to address were common problems of poor communities: poor environmental and sanitary conditions, malnutrition in children under age five years, lack of trained health personnel in developing countries and absence of small businesses designed to encourage farmers to grow more food.

The goal of the MG is to improve the health, nutrition, and socio-economic conditions of the population within a defined radius of the health-care and educational institutions operated by SAWS in targeted countries. The purposes are to adapt, implement and test community-based integrated health and nutrition methodology in selected communities in target countries; and to support new community-based programs in designated communities of six countries and expand community-based programs in ten countries with a package of primary health care and nutrition services. The planned outputs of the MG are improved community health programs in 40 communities in the environs of 47 SDA health institutions in 13 countries in five years. The

*SAWS Matching Grant Proposal to AID, March, 1981

planned strategy to achieve the MG goals, purposes, and outputs includes a number of key components such as community health committees, needs assessments and project planning, use of SDA institutions as bases, and training of host country nationals as health promoters.

The SAWS MG is managed by the SAWS international (SAWS/I) office in Washington where Mr. David Syme is the Director for Program Planning and Evaluation. Within each country, the program is under the overall supervision of the SAWS Board of Directors which appoints the Country Director to coordinate the program. The Country Director has a variable staff depending on the needs but usually including management and administrative personnel and training officers. The MG provides for the use of consultants from within the country or from abroad as and when necessary. Since SAWS programs are active in many countries, the potential for technology transfer is enhanced by sharing of materials and experiences between country programs through the coordinating role of the SAWS headquarters office. The MG was approved in October of 1981 for \$4.3 million, one-half from SAWS and one-half from AID. (An organizational chart for SAWS/I is shown in the Appendix.)

D. The Program Environment in Tanzania

The health and nutrition status of Tanzania, particularly among children, is relatively poor. One child in seven dies before age one, and 120 out of 1000 children born die between age one and five. Nearly half the population is under age 15, average family size is nearly seven. Life expectancy is 47 years. The major health problems result from malnutrition, infectious diseases, parasitic diseases and poor hygienic practices. High incidence rates of malaria, measles, tuberculosis, pneumonia, dysentery, diarrhea, venereal disease, helminthiasis and cholera are common in many areas. About 1/3 of childhood deaths in Tanzania have malnutrition as a contributing cause. Approximately 16% of the reported deaths in children under 5 years of age are attributable to diseases for which immunization is available.

The political and economic situation in Tanzania affects health substantially. As the most prominent example of socialism in tropical Africa, Tanzania is recognized as a nation in which the central government, under a dynamic president, has made a conscious decision to sacrifice the possibility of more rapid economic growth through free enterprise in favor of a model of growth with what is felt to be equity where the welfare of the poor elements are a primary concern. The political commitment to the rural sector in particular is reflected in a build up of the rural service sector in Tanzania including emphasis on rural health, education, and rural social development. Despite these commitments to equity and to rural areas, economic factors have seriously hampered the GOT's efforts. Serious inefficiencies in the public sector, lack of exports, the world recession, and lack of foreign exchange plus the burden of a costly war in Uganda, have steadily worsened the GOT's ability to finance the social sector for a rapidly growing population.

As a result of these problems, Tanzania has been unable to acquire adequate stocks of petrol, diesel, kerosene, drugs, and medical equipment. Fewer trucks are able to bring fertilizer to farms or return with crops; the country, though self-sufficient in food production, now has several areas where little food is available. Deliveries of drugs and equipment to clinics are rare; supervisors of clinics or health workers are unable to visit remote areas; kerosene refrigerators for drugs are out of fuel, and wells and pumps seldom work, leading to water shortages. Drugs are also in short supply because without foreign exchange they cannot be purchased overseas.

Tanzanian Government policies emphasize health so that people can realize their social and productive potential. The government attempts to provide minimum basic health care through rural health care centers and maternal and child care centers using paramedical personnel. Recent national and regional priority has been placed on preventive health care (instead of curative) and on rural health centers, paramedical personnel, and village-level workers. The government's commitment to providing free health care through a decentralized network of government clinics and hospitals (supplemented by PVOs traditional healers, and TBAs) is sincere, but it is a political ideal tarnished by economic reality. Health receives 6% of the total government budget amounting to \$6 per capita per year in 1980. This is barely enough to cover recurrent costs while development costs (such as construction of rural facilities) must be paid by external donors. About 2/3 of Tanzania's villages have no clinic. In spite of the GOT's efforts to channel donor funds to underserved areas, only 100 clinics a year are being built; at that rate it would take 60 years to meet the needs of the current population of about 20 million (which by then may have tripled.) Thus a major share of rural health services in Tanzania, as in many African countries, is supplied by the traditional healers, TBAs, private physicians, and church-sponsored clinics, not by government.

The GOT has maintained strong ties with international PVOs since independence in 1961, and has welcomed missionaries for nearly a century. The majority of the 1450 Americans living in Tanzania are missionaries. (Tanzanians are about one third Christian, one third Moslem, and one third animist.) Recently it appears that the GOT, facing serious difficulties in providing free education and health services to its rapidly growing population, has been increasingly aware of its debt to both government and private aid donors. The most active expatriate PVOs are OXFAM, Codel, and church-related groups such as the SDA and the Catholic Relief Services. Aid from PVOs is significant, but is far less than aid from bilateral donors.

E. Relevant AID and USAID Policies and Strategies

AID PVO Policy is to support PVOs "of recognized standing with discreet programs in high-priority sectors." For use of AID funds, AID seeks to give all PVOs independence in designing projects and recognizes the need for "programming flexibility," but always within its overall policies and priorities. The AID Health Policy supports the expansion of low cost primary health care systems with special emphasis on promoting private sector efforts; thus USAID/Tanzania should give high priority to PVOs involved in primary health care. However, USAID/Tanzania does not appear to have explicit strategies for PVOs in primary health care in either its overall CDSS, its 1980 health sector strategy, or its projects. Recent USAID health projects, for example, deal with school health, village health worker education and training, sanitation and sewerage, malaria control, and MCH nurse training in the public sector, but do not describe PVO efforts.*

*AID/Tanzania Health Sector Strategy, Dar es Salaam, February, 1980

III. THE SAWS/TANZANIA MATCHING GRANT PROGRAM

A. Planned Goals, Purposes, Outputs, and Strategy

The SAWS/Tanzania MG program was developed to improve two major areas: community health and agricultural production. The problems to be addressed in community health are similar to the problems listed in the overall MG: poor environmental and sanitary conditions, childhood malnutrition, and lack of trained personnel. The goal for the community health component is to improve health status in children under age five years in eight communities. The purpose, although not clearly stated, seems to be to have a functioning primary health care system in these communities including Community Health Promoters (CHPs) in the villages linked to the SDA Clinics who will provide back-up services for problems that the CHPs cannot handle. The planned output categories, the output indicators, and the target dates for this component are shown on the following page.

The strategy to achieve the project goals, purposes, and outputs, was to begin by designating the SDA clinics that would participate in the project. Secondly, target communities where Community Health Promoters (CHPs) would be selected would be chosen from around these clinics. Next government approval and cooperation would be sought; villages would be visited by SAWS staff who would meet with village leaders and discuss the project. With the cooperation of the village leaders, a village health committee would be set up that would form the basis of implementing health promotion and health reform in the village. The committee would also, in conjunction with SAWS personnel, choose a person from the village who would become the CHP. SAWS staff would provide formal training for the CHP for approximately three weeks and the CHP would then return to the village. Post-training supervision would be carried out by the training officers and the SDA Clinic Supervisor. Further training seminars would be held in the villages during the three year period of the program. The CHPs would receive full-time salaries at the GOT minimum wage from the SDA clinic to which they were assigned. (The planned and actual implementation schedule is shown in the Appendix.)

TABLE OF OUTPUTS

PLANNED OUTPUT CATEGORIES		OVI's*	DATES	
1.	Community Health Committees Established	Meetings CHPs Selected	2/mo 30	6/83 <hr/>
2.	Community Health Promotors Trained	CHPs trained CHPs utilizing training Hours of formal training Hours of informal training	30 30 60 N.S.	6/83 N.S. 3/84 N.S.
3.	MCH Services Delivered	Clinics/community Mothers attending 2x/mo. Children attending Vaccinations given to child.	1 70% N.S. 75%	3/84 6/84 N.S. <hr/>
4.	Potable Water Systems Established	Wells dug in 6 communities 30 Liters of potable water/person/day in comm. Standpipes	1 60%	6/84 12/84
5.	Pit Privy Construction Completed	Increased pit privies avail- able in communities % Families using pit privies in CHP communities	100% 40%	6/85 6/85

N.S. = Not Stated

* = Objectively Verifiable Indicators

B. Planned Resources

The SAWS/Tanzania MG was to be managed at the SAWS country office in Arusha, Tanzania. The Project Director is Mr. Norman Bunker, the Country Director, a hard-working British jack of all trades with six years' experience in Tanzania who is fluent in Swahili. He was scheduled to work 40% of his time on the project. The SDA Medical Director, Godfrey Chamba, MD, a Tanzanian experienced in clinical medicine and very interested in community medicine and nutrition research, was chosen to be in charge of the community health component. Dr. Chamba was scheduled to work 60% on the MG and 40% as Medical Director where he had responsibility for managing the 37 SDA clinics and one hospital in Tanzania. Mr. Bunker would bring administrative, agricultural, and mechanical skills and experience to the project. Dr. Chamba would bring medical, public health, and administrative skills and experience to the project. Two full-time Training Officers were to be selected by Dr. Chamba to assist him in developing the curriculum for the one month CHP course, and afterwards to supervise the two halves of the program. No additional administrative staff were planned for the MG activities.

Financial control of the project was to occur through the existing SDA church accounting systems. Upon approval of the Tanzania proposal, SAWS/I would deposit the required foreign exchange funds in the New York account of the SDA regional office located in Nairobi, Kenya. SAWS/Tanzania would request funds through the Nairobi office who would either purchase required equipment or provide Tanzanian shillings from its account for local expenses.

Transport for the supervisors was to be by motorbikes and both Dr. Chamba and Mr. Bunker were to have four wheel drive vehicles. Mr. Syme and other staff from SAWS headquarters were to help with technical matters and other consultants would be used as necessary. (An organizational chart for SAWS/Tanzania is shown in the Appendix.)

The Tanzania MG program was budgeted at \$ 400,300. Of that, half was planned to be AID funds, 25% by SAWS/T and the other 25% was to be generated in kind by the SAWS/Tanzania program itself. The community health component was budgeted at \$273,350 (see complete budget in the Appendix). The communities were not asked to contribute funds but, in the case of the irrigation component of the MG at one of the two sites, were to contribute significant volunteer labor. The Government of Tanzania was not asked or expected to contribute to the project. The planned distribution of the SAWS/Tanzania contributions and the AID contributions is shown below. SAWS/Tanzania contributions were to be made in Tanzanian shillings.

SAWS/Tanzania Contributions for the MG Program

- SAWS/Tanzania Country Director: 40% of salary for overall program supervision
- SDA Medical Director: 60% of salary for management of the community health component
- SDA Health Services Treasurer: 50% of salary for financial management of MG
- 8 SDA Clinic Supervisors: 20% of salary for inservice training and supervision of CHPs

AID Contribution for the MG Program

AID's matching grant pays all other costs shown in this budget. The major costs are as follows:

Two Training Officers (100%) - one in Ikizu, one in Parane

30 CHPs (100%) - paid 460 shillings (\$184) per months (government's minimum wage for rural areas) One dropped out, so 29 were actually working in September, 1983.

Seminars - costs of training, lodging, feeding CHPs in trainings

Transportation and travel expenses - to and from training, supervisory travel, reimbursement to Training Officers for regular visits to CHPs, etc.

Water Well drilling equipment - purchased 8/83

Other equipment - the initial supply of drugs (to be sold by CHP) and the solar refrigerators, were not purchased by 10/83 because of insufficient budget and delated delivery.

C. How the Proposal Development Process Took Place

The initial SAWS Matching Grant concept was developed at SAWS/I in Washington, D.C. with relatively little discussion with the church in Tanzania. Tanzanian SDA staff apparently only became knowledgeable about the Matching Grant after it was approved. At that time, they received a message from SAWS/I informing them about the MG and asking them if they were interested in starting a program for "community-based interventions in health and agriculture." This lack of involvement may have been because there was no SAWS organization in Tanzania at that time (although the Health Services Director for SDA then was an experienced public health physician). In any event, the Adventists in Tanzania had little direct input into the planning of the overall MG proposal.

The planning group in Tanzania followed the guidelines of the overall MG in making their plans. They were most interested in training of Community Health Promoters (CHPs), based on very positive experiences with family planning promoters who were currently working in 21 SDA clinics and who were trained, supplied, and paid in part by AID funds from the Family Planning International Association (FPIA). The church had also had a positive experience training local pastors in health education and the concepts of the Community Health Promoters and a strong health emphasis clearly derived from these experiences. The planning group also planned to base the workers around 16 of their existing SDA clinics.

The planning team in Tanzania sent the proposal to SAWS/I for review and comments in January 1982 (see first Tanzania MG proposal, dated January 1982). The proposal included goals, purposes, outputs, a strategy, an implementation plan, a management plan, an evaluation plan, and a budget of \$ 355,215 for the community health project. SAWS/I reviewed the proposal in late winter 1982 and, while feeling that the intent was good and the overall strategy sound, thought that the proposal needed more specificity. In addition, the Tanzanian group did not realize that they were to contribute 25% of the total project expenses so a revised budget was required.

A substantial gap occurred after the SAWS/I reply. This was due to a number of important factors. First the SDA Community Services Director, who had played a key role in developing the first proposal, left and his position lay vacant until occupied by Dr. Chamba in the fall of 1982. In addition, Mr. Syme, Director of Program Planning and Evaluation, was new and had many programs to assist. He did not visit Tanzania until September 1982. As importantly, SAWS/I felt pressure from AID to improve evaluation and monitoring procedures for the Matching Grant and yet SAWS/T field staff were not skilled or experienced in management information systems, or in the meaning and application of evaluation in the project management process. As such, Tanzania activity was minimal until September of 1982.

At that time, Mr. Syme and a consultant from TransCentury, Ms. Jane Watkin, gave a course in Nairobi on project planning and management which Mr. Bunker attended. Following that course, Syme and Watkin went to Tanzania where they helped revise the proposal. Discussions included the size of the project, the technical approach, details about the agricultural component, and the budget. Dr. Chamba joined the discussions at that time. After considering their manpower capabilities and the logistical difficulties of training, equipping, supplying, and supervising the CHPs, the SAWS/Tanzania planners decided to cut the community health component to eight clinics from the original 16 and the number of CHPs to 30 from the original 48. In addition, they were concerned about shrinking funds due to high inflation rates within Tanzania.

Originally 50% of total program costs were in management; Mr. Syme believed this amount was too high and did not agree with the proposed staffing plan, deleting some proposed staff from the SAWS office in Arusha. Apparently his feeling was that AID might object to more administrative costs. Mr. Syme did help with the log frame, Dr. Chamba added a stronger emphasis on nutrition, and the SAWS/Tanzania Board of Directors approved the plans. The Tanzania MG was approved by SAWS/I in November 1982.

The written plans in Tanzania followed the general program planning strategy outlined in the overall Matching Grant including community health committees, needs assessments, use of existing SDA or SAWS institutions as bases for clinic services and for training, and training of village health promoters. The needs assessment plan included a baseline survey to determine the epidemiologically important health problems of the individual communities likely to have CHPs, and discussions with local officials, government health officials, USAID, and other PVOs as part of the process of determining the needs for the program.

The actual design of most program activities was not specified in detail in the proposal as SAWS personnel felt that it was crucial to begin the program as soon as possible since the MG was only three years in length. The proposal did include general plans for having community health committees who would be contacted during the early months of implementation. The proposal set up the management structure as follows: The Project Director, Mr. Bunker, planned to mainly concentrate on the agricultural improvement component while Dr. Chamba planned to manage the community health component of the project on a 60% time basis. He was to be assisted by two full time Training Officers, one located 14 hours away by LandCruiser and the other located five hours away (the only other means of communications was by radio). No additional professional or administrative staff were included.

IV. ACTIVITIES OF THE PROGRAM TO DATE

At the time of this evaluation, the program had been in operation for eight months. During that time SAWS staff have been selected and trained, villages have been chosen, CHPs have been recruited and selected, a baseline survey has been carried out and partly analyzed, a training curriculum developed, two CHP training courses carried out, and two groups of CHPs have returned to their villages and begun work. Important details of these activities follow.

A. The Pre-Training Phase

Following approval of the Tanzania MG in the fall of 1982, Dr. Chamba began to work on the project. During late 1982, he wrote three District Medical Officers of the Government of Tanzania health service requesting permission for this project. Two replied, granting him permission to approach the communities in their districts. Beginning in December 1982, Dr. Chamba chose two Training Officers: Tenga Elinihaki, a Medical Assistant with three years training in clinical area would train and supervise CHPs around Parane, where he works (and lives) in the SDA dispensary; and Lewis Makengo, an experienced RN in Ikizu, would train and supervise CHPs there. Their job was to help with site selection, recruitment of CHPs, development of the curriculum, training of CHPs, and supervision after training. They worked with Dr. Chamba in a preceptorship relationship.

Dr. Chamba and his staff began to visit the villages in late December 1982 where they met with the Village Chairmen, explained the program, asked them to identify the health problems of the village, asked them to set up village health committees where they did not exist already, and asked that the committees recruit and select someone from the village who met certain selection criteria. In addition, the village leaders were asked to help gain community acceptance for the CHP. The villages were either in the Ikizu area near Lake Victoria or in the Parane mountains where the SDA had clinics (for details of these sites, see Appendix.) In late March, the training officers returned to the villages to meet with the village leaders and the committees.

The training officers did not find health committees but instead found groups of village leaders representing the village chairman and the ten-family leaders, the government of Tanzania pattern for village leadership. This group had the final say on who would be chosen to be a CHP. In most cases, they had consulted the villagers. In some cases, the person selected did not actually volunteer for this job. However, those chosen by their community, did usually accept. Dr. Chamba and his staff found wide deviations from their selection criteria (as shown in a table in the Appendix.) The strong preponderance of young men is striking.

From January through May, 1983, Dr. Chamba and his training officers worked on the details of the baseline survey. This survey was to determine the health problems of the area and would also serve as the baseline for the evaluation process. The survey was designed by Dr. Chamba after consulting with SDA clinic staff, and some Ministry of Health officials. The survey had several objectives. It would be used to indicate to SAWS staff the health and nutrition related perceptions, levels of awareness, concerns, and priorities of the families in each community, and would provide some information about the prevalence of childhood diseases and their causes, particularly

those related to sanitation and nutrition, which could focus program interventions. In addition, the survey would (1) influence the content of CHP training, (2) provide baseline data to compare with later surveys for evaluation purposes, and (3) be a tool for raising the level of community concern and involvement.

Dr. Chamba and his staff also worked on the curriculum during January-June 1983. Although Dr. Chamba had done village training during medical school, he had never developed curricula in a formal way before. He worked hard at the curriculum development process. He visited several SAWS clinics in Tanzania, spoke with planners of similar programs in Arusha and Dar, and met with the Director of Preventive Medicine at the Ministry of Health in Dar es Salaam. He reviewed similar curricula from other organizations in Tanzania; he felt that the government curriculum (titled Village Medical Helper) was inadequate for SAWS purposes. A curriculum specifically designed by SAWS for training CHPs cited in the MG proposal and used in training village health workers in Sri Lanka was felt to be more useful. Dr. Chamba consulted with his former professors of community medicine at the University of Dar es Salaam. In late March, he received assistance from Mr. Syme, who was experienced in public health work in East Africa, and support from Jane Watkin from TransCentury. The two training officers worked closely with Dr. Chamba during this process. The resulting syllabus and curriculum were based on these discussions and readings and the content reflected Dr. Chamba's and the Training Officers' experiences in Tanzania.

B. The Baseline Survey and Training Phase

During April, May, and June, 1983 the work continued on the baseline survey design, the curriculum design, and in planning for the training courses. Beginning in July, the "western" group of 14 male CHPs met at Busegwe near Ikizu. During their initial week-long orientation, the group was told about the baseline survey and its importance to their jobs in the village. They were trained to interview a minimum of 100 families each in their communities, asking 43 questions with at least 240 alternative answers. (The questionnaire, translated from Swahili, is in the Appendix.) Following the survey training, they returned to their villages and carried out the data gathering, with minimal, if any supervision of the data gathering process. The same process occurred in Parane in August. Unfortunately, the baseline data analysis was not begun before the training ended and, as such, had no influence on the training process, or on what the initial tasks of the CHP should be in the village.

After completing their baseline surveys, the two groups of CHPs returned to the training sites to begin their three week training course in basic PHC. During the three week course, the students had lectures and discussions, did some role playing, and had some informal training under the Training Officers. They spent a modest amount of time at the local SDA clinic. The general objective of the course was "to enable CHPs to acquire adequate knowledge to be able to educate their fellow villagers on health principles and also be able to answer their questions they have on health". The CHPs were told to be "examples in the respective villages by following health principles and modern ways of agriculture, and each CHP should have a kitchen garden for growing vegetables." The course covered the following five major topics (described in detail in the Appendix):

<u>Content</u>	<u>Hours</u>
1. Anatomy and Physiology	20
2. Hygiene, Nutrition, and First Aid	25
3. Human Diseases	27
4. Maternal and Child Health	18
5. Agriculture	12

102

C. The Community Phase

Most CHPs have been working for only one or two months in their communities. Most CHPs, encouraged by the Training Officers, had begun their work by surveying all homes, or as many as possible, to see whether each had a latrine that was functioning, utilized, and clean. (It was not clear to the evaluators how this priority had been decided, nor whether CHPs had consulted the community leaders about it.) Most community members, when asked by the evaluators, verified that their CHP had indeed visited them and had instructed them in how to sanitize their latrines and improve their water supplies. Many community members could explain reasons for them to do so. At least two of the seven CHPs interviewed had begun to build a new latrine for their own home. Most people, regardless of income or religion, said they had been visited by the CHPs who did try to convince them to change their habits. However, the team's visit to the villages found that improvements, with few exceptions, had not yet occurred, perhaps because only one or two months is too soon to expect changes.

At this time, despite SAWS intention to involve the community in the program, the community seems to have little involvement in the supervision of the CHPs. The community leaders interviewed were not clear about their role once the CHP came back to their village. Although each village in Tanzania is supposed to have a functioning community health committee, it appears that the local political organizations guide most all community actions. No actions had yet been taken by any local organizations to support or direct CHPs.

Some CHPs seemed to feel somewhat disillusioned about village work so far. This varied among CHPs; those more satisfied seemed older, and seemed to work more closely with the local SDA clinic. The CHPs often perceived that the villagers, while appreciating them, were not very responsive to their guidance. In addition, some CHPs had visited many homes, given talks about water and sanitation, and now were unsure about what to do next. Some families now refused to meet with them, saying that they were busy and that they had heard the CHPs talk already. It was clear that the CHPs needed more direction and help with their work. It is conceivable that some attrition may result from these problems. The CHPs seemed to have only a general knowledge about most of the topics. For example, many could not remember how to mix ORT, what some of the common diseases were, and what guidance to give the villagers about these problems.

The relationships between the CHPs and the SDA clinics vary widely. The SDA clinics vary in distance from the CHPs' villages. Some CHPs live near the clinics, others live four to six hours away on foot, sometimes over mountain trails. The clinics themselves are modest facilities having a limited supply of drugs, many of which are donated, and a small professional staff. They appear to be better supplied, more accessible, and more popular than distant government clinics. The Clinic Supervisor is usually a nurse or a Registered Medical Assistant who is assisted by an MCH Aide, an (FPIA-funded) family planning motivator, and sometimes a nurse midwife. The Clinic Supervisor is paid by MG funds to supervise the CHP eight hours per week.

It appeared that the SDA clinic staff are quite unsure about their role in the MG program at this time. In fact, they continue to operate just about as before. More significant to them than the CHP has been the recent addition of MCH aides to the staff for assisting pregnant women and young children. They have introduced growth cards and a more organized MCH program. However, the clinic register books and medical records do not gather information that will allow the MG program outputs to be measured. Appropriate changes in record systems had been considered but were not yet implemented by the SAWS staff in Arusha. The clinics visited by the evaluators had new kerosene refrigerators but weren't working as no kerosene was available. A kitchen garden was seen at one clinic but the animals had destroyed most vegetables because no adequate "animal-proof" fencing was available. The SDA clinics were becoming more aware of the need for an "active" approach to health care, rather than just a passive, clinic-only approach, but the planning and training needed to build a system for CHP-clinic collaboration is not yet evident.

At this early stage, no regular contacts have been established between the CHPs and either the Training Officers, the Clinic Supervisors, or the community committees. There is no indication yet that a CHP support system (which could include the provision of technical advice, nonprescription drugs or contraceptives, or management information systems) is being designed, much less routinized. Clinics do not seem to have set up any systems for assisting CHPs when they visit households. Some CHPs do receive occasional advice from clinic staff. The clinic is also the place where all CHPs receive their pay and where some provide individual and group health education. Some CHPs do "enhance their credibility in the community" by using clinics as a base of operation. But clinics are not yet, as originally proposed in the worldwide MG proposal, "committed to the support in every way of the health outreach program." It is important to remember that the MG plan was to develop an outreach capacity during the three year program period, not overnight. Nonetheless, SAWS staff are increasingly aware of the need to develop it soon.

The MG proposal suggested in its log frame that the program would verify its outputs in 12 different ways. The status of these means of verification at the time of the evaluation is shown in the Appendix; less than half of the 12 were being recorded.

The monitoring of CHPs' performance during their early months on the job has proven to be very difficult to implement effectively. The SAWS/T Director and Medical Director have many other pressing responsibilities besides the MG. Dr. Chamba, limited by lack of both time and fuel, has not been able to meet the two Training Officers regularly though he is scheduled to meet them at least every two weeks. For example, he and Mr. Bunker met with the Ikizu training officer during this evaluation, the first time in over a month. In addition, Dr. Chamba is responsible for processing and analyzing of the lengthy baseline survey (42 questions asked of 2900 families), and continues his management responsibilities for the SDA Health Services throughout Tanzania.

The two Training Officers and the Clinic Directors have the most direct responsibility for supervising, supporting, and supplying the 29 CHPs, but they have been handicapped by Tanzania's fuel shortage and their own lack of transportation. They have not yet established organized procedures for performing and reporting any of these roles. The CHPs are supposed to keep a daily record of their activities, to be given to the Training Officer or Clinic Director monthly. Nonetheless, several CHPs did not appear to be taking this report seriously, nor did they appear to know what format to follow.

The baseline survey analysis was underway during the evaluation visit. While the evaluators did not look at the results in detail, the variability in the data suggested some concern about the quality of the data collection. In addition, many of the data items were not compatible with international standard classifications.

V. RESULTS TO DATEA. Impact

Although it is too soon to measure program impact on the population, in the Analysis section below we predict the likelihood of impact based on the program operations to date. At the present time, the program has not had any impact on other SAWS programs; on other local institutions; on SDA, AID, USAID, or GOT policies or strategies. But it does have great potential to do so, and this should be considered in future AID planning and evaluation.

B. Outputs by Component and Site

Because few means of output verification are being monitored, only a few are known. Below are the MG program's health outputs as listed in the final log frame, and the planned and actual (if known) outputs achieved by September, 1983.

Component	<u>IKIZU</u>		<u>PARANE</u>	
	Planned	Achieved To Date	Planned	Achieved To date
1. Number of Community health committees(CHC's)established by June, 1983:				
a. No. of CHCs operating at a minimum of twice monthly in each target community	15	?	15	?
b. No.of CHPs selected (each community is to select minimum of three persons for training as CHPs.)	45	15	45	14
<hr/>				
2. Number of CHPs trained	15	15	15	14
No. hours of training	60	102	60	102
<hr/>				
3. MCH services delivered				
a. No. of MCH clinics operating at least twice weekly in each community by March 1984.	15	?	15	?
b. % of Mothers with children 0-5 attending MCH clinics at least twice monthly by June, 1984	70%	?	70%	?
c. % of Children 0-5 immunized (no deadline)-measles	75%	?	75%	?
-DPT	75%	?	75%	?
-Polio	75%	?	75%	?

4. Potable water systems established by Dec. 1984.

a.No. of communities having portable water systems	6	?	0	0
b. % of population in 6 communities having access to 30 liters of portable water per person per day.	60%	?	0	0

5. Sanitation program completed by June 1985:

a. % of families using pit latrine sanitarily	40%	?	40%	?
b. % increase in no. of pit letrines	100%	?	100%	?

VI. ANALYSIS OF THE SAWS/T MATCHING PROGRAM TO DATE

A. Summary of Results

Results in the SAWS/Tanzania Matching Grant Program are limited to date. This is not unexpected given the fact that the evaluation occurred in the ninth month of the first year of implementation. However, the SAWS/T staff should be congratulated on the progress in having 29 CHPs in the villages in a very difficult working environment. The next year will be critical to achieve major improvements in the program and it remains to be seen if a cost-effective primary health care program can be developed.

B. Analysis of the MG Proposal and the Proposal Development Process

The goal of the MG, improved health status in children, is sound and is clearly in line with AID and SAWS Matching Grant priorities. Its objectively verifiable indicators of lowered infant and child mortality, lower incidence of measles, etc. are ambitious and are unlikely to be reached without considerable improvements in training, project management and community participation.

The purpose of the project, as interpreted by the evaluators, is to develop a functioning primary health care system using CHPs and the SDA clinics. This purpose is sound but project SAWS/T management to date has not conceptualized how to achieve this in a practical way.

The planned outputs of the project are only being met in part. The CHPs have been trained, but the community health committees, the monitoring of MCH services, the potable water systems, and the pit privy construction remains to be done.

The general strategy to achieve the project goals, purposes, and outputs is generally sound. However, the package of services to achieve the goals of improved health status of children under age five has not been well articulated, nor is it clear how the CHP and SDA clinic services activities are to be integrated to function in a complementary and synergistic way to achieve the goals. Four areas might be worth further thought: the selection procedures, the length of training, the supervision system and the paying of the CHP a full-time salary. The selection might be improved if a stronger emphasis was given to the communities to select mature females who are more apt to be good "child mortality reduction" workers. The length of training appears to have been arbitrary rather than based on any analysis of the job requirements or training. The supervision system should have included a role for the community itself. Most importantly, the CHP salary system, being paid full-time by the SDA church, may not promote community commitment to the CHP and commitment of the CHP to the community. In addition, it will take careful planning on the part of the health services in Tanzania if they are to afford these salaries in the post-project period.

The planned implementation schedule is considerably delayed from its original calendar dates, but, in terms of progress since actual approval, is doing well, especially considering the difficult transportation situation and the multiple tasks of the SAWS/T professional staff.

The SAWS/T managers are outstanding persons working many overtime hours in a difficult environment. While their commitment and capability is unquestionable, they are new at the job of setting up a functioning primary health care system and not professionally trained or experienced in the educational science aspects of training of village-level people. In addition, the staffing pattern in the proposal is woefully inadequate in terms of professional and administrative support for Dr. Chamba, given his many responsibilities.

Dr. Chamba's job requires him to plan and manage the project, train and supervise the two training officers, plan the CHP curriculum, assist in its development and help with the CHP training, design and organize the baseline survey and see that the data are analyzed, develop any monitoring system required, etc. Clearly it is too big a job for him to handle on top of his other responsibilities. Some of this problem results from a change in directorship of the SDA medical services. The previous director was well versed and experienced in these areas, while Dr. Chamba was new and is adjusting to new responsibilities. In addition SAWS/T has been reluctant to impose design directives in detail for it has considered this to be the responsibility of local staff.

The financial plan in the MG proposal was generally sound. The main problem with the plan was the delays (and sometimes the difficulties) of receiving funds from the Nairobi office of the SDA church. Also, the foreign exchange and black market situation in Tanzania have made purchasing time-consuming, costly, and difficult. In terms of determining the actual financial needs of the project, the proposal did not reflect concern for the need for potential increases in supplies and equipment or for attrition of workers. Most importantly, there was no discussion for how to pay the salaries of the CHPs once the 100% AID funding ended in three years.

The plan for the CHP training does not seem to be based on a careful task analysis. It lacks clear, "competency-based" training objectives, explicit learning experiences, adequate training materials, and an evaluation plan. The training process lacked supervised experience in health education, community organization, and in selected medical and public health content. Unfortunately the trainees did not spend enough time in villages practicing their jobs under the supervision of their trainers, although some informal training in the community did take place. Although they had both been called for in the proposal, there was neither a pretest to find out what trainees needed to learn, nor a post-test of what they had learned. In addition, the curriculum did not seem to cover how the CHPs would work with the clinics, how their performance would be supervised or how they were to work with the community health committees and village itself. (Details of the course topics are found in the Appendix.)

The process by which the Tanzania MG proposal was developed was slow but necessary. From the time of the original proposal submitted in January 1982 until approval of a revised proposal in November 1983, the SAWS/T staff underwent a major learning process about project planning and management. Before then, the SDA church in Tanzania mostly had a focus on relief work and were not truly "developmentally" oriented. As such, they were new at both proposal development and the primary health care planning process. They learned a great deal during the proposal development effort. The newness in primary health care development planning has been reflected in the gaps in program planning so far.

C. Analysis of Program Management to Date

The activities of the pre-training phase were generally carried out adequately, especially given the lack of experience of the SAWS/T staff. The idea of a preceptorship approach to staff development was a very good approach in both skill and team building. The approach to the villages, although not well planned, was well managed and followed up.

The baseline survey and training phase, however, could have been improved. Better quality and more timely baseline data collection could have led to a more focused training curriculum and been a more reliable guide to planning CHP activities. The training itself should have been more practical, more centered around the actual jobs of the CHPs in the village. It should have shown specifically how the CHPs would work with communities, with community leaders, and with the local SDA clinic. More training should have taken place in the community. Pre- and post-tests, called for in the MG, were not done. They might have shown that many of the skills needed for community work were not clearly understood.

The activities of the community phase have been the least satisfactory. The CHPs have not been adequately supervised and the community has not become meaningfully involved in the program since selecting the CHP. The CHPs, especially the younger, less experienced ones, lack ideas about what they should be doing each day. Some may be losing their credibility with community families. In addition, the SDA clinics are not clearly integrated into program plans or activities.

CHPs and clinic staff both need guidance with their roles and their record systems so that they begin to monitor the clinic-based outputs such as health education sessions, CHP patient or MCH/FP referrals. It also seems that the Training Officers, now supervisors, are not at all clear about their supervisory responsibilities. They need guidance as well. Certainly, SAWS/T needs to reconsider its staffing pattern now that the CHPs are spread out over relatively vast distances from Arusha.

Examples where CHP guidance is lacking include the following: CHPs do not write or submit to the Training Officer any type of advance work plans for the week, month, or year. They have no systematic way of assessing community needs, priorities, or perceptions, of communicating with or responding to community leaders or at-risk families. They have not yet been told specifically how to record their daily activities or submit monthly reports to their Training Officers; some do not even have the paper and pencils to do so. No CHP work scheduling system or supervisory schedule was set up during training. No household survey follow-up, such as targeting high-risk families among the initial 100 families surveyed, was discussed in training. No follow-up system was designed to help CHPs keep information about such activities as child growth monitoring, ORT knowledge and practice, family planning acceptance, or any of the many other health interventions which depend for their success on frequent return visits and keep accurate records.

If the clinic record system is to be used to record this type of management information for Training Officers and CHPs, then it needs to be improved and the CHPs need to be trained to use it. To date they have not been trained in any major administrative duties.

D. The Importance of Program Environment

The current problems of the Tanzanian economy, particularly as they affect the availability of transportation and drug supplies, have been described previously and are substantial. The SAWS field staff face serious barriers to communication and travel which are obviously affecting the supervision, monitoring, support, and motivation at all levels, but which are largely out of their control. Tanzania's economic woes are reputedly as bad now as they have ever been since independence. On the plus side, the war in Uganda is over, relations with Kenya are thawing, and there have been no major natural disasters nor outbreaks of disease, starvation, or drought. Economic problems are by no means exclusive to Tanzania; many African countries are in a serious recession, lack foreign exchange and fuel, and face population and urbanization pressures. The hostile environment facing SAWS in Tanzania is, in short, more a reason for its presence than an excuse for its difficulties.

E. The Importance of Financial Constraints

In general, the MG is adequately funded and appropriately budgeted by AID and SAWS, and the over \$400,000 total amount of the MG appears adequate. AID funds could be spent far more effectively, however, if US dollars instead of Tanzanian shillings could be used to purchase any drugs and equipment. (In addition, SAWS staff argue that the official exchange rate paid by AID and SDA to them in US dollars for the Tanzanian shillings they earn should be more equitable; the blackmarket rate for dollars is nearly five times the official rate, but the staff cannot take advantage of that difference.) Generally, however, the program is adequately financed to achieve its objectives. However, post-project financing is not certain as of now.

VII. CONCLUSIONS AND RECOMMENDATIONS

A. GENERAL CONCLUSIONS

The overall conclusion is that the SAWS/Tanzania program may or may not achieve its project goals, but that it has the potential to achieve its project purposes of developing a functioning, self-sustaining primary health care system. Its strengths are that it has a sound strategy based on its existing SDA clinics and that it has dedicated staff who want to do a good job. To achieve its potential, a number of improvements need to be made in planning, management, training, and financing. If these changes are made successfully, the program would have the potential to be extended to other SDA clinics in Tanzania.

In this program, as in nearly all Third World health programs, long term impact is difficult to predict. It is uncertain whether the communities if made more aware of health behaviors, will implement the changes desired by the program. Increased awareness and behavior changes seem unlikely unless the CHPs have more specific knowledge and more skills, unless the community leaders are more involved, and unless the CHPs are better supported by the SDA clinics. It does appear likely that the people will learn a great deal if the program can be improved in these areas; the CHPs do seem to be potentially effective as health educators. However, without better knowledge of ORT, measles and other immunizable diseases, and without coordination with the community and SDA clinics, the desired impact may not be achieved. The informal and formal inservice training planned for future months, and the improvement of management systems currently under way, are necessary and urgent.

In the context of the SDA church-related health activities in Tanzania, where health care has been for a half century confined mostly within SDA clinics, the MG program is a real step forward. However, in the worldwide context of AID-funded PHC programs, in both public and private sectors, the SAWS/Tanzania program is straight-forward and predictable, but it is not pioneering or innovative. All the community PHC techniques and technologies being tested by SAWS are known in Tanzania and are being implemented in many developing countries. These need to be extended to SDA and other SAWS programs but they are not new.

It is clear that the SAWS/Tanzania staff has learned a great deal so far and has made considerable steps in moving from a "relief" approach to a "development" approach. These are positive steps and should be appreciated. In addition, the program is still early enough in the implementation phase to be improved and to achieve its potential. At the present time, the SDA clinic system is probably functioning better than the clinic-based components of the public sector system and, as the SDA clinics are nearly self-sustaining, they form an excellent base upon which to build the community outreach components that will make a complete primary health care system.

B. SPECIAL AREAS OF INTEREST

1. Benefit Distribution

In spite of the Tanzanian government's encouragement of "bottom-up" involvement in development program design and implementation, to date the meaningful involvement of community leaders or the average citizens in the Matching Grant program has been minimal. The only community members who may have been involved peripherally in designing the health program at its primary (village) level have been local political and economic elites - nearly all male. The program so far has not contributed to the diminution of "elite" influence in village life nor has it enhanced the role of women. However, these changes may not be possible in the current social, cultural, and political setting. While the program has promoted a voluntary selection process, the fact that the SDA clinics pay all CHP salaries may cause the community to have less interest in the program over time.

It is likely that the benefits of the program will reach the poor families and women - both usually being the most in need of PHC services, especially MCH - but how widely is not yet known. It could be largely restricted to those elite males and their families who, thus far, have selected the CHPs. The diffusion of these benefits to the poor may depend on how the program is managed in the next project year.

2. Cost-effectiveness

SAWS CHPs have the potential to provide both health education (about sanitation, oral rehydration, MCH, nutrition and family planning), and primary health services (such as oral rehydration assistance, non-prescription medication, growth monitoring, contraception, and first aid.) These interventions can be effective in preventing some mortality and morbidity, among young children in particular. Because of the low additional costs involved in adding this village-based activity on to an existing clinic support and supervision system, this program could be cost-effective if managed effectively.

3. Sustainability

The SAWS program presently lacks plans to create self-sustaining financial support systems. There have been very general discussions about eventually (a) encouraging village committees to take over the responsibility for paying and supervising CHPs; (b) paying CHPs from clinic proceeds, like other clinic staff, on the grounds that the CHPs' referrals become paying clinic clients and the clinic profits from the CHPs' sale of drugs, ORS and contraceptives; (c) allowing CHPs to keep a portion of the proceeds from their sales; or (d) some combination of these. Unless the cost-effectiveness of CHP work can be measured and conveyed to community leaders, and unless the community is involved in the current program, it is unlikely that the community will have either motivation or the mechanisms to sustain (finance and supervise) CHP programs.

4. Replicability and Spread Effects

If the CHPs function (and are managed) effectively as outreach clinic staff, if community participation is strengthened, and if financial self-support mechanisms are developed, the CHP programs can potentially be replicated on three main levels:

- a) in the remaining Adventists clinics in Tanzania (about 20);
- b) in other private and GOT clinics in Tanzania (several hundred);
- c) in SAWS rural health programs in Kenya, Uganda, Malawi, Zimbabwe, Pakistan, Sri Lanka, Indonesia, Sarawak, and Papua New Guinea.

C. Recommendations

1. To SAWS/Tanzania Field Staff

- a. The work assignments of CHPs should be clearly outlined based on activities to achieve child mortality reduction goals. The training should focus on building in a specific way the skills necessary to achieve these activities. The sequencing of training can begin, as SAWS did, with water and sanitation, but should quickly be followed by key interventions including growth monitoring, ORT, breastfeeding, immunizations, family planning, and other selected infectious diseases. These should be taught via in-service approaches, keeping seasonality in mind, and knowledge and skills need to be tested in the community setting.
- b. The SAWS Medical Director and training Officers should design, test, and implement, in collaboration with both community representatives and clinic staff, a practical, thorough system of supervising, supporting, and supplying every CHP. This management system would include regular reports (in a standard format), regular visits, spot-checks, and financial and drug controls. SAWS should involve Clinic Directors directly in daily or weekly supervision of CHPs so that CHPs can spend at least one morning a week providing health education at the clinic, receive basic drug and contraceptive supplies, and in return refer patients to the clinic.
- c. Community leaders and committees should become involved, in collaboration with the clinics, in supporting and controlling the CHPs. Community leaders are currently involved only marginally in the SAWS program: they were told about the program by the Training Officers, asked to nominate a CHP candidate for training, then have no further structured involvements. Strong, continuing involvement is vital, both to ensure CHP support and respect among the people who will not easily be convinced to change their behaviors, and to provide a mechanism for eventual financial support.
- d. Provide CHPs who have earned it by hard work and accurate reporting with a "black bag" of 30 basic non-prescription drugs, first aid equipment; ORS packets, contraceptives, health education materials, growth charts, appointment cards, a CHP manual, etc. ORS, contraceptives, and drugs should be sold on behalf of the clinic which will resupply them; alternatively, CHPs should keep a commission from proceeds. An incentive or bonus might be allowed when the CHPs earnings exceed a certain amount. About 30 drugs theoretically available in SAWS clinics can safely be sold by CHPs if properly trained (see Appendix). A CHP manual is urgently needed for them to refer to for guidance in both PHC and administration.
- e. Use the baseline survey data, currently being processed, and future periodic surveys now being planned by the Medical Director, as tools for program trainers, to develop CHPs' awareness and in focusing CHPs' assignments and work schedules according to priorities. They can also be used by the CHPs as tools for increasing community awareness; statistics on morbidity, mortality, births, injuries, latrine building, water use, contraceptive prevalence, etc., can be discussed at health education talks, home visits, or schools; charts showing health statistics changes can be posted in clinics, schools, or public places. New or follow-up surveys by CHPs may be needed. In some communities CHPs can cover all households with a census, provided the community leaders approve and assist; in others, a random sample or recorded spot-checking will provide quick visual information about the extent of a problem (e.g., child malnutrition, unspaced pregnancy, BCG vaccination coverage).

CHPs must be trained, however, not to draw conclusions from too small or to biased a sample, and what to do when they draw sound conclusions. CHP training did not utilize baseline data, and CHPs are not currently required to record their observations (although some have kept lists of good, bad, or nonexistent latrines.) Such information will help not only in planning CHP work and increasing awareness; it can also be an additional means of monitoring CHP activity and measuring their impact.

f. Additional full or part-time staff and short-term consultants are needed to strengthen program management. Preferably the MG program should have a full-time program manager, a full or part-time midlevel professional assistant and/or research assistant, and at least one full time secretary. More consultant help should have been called upon for the key areas of training and design/analysis of the baseline survey, both specialized tasks.

g. Staff development in Tanzania needs considerable attention to improve planning, management, and training skills.

h. The SDA and SAWS staff, in order to develop in time a self-financing CHP system to replace the current subsidized system, needs to improve financial record-keeping. To plan, for example, the fees which must be charged for CHP or clinic drugs and services to cover program costs, it will be helpful to SAWS to keep up-to-date records of recurrent (vs. capital) expenditures, cost of supporting CHPs, supplying drugs and equipment, transportation, etc. (SAWS needs to consider also the amounts now paid by villagers for traditional and modern health services to ascertain how much people would be able and willing to pay for CHP services.) Summaries of such program costs should be sent regularly to SAWS/I headquarters in Washington.

2. To SAWS Headquarters

a. More headquarters staff (as well as field staff) resources need to be committed to monitoring and assisting the MG program in Tanzania. In particular, the Director for Program Planning and Evaluation at SAWS Headquarters should play a major continuing role in future planning and monitoring of the SAWS/Tanzania MG to ensure that baseline data gathering, CHP monitoring, and all means of verifying outputs and impacts according to the log frame are accurate and on time. Both program design before implementation and program monitoring during implementation are an integral part of any evaluation activity, so it is essential for the headquarters person responsible for MG evaluation to be involved in it from the very beginning.

He should be receiving, as part of the Quarterly Report from the field, monthly summaries from the Country Director of the Training Officers' reports of CHP activity and other information required in the MG log frame. For example, if minutes of community health committee meetings are the indicator of community participation, then SAWS should include at least the total numbers of each (meetings held or minutes collected) in the Quarterly Report.

b. Consultants need to be provided to help out with training of SAWS/I and SAWS/T staff. An affiliation with a university, to provide both a technical and a research capacity to SAWS programs, might strengthen the Tanzanian program, too. A professional, full-time SAWS/I trainer would make an important contribution to training at headquarters and to SAWS/I activities worldwide, and would relieve Mr. Syme of some of his heavy training duties.

c. Research and consultation is urgently needed to set up PHC systems, particularly financing mechanisms. For example, studies could be undertaken of methods of paying CHP salaries from SDA clinics. (PRICOR research should be considered.)

3. To AID

a. AID should recognize the problems which may arise when it approves general MG programs lacking specific plans and OVIs.

b. More detailed, specific plans should be required by AID before extending full funding to SAWS MG programs, to ensure that they will be and are being implemented as planned. The AID program officer responsible for SAWS needs to review each of the means of verification which are reported in Quarterly Reports to SAWS from the field.

c. More administrative support in the field by SAWS/Tanzania and SAWS/I headquarters staff will improve program management. Currently about 30% of the MG goes toward management. In most programs with established systems this would be adequate, but because of the difficulties of communication and transportation in Tanzania an unusual commitment of management time will be required, particularly during the first two years, to ensure that community-based programs, with adequate support and supply systems, are managed effectively. AID should make adjustments to strengthen program administration through budgeting increased management time (over 40% of the MG) supplemented by consultants where needed.

d. AID should recognize the long time lag between program approval and full implementation and should consider five-year program cycles.

e. AID should consider assistance to SAWS in staff development areas.

4. To USAID

USAID staff site visits, review of SAWS reports, and annual meetings with both SAWS and other US PVOs would strengthen SAWS communications with USAID and would help build continuing ties between SAWS, other PVOs, and the GOT. USAID can assist in strengthening and coordinating these ties.

Appendix A

SAWS/Tanzania Evaluation - 9/83

Field Visit Schedule: John LeSar, M.D., Epidemiologist (Project Director)
 Nick Danforth, Ed.M., Health Educator (Project Coordinator)

Sept. 15-17: Travel to Nairobi, Kenya, briefing by David Syme, SAWS Deputy Director for Program Planning and Evaluation

Sept. 18: Overland Nairobi - Naranga (border) - Arusha, Tanzania briefing by Norman Bunker, SAWS/Tanzanian Director (box 1121, Arusha, Telex 72139 GENTIREAL, Cable "ADVENTIST" Arusha.)

Sept. 19: Briefing by Godfrey B. Chamba, MD, SAWS Medical Director (located in Arusha Conference Center, uses same mail address as Bunker.) Met with local AID staff; arranged diesel fuel with Mr. Bilimoria, AID/Arusha.

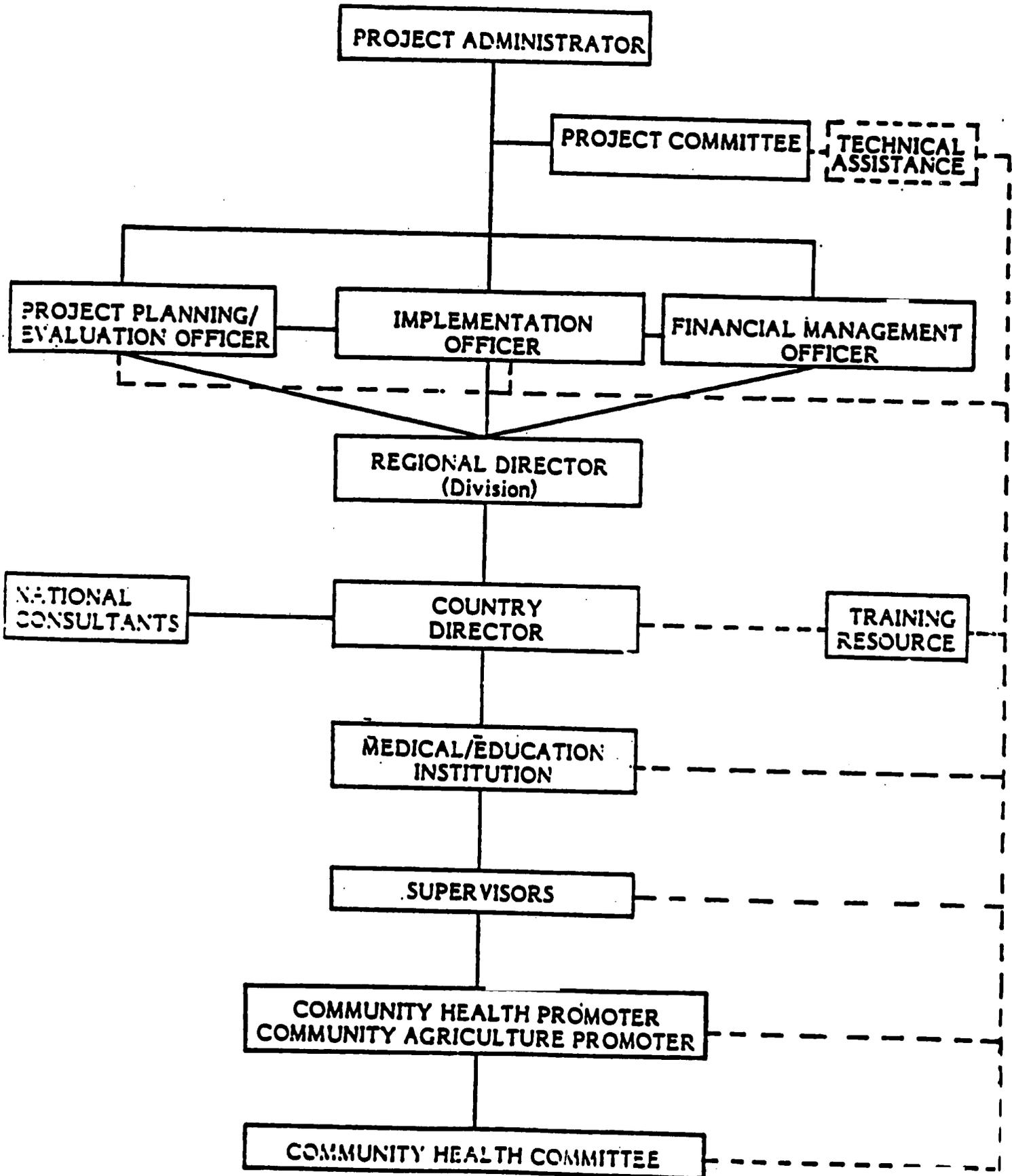
Sept. 20-23: Travel to Ikizu. Visited three CHPs (Community Health Promoters) including their homes: Mugeta Mugulee, Busungu; Laudekias Galinde, Bwassi; Tico Kihamba, Ikizu) and their supervisor, Lewis Makengo, RN, SAWS Training Advisor. Also met with Dr. T. Mwiganduru, Musoma District Medical Officer Ikizu. Visited Adventist clinic in Bwassi, interviewed the the three clinic staff (clinic supervisor, SAWS FPIA-sponsored Family Planning Motivator, and MCH aide.) Visited several villagers' homes.

Sept. 24-25: Returned to Arusha, day off.

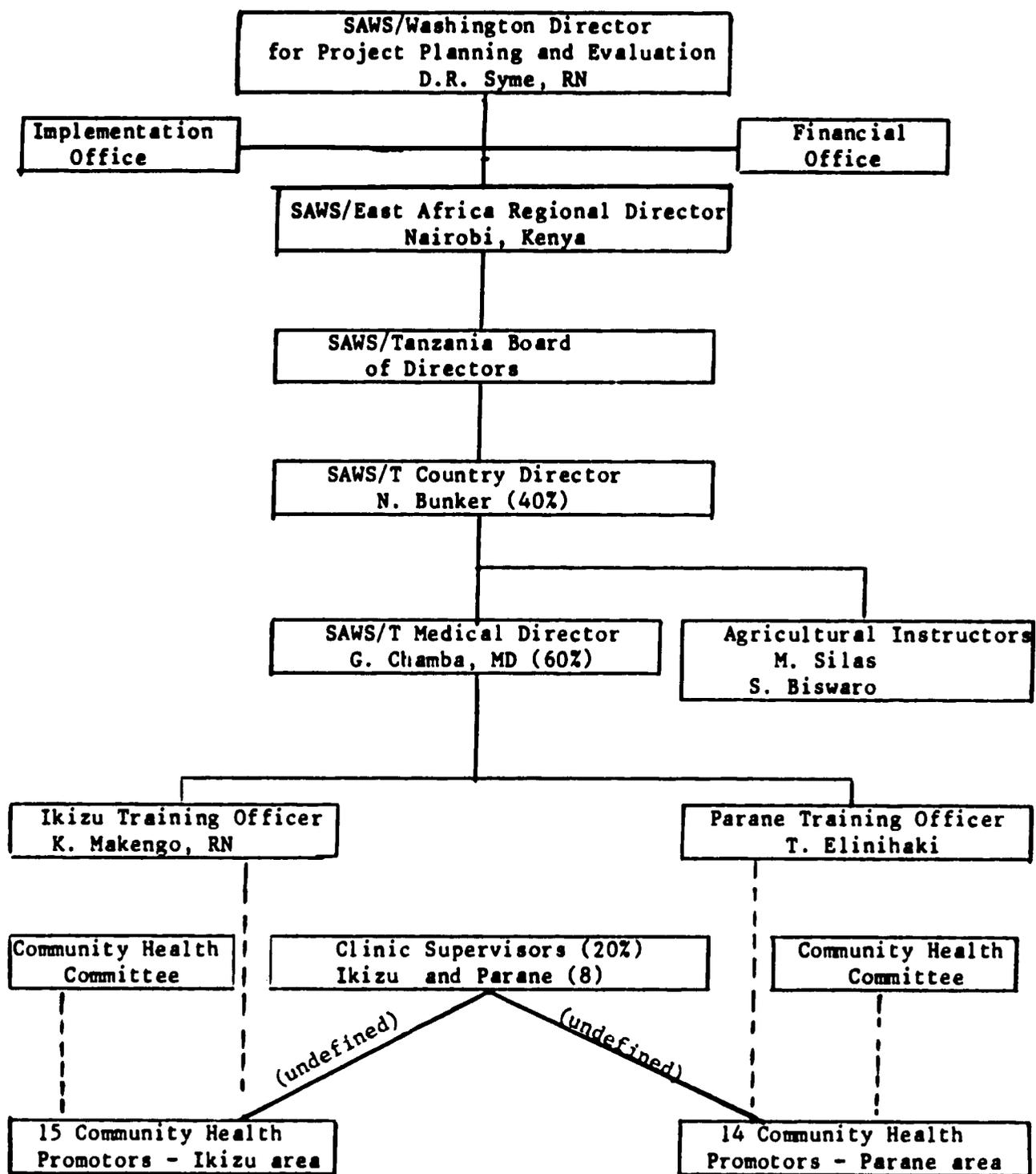
Sept. 26: Review meetings with SAWS staff in Arusha

Sept. 27-29: Travel to Pare Mountains. Visited four CHPs: Mrs. Perpetua Shange, Suji; Mr. Bernard Samweli, Goha; John Tendwa, Goha; Senguji Amosi, Mang'a, and their supervisor, Tenga Jasper Elinihaki, SAWS Training Advisor. Visited CHP's homes and inspected Parane irrigation ditch. Met with 14 members of "Ditch Committee" in Parane and Chairman of Goha Village Committee, Mondo Tumaini. Flew from Kilimanjaro Airport, flew to Dar. Spoke with AID population officer, Spence Silverstein, AID office in Dar es Salaam. Returned to USA.

APPENDIX B
SAWS/INTERNATIONAL ORGANIZATION



APPENDIX C
SAWS/TANZANIA MATCHING GRANT ORGANIZATION



* The addition of the two agricultural instructors in Parane (who work with local "ditch committee," not shown because it is not directly involved in health/nutrition.)

APPENDIX D
 TIME FRAME/SCHEDULE OF SIGNIFICANT EVENTS
 (Months)

—> = Planned 32
 --- = Actual

ACTIVITY	10/81	4/82	12/82	18/83	24/83	30	36
PHASE I							
Program starts	→		---				
Selection of training sites and the approval of government	→		---				
Hiring of technical personnel and staffing of training centers	→		---				
Purchase and shipment of training equipment and supplies to program sites	→		(incomplete)				
Recruitment of suitable local persons to undergo training	→		---				
Carrying out of community surveys to collect baseline data; analysis of data	→	→		---			
Training of community health workers starts	→			---			
Selection and organization of communities where program activities will be carried out	→		---				
PHASE II (6-9 months later)							
Training of first group ends and training of second group starts			→	---			
Detailed analysis of rest of baseline data continues			→	(incomplete)			
Full-scale operation of program activities in first sites starts			→	---	---	---	→
Training of second (last) group of health and ag. workers ends			→	---			
Full-scale operation of second half of program activities starts			→	---	---	---	→
Collection of preliminary data for general administration	→	→		?			
Second survey of communities; analysis of data for evaluation		→		?	→		→
End of program activities							→
Publication of evaluation results							→

APPENDIX E

COMMUNITY HEALTH PROJECT

	<u>YEAR 1</u>	<u>YEAR 2</u>	<u>YEAR 3</u>	<u>TOTAL</u>
*SANS Incountry Director (40%)	\$6,200.00	\$7,750.00	\$9,650.00	\$23,600.00
*Project Director (60%)	6,000.00	7,000.00	8,750.00	21,750.00
*Treasurer	2,100.00	2,625.00	3,275.00	8,000.00
2 Training Officers	8,000.00	9,075.00	10,000.00	27,075.00
30 Village Health Promoters	14,625.00	28,800.00	36,000.00	79,425.00
Misc. Employment Expenses, Pension, Insurance, Medical	1,170.00	2,325.00	3,080.00	6,575.00
Accountant & Typist (50%)	2,000.00	2,500.00	3,125.00	7,625.00
Equipment (Health Centers & Promoters)	6,000.00	6,000.00	1,000.00	13,000.00
Water Well Drilling Equipment	18,000.00			18,000.00
Health Projects Assistance - Solar Refrigerators	8,000.00			8,000.00
Training Seminars	6,300.00	6,000.00	6,000.00	18,300.00
*Clinic Supervisor's Time For Seminars and Supervision (20%)	3,750.00	4,600.00	6,650.00	15,000.00
Data Processing and Promotional Equipment & Supplies	2,000.00			2,000.00
Transportation	11,500.00	7,000.00	6,500.00	25,000.00
	<u>\$95,645.00</u>	<u>\$83,675.00</u>	<u>\$94,030.00</u>	<u>\$273,350.00</u>

Wages Calculated At 25%
Increase Per Year

*Local Input 25% Of Bottom Line

vehicles 6650

Appendix F

Description of Field Sites

1. Central Program Offices: Arusha

The SAWS Program Director, Norman Bunker, works from the SAWS office at the Tanzanian headquarters of the SDA on the outskirts of Arusha. His office, equipped with a TRS 80 Radio Shack Computer, is staffed part time by his wife, who volunteers with typing. The office has one telephone. A two-way radio, contacting all SDA mission offices daily at noon, is located in the Bunkers' home next door to his office; the SAWS telex is nearby at the General Tire Co. office.

The SAWS Medical Director, Godfrey Chamba, M.D., works in the Arusha Conference Center about three miles away in downtown Arusha. His wife, a nurse, also volunteers to do typing and data processing for the project. They have a telephone; the center has a telex. Both Mr. Bunker and Dr. Chammba own four-wheel drive diesel vehicles to use for site visits depending on the availability of diesel fuel.

2. Northeast Program Site: Ikizu area

Ikizu is a large town about 600 kilometers west of Arusha in Musoma District. It has a large SDA school (Ikizu Secondary School), an SDA dispensary, and one SDA church. It is the base of operations of the regional SAWS health program director, Lewis Makengo, a Registered nurse who is a full time employee of the program. Mr. Makengo lives near the dispensary and owns a new "picky-picky" (a light motorcycle) which will enable him, when tires are not flat and petrol is available, to visit the 15 CHPs who work in 14 villages in the region. Four of the CHPs are in the Ikizu area and can be reached on foot if necessary; the rest are about equally divided between villages in the areas of Bwasi, Busegiwe and Kamageta - at least three, four, and six hours respectively by picky-picky from Ikizu.

3. North Central Program Site: Parane

The Adventist mission in Parane, located at 7000 feet in the Pare Mountains, runs the Parane Secondary School and a modern dispensary. Adventist educational, health and agricultural work in this area encompasses five areas (Suji, Myamba, Bome, Makanya, and Maazi). Fourteen CHPs, including five women, work in 11 villages in those areas. Every four villages have a small Adventist clinic which refer patients to a hospital in Moshi, about two hours away for the fortunate few who can go by car.

The valley which contains Parane and some of the 11 villages in the project is encircled by an open irrigational ditch which was originally built by German settlers in 1920s. It has since fallen into disrepair; clogged with earth and boulders in places, the ditch has been tapped by many smaller canals which allow water to run off even when not needed. Two of the 11 villages therefore decided to team up to form a village ditch committee of about 13 men. It organizes about 200 male "volunteers" to work at least one day a week (usually Thursday) on clearing and rebuilding the ditch.

It was this group which appealed to SAWS for assistance: power-driven hammers were needed to break up boulders; cement was needed to line parts of the ditch; shovels and pick-axes were needed by the many workers. SAWS also decided to provide agricultural training to local farmers to ensure that the planned ample, dependable water supplies would be utilized efficiently. In addition, SAWS plans to provide nutrition education, tailored to local food availability, and monitoring to encourage and measure the benefits of the ditch project on the health of local children.

Appendix C

SAWS/Tanzania MG Program Logical Framework, January, 1982

NARRATIVE SUMMARY	OBJECTIVELY MEASURABLE INDICATORS	MEANS OF VERIFICATION	RISK APPRAISAL
<p>Higher Quality which the Project may contribute.</p> <p>IMPROVED HEALTH STATUS OF YOUNG CHILDREN IN TANZANIA</p>	<p>DECREASED MORTALITY RATES DECREASED MORBIDITY RATES</p>	<p>NATIONAL MORTALITY DATA NATIONAL MORBIDITY DATA</p>	
<p>Project Goals:</p> <p>IMPROVED HEALTH STATUS OF YOUNG CHILDREN IN EIGHT RURAL COMMUNITIES OF TANZANIA BY SEPTEMBER 1985</p> <p>A. Mahanya B. Farano C. Sufi D. Mundi K. Ithau F. Mungwe G. Saragana H. Bwasi</p>	<p>1. 30% Decrease in the incidence of Measles among children aged (0-5) in eight target communities by September 1985</p> <p>2. 35% Decrease in the incidence of Coughs & Colds among children aged (0-5) in 8 target communities by September 1985</p> <p>3. 15% Decrease in Local Toddler Mortality (ages 1-4) in 8 target communities by September 1985</p> <p>4. 30% Decrease in the prevalence of Gastroenteritis among children aged 0-5 in 8 target communities by September 1985.</p>	<p>1.A. Analysis of Baseline with endline data by an independent evaluator and/or SAWS/T evaluator commissioned by project management</p> <p>1.B. Analysis of Clinical records in each target community over life of the project by S.A.W.S evaluators.</p> <p>2.A. as in 1.A 2.B. as in 1.B 3.A. as in 1.A 3.B. as in 1.B 4.A. as in 1.A 4.B. as in 1.B</p>	<p>PROJECT REPLICATED NATIONWIDE</p> <p>NO MAJOR EPIDEMIC OF CHILD DEBILITATING DISEASES.</p> <p>FOOD SUPPLY LEVELS DO NOT FALL</p>
<p>Outputs:</p> <p>1. COMMUNITY HEALTH COMMITTEES ESTABLISHED.</p> <p>2. COMMUNITY HEALTH PROMOTORS TRAINED.</p>	<p>1.A. COMMUNITY HEALTH COMMITTEE OPERATING AT A MINIMUM OF TWICE MONTHLY IN EACH TARGET COMMUNITY BY JUNE 1983</p> <p>1.B. EACH CHC SELECTED A MINIMUM OF 3 PERSONS FROM THEIR COMMUNITY FOR TRAINING AS COMMUNITY HEALTH PROMOTORS BY JUNE 1983</p> <p>2.A. 30 CHP'S GIVEN A MINIMUM OF 60HRS TRAINING IN THE FOLLOWING SUBJECT AREAS:</p> <p>I. Sanitary Hygiene + Food Preparation II. Pregnancy + Lactation III. Child Growth Monitoring IV. Basic Infant Nutrition V. Common Childhood Maladies VI. Oral Rehydration Therapy VII. Vaccinations VIII. Family Spacing IX. Table Garden Production by March 1984</p>	<p>C.N.C. MINUTES</p> <p>MONTHLY TRAINING OFFICERS REPORTS</p> <p>TRAINING RECORDS</p> <p>CURRICULUM</p> <p>PRE AND POSTTEST K.A.P. RECORDS</p> <p>SITE VISITATION</p> <p>COMPLETION CERTIFICATES</p>	<p>COMMUNITY SUPPORT MAINTAINED.</p> <p>CHP'S RETAIN + UTILIZE TRAINING</p> <p>NO MAJOR EPIDEMICS</p> <p>NO DECLINE IN PER CAPITA FOOD SUPPLY LEVELS</p>

3. MCH SERVICES DELIVERED

3.A. MCH CLINICS OPERATING AT LEAST TWICE WEEKLY IN EACH TARGET COMMUNITY BY MARCH 1984

3.B. 70% OF MOTHERS WITH CHILDREN AGED 0-5 ATTENDING MCH CLINICS AT LEAST TWICE MONTHLY IN EACH TARGET COMMUNITY BY JUNE 1984

3.C. 75% OF ALL CHILDREN AGED 0-5 IMMUNIZED AGAINST THE FOLLOWING DISEASES
I. MEASLES
II. DIPHTHERIA-PERTUSSIS- TETANUS
III. POLIO.

4. POTABLE WATER SYSTEMS ESTABLISHED.

4.A. A MINIMUM OF 1 POTABLE WATER SYSTEM ESTABLISHED IN 6 TARGET COMMUNITIES BY DECEMBER 1984

4.B. 60% OF POPULATION IN 6 TARGET COMMUNITIES HAVING ACCESS TO 30 LITRES OF POTABLE WATER PER PERSON PER DAY BY DECEMBER 1984

5. SANITATION PROGRAM COMPLETED

5.A. 40% OF THE FAMILIES IN EACH COMMUNITY DISPOSING OF HUMAN WASTE IN A SANITARY MANNER AS EVIDENCED BY
I. PIT LATRINE USAGE
II. ABSENCE OF FREELYING

HUMAN WASTE
BY JUNE 1985

5.B. 100% INCREASE IN THE NUMBER OF PIT LATRINES AVAILABLE TO EACH COMMUNITY BY JUNE 1985

CLINIC RECORDS.
WEEKLY CHP REPORTS

MONTHLY TRAINING OFFICERS REPORTS

VACCINATION RECORDS

VISUAL RECORDS

SUPPLIES REMAIN AVAILABLE

COLD CHAIN MAINTAINED

WATER SUPPLIES REMAIN CONSTANT

Inputs:

- 1.A. SITE SELECTION**
- B. COMMITTEE SELECTION**
- C. PLANNING**
- D. CHP SELECTION**
- E. IMPLEMENTATION**
- 2.A. T.O'S HIRED**
- B. CURRICULUM DEVELOPED**
- C. PRETEST KAP**
- D. TRAINING**
- E. POSTEST KAP**
- F. FIELD TRAINING**
- G. MONITORING**

BUDGET:

Personnel	177,125
Training	33,300
Water Supplies	16,000
Equipment	20,000
Transportation	27,000
Misc Support	6,575
TOTAL	280,000

QUARTERLY FINANCIAL STATEMENTS

RECEIPTS

INVOICES

MONTHLY PAYROLL STATEMENTS

CURRICULAE

FINAL EVALUATION REPORTS

PROJECT STAFF MAINTAIN CONTRACTS

FUNDS ARRIVE ON TIMELY BASIS

APPROVALS + COMMUNITY SUPPORT MAINTAINED

CHP'S RETAIN + UTILIZE THEIR TRAINING

SAWS Selection Criteria¹

- Preferred age: 25-35 (Dr. Chamba stressed need to be over 30 in his visits to communities)
- Male or Female
- Education: no level mandatory but should be able to read and comprehend health literature and communicate verbally with ease.
- Should have lived in area at least 10 years (5 years enough according to SAWS/T Director)
- Should have reputation for leadership and responsibility
- Mature and responsible
- Elected and accepted by village and village committee
- Where possible health orientated
- Someone with time to work on project
- No serious health problems or disabilities

Actual Characteristics of CHPs²

- lower than preferred. CHPs range from 18 to about 45, but mostly in early 20's.
- only 5 females, 25 males
- most seem to be literate, as required, although written records were not always kept.
- not known
- not known
- some CHPs interviewed were not very mature
- not known; at least one village protested against committee nomination.
- probably not; only one of those interviewed had any health experience; some others were not at all health oriented.
- Apparently true (although some CHPs observed were not working the regular hours required)
- Apparently true

¹ The first five selection criteria were cited in the original MG proposal to AID of March, 1981. The remaining five criteria were recommended by the SAWS/T Director in 1983.

² Characteristics either observed by the evaluators during interviews with seven PVOs or reported by community members and program staff, Sept. 19-30, 1983

The course description reads, in part, as follows:

The course is designed in such a way that CHPs will attain knowledge on general principles of health so that they may be able to impart this knowledge to their fellow villagers in their respective villages. The course comprises theoretical and practical classes. During the training session we are going to use simple visual aids which can easily be found in Tanzania, e.g. pictures, magazines, flip charts, etc. In the near future we are planning to order film strips from abroad which can be used by CHPs in giving health education classes in their respective villages. The whole course will be conducted in Kiswahili, which is the national language of Tanzania and understood by all CHPs who are going to attend the course.

The course is aiming at improving Health status of young children in the target areas. The health status of young children can improve if the whole community can be educated on health principles and encouraged to change their previous ways of life which are not in accordance with the health principles. The community has to be encouraged to use modern way of agriculture which in turn will increase their annual harvest. Each family has to be encouraged to have a kitchen garden of vegetables near their house. Moreover, we are now establishing static Maternal and Child Health (M.C.H.) Clinics in each of the target health centres so that children can be immunized against diseases such as Tuberculosis, Polio, Tetanus, Measles, Diphtheria, Pertussis, etc. Children can be weighed in the clinics to help in assessing their nutritional status for age. The CHPs will be taught very elementary Human Anatomy and Physiology just to enable them to understand the pathophysiology of diseases such as hookworm, Ascaris, Pulmonary Tuberculosis, etc.

Each of the five course sections was described as follows in a course description written by Dr. Chamba, who designed most of it:

1. ANATOMY AND PHYSIOLOGY:

Students will be taught elementary Human Anatomy and Physiology to enable them to understand the pathophysiology of diseases such as Hookworms, Ascaris, Pulmonary T.B., Polio, etc.

2. HYGIENE, NUTRITION AND FIRST AID:

Students will be taught personal and sanitary hygiene and how it relates to certain diseases e.g. hookworms, ascaris, scabies etc. The causes of malnutrition will be taught and how to prevent it by giving the right type of diet to children. When teaching first aid much emphasis will be put on how to help a patient before taking him/her to the Health Centre e.g. a patient with fracture of arm, etc.

3. HUMAN DISEASES:

The students will be taught the causes of diseases and how man contracts the disease. Elementary Pathophysiology of the disease should be taught to the students so as to eliminate some of the superstitious beliefs they have towards certain diseases, e.g. Polio, Tetanus, etc. A few important clinical features of disease will be taught to the students. Then much emphasis during training should be put on ways of preventing these diseases.

The course in Human Diseases will include the following topics; Tuberculosis (T.B.) Hookworm, Ascaris, Schistosomiasis, Leprosy, Malaria, Typhoid, Cholera, Relapsing Fever due to ticks and lice, Amoebiasis, Liver damage due to Alcohol (Cirrhosis), Chronic Bronchitis and Cancer of lungs due to smoking, Diarrhoea, Measles, Polio, Tetanus, etc.

4. MATERNAL AND CHILD HEALTH (M.C.H.):

The students should be able to read what is written on the M.C.H. Card and give interpretation of what is written. To emphasize that students should encourage mothers with children under five years to be taken to M.C.H. Clinics where they will be vaccinated against T.B., Polio, Measles, etc., and children will be weighed to see if their growth rate is within the accepted range. Family Planning. Here, much emphasis will be put on child spacing with use of different methods of contraceptives, e.g. pills, abstinence, condoms, etc. For families with enough children who want to stop having children, then permanent sterilization method is advised for either the husband or the wife.

5. AGRICULTURE:

The aim of teaching agriculture is to emphasize the importance of each family having a garden where they can grow vegetables and how the family can care for the garden. The students should be taught modern methods of agriculture which will include crop rotation, use of artificial fertilizers and composite manure, and how these new methods can improve harvest per acre. This period will include theory and practical classes where by the students will be encouraged to prepare a garden and grow vegetables.

METHODS OF TEACHING:

1. Black Board
2. Flip charts
3. Small group Discussion
4. Practical classes in the villges nearby to be able to assess how much the students have understood in the lecture. Students are to prepare a vegetable garden during the one month course. Practical demonstration by digging one pit latrine in the nearby villages for a person with no latrine.

TEXT BOOKS:

1. Where there is no Doctor, by David Werner.
2. Village Medical Helper, Prepared by Ministry of Health, Tanzania.
3. Clinical Tropical Diseases, by Adams and Maegraith.
4. Family Planning (UMATI), by .S.J. Mamaya.
5. Health Education, by N. Scotney.
6. Paediatric Priorities in the Developing World, by David Morley."

Appendix J

Baseline Community Health Survey Questions

LIST OF QUESTIONS
WHICH WILL BE USED TO COLLECT BASE-LINE DATA IN THE
COMMUNITY BEFORE STARTING A HEALTH EDUCATION PROGRAM

(This questionnaire will be answered by each family involved in the SAWS project.)

1. Name of head of family _____ Age _____

2. Wife's name a) _____
b) _____

3. Schooling of head of family:

- a) Primary school
- b) Secondary school
- c) Can read or write through adult education
- d) Illiterate

4. Wife's education status:

- a) Primary school
- b) Secondary school
- c) Can read or write through adult education
- d) Illiterate

5. When the wives are pregnant, do they attend MCH clinic?

Yes, always
No, never
Sometimes

6. Number of children in the family:

- a) Under 1 year _____
- b) 1 - 5 years _____
- c) 5 - 10 years _____
- d) Over 10 years _____
- e) Are the children attending MCH clinic
Yes
No
- f) If yes, are they registered with clinic? (do they
have growth charts - MCH clinic cards?)
Yes
No
- g) What vaccination have they received? (according
to card, or if card is lost the way mother
remembers)

BCG
DPT
Measles
Polio

h) Do these injections help in preventing these diseases?

- Very useful
- Not very useful
- Useless

i) Is there any child in family who died in the past year?

- Yes
- No

j) What age was the child?

7. Weight of children under 5 in the family?

	<u>Age</u>	<u>Weight</u>
a)	_____	_____
b)	_____	_____
c)	_____	_____
d)	_____	_____
e)	_____	_____

8. Have you heard anything about malnutrition in children?

- Yes
- No

What do you think is the cause of malnutrition?

- a) Bewitched
- b) Mother becoming pregnant while breastfeeding
- c) Unbalanced diet
- d) Don't know
- e) Diarrhea
- f) Other

If child suffered from malnutrition, how did you help the child?

- | | |
|-------------------------------------|-----|
| a) I go to local/traditional healer | Yes |
| | No |
| b) I go to hospital- | Yes |
| | No |
| c) I don't know what to do | Yes |
| | No |

9. When did you stop breastfeeding? _____

Do you supplement with other foods? Yes
No

10. Type of house:

- a) Mud house with thatched grass roof
 - b) Mud house with tin roof
 - c) House of cement everywhere and tin roof
 - d) Windows in every room
 - e) Mud walls, cement floor, tin roof
 - f) Cement floor and grass roof
- Yes
No

18. Was there good harvest last year? Yes
No

How many sacks did you get of:

- a) millet
- b) maize
- c) groundnuts
- d) cassava
- e) beans
- f) rice

19. How many shillings did you get for cash crops?

How do you store your food after harvest? _____

Is the food protected against pests? Yes
No

If so, how do you protect it? _____

20. Do you use fertilizer?

- a) compost Yes
No
- b) fertilizer Yes
No
- c) cow dung Yes
No

Do you think fertilizer helps crops grow? Yes
No
Maybe

21. Has family planted trees in past 2 years? Yes
No

22. In past 3 months has anybody in family been ill? Yes
No

If yes, what was he suffering from?

- a) fever
- b) diarrhea
- c) coughing
- d) coughing blood
- e) eye discharge
- f) vomiting
- g) other

Was patient treated?

- a) home
- b) traditional practitioner
- c) dispensary
- d) not treated

23. Anybody in family coughing for more than 3 months?

Yes
No

What do you think is cause of coughing? _____

24. Any child in family who has suffered from measles?

Yes
No

How many children had measles?

25. Does family keep poultry?

Yes
No

26. Is there anybody in the neighborhood who died after an illness?

Yes
No

If yes, what was the person suffering from? _____

27. Is the compound around the house clean?

- a) very clean
- b) fair
- c) dirty

28. Are the villagers cooperating in improving sanitation in own villages?

Yes
No

If yes, how do they do it?

- a) spending some days cleaning up compound
Yes
No
- b) individually
Yes
No

29. Where do you get drinking water?

- a) well
- b) river
- c) tap water
- d) lake

Is it safe for drinking?

Yes
No

If not safe, how do you treat the water before you drink it?

- a) store it in clay pot, then drink it
- b) boil it, drink when cool
- c) add chemicals
- d) no treatment

37. Are the children born in

- | | |
|-------------|-----------|
| a) MCH ward | Yes |
| | Sometimes |
| | No |
| b) home | Yes |
| | Sometimes |
| | No |

If mother delivered at home, what did they use to tie umbilical cord? How did they treat the thing they used?

What did they use to cut the umbilical cord?

- a) clean knives
- b) dirty knives
- c) clean razor blade
- d) dirty razor blade

38. Does family use any means of family planning? Yes
No

How do they see family planning? Useful
Useless
No way

If yes, what method?

- a) abstinence
- b) pill
- c) IUD and jelly

39. What do you do for someone with severe abdominal pains and vomiting?

- a) call in a traditional healer
- b) take to dispensary
- c) don't know
- d) other

40. What is the cause of someone urinating blood?

- a) normal thing
- b) biharzia
- c) don't know cause
- d) TB, other

41. Is leprosy a treatable disease? Yes
No
Don't know

Anyone in family with leprosy? Yes
No

If yes, how many?

42. Is the family using contour ditches to prevent soil erosion?

Yes

No

Using crop rotation?

Yes

No

What is being rotated with what?

- a) maize and beans (best, to fix nitrogen)
- b) beans and peas (worst)
- c) millet and peas (good)
- d) other

APPENDIX K

<u>Output</u>	<u>Means of Verification</u>	<u>Current Status</u>
1. Community Health Centers (CHC) established	a) CHC minutes of meetings	Apparently not completed by CHCs; not collected by Training Officers as planned.
	b) Training Records showing three CHPs selected by each CHC	Records completed show one, not three CHPs per CHC
2. CHPs Trained	a) Curriculum	completed
	b) Pretest/Posttest KAP surveys (of CHPs?)	not completed
	c) Pretest KAP surveys of community	completed
	d) Posttest KAP surveys of community	to be done in mid-1984
3. MCH services delivered	a) Clinic records	inadequately recorded clinics; not collected by Training Officers
	b) Monthly CHP reports	Some CHPs are completing but others waiting for the Training Officer to provide them with record books. Neither Training Officer has collected any.
	c) Monthly Training Officer Report	Not completed
	d) Vaccination records	inadequately completed by clinics; not collected by Training Officers
4. Portable water systems established	visual records	not completed by any staff
5. Sanitation program completed	visual records	Some CHPs are completing; one Training Officer is collecting

Appendix L

List of Possible Drugs for CHP Sale

List of Possible Drugs for Sale by CHPs

TABLETS	SELLING PRICES
Ascorbic Acid (Vitamin C) 500 mg.	.25 per tab
Ascorbic Acid (Vitamin C) 100 mg.	.15 per tab
Asprin (Ascripten)	.10 per tab
B. Comp. tabs	.10 per tab
Bephenium Hydroxynaphthoate (Alcopar)	.50 per tab
Birth Control tabs	4.00 per cycle
Bisacodyl (Dulcolax)	.30 per tab ?
Chloroquine	.30 per tab
Dapsone (DDS)	.10 per tab
Ferrous Sulfate	.15 per tab
Folic Acid	.15 per tab
Magnesium Trisilicate	.15 per tab
Multivitamins	.20 per tab
Penicillin tabs	1.00 per tab
Piperazine	.20 per tab
Sodium Thiosulfate (Water Purification B)	.10 per tab ?
Yeast	.10 per tab
Vegatable Laxative	.20 per tab
Chloroquine Syrup	1.00 for 10 cc *
Cod Liver Oil	1.00 for 10 cc
Cough Mixture (Mixed Adult)	1.50 for 10 cc
Cough Mixture (Mixed Child)	1.20 for 10 cc
Ferrous Phosphate Syrup	1.20 for 10 cc
Expectorant Syrup (100 mls in bottle)	20.00
Multivitamin Syrup (Orovite)	1.00 for 10 cc
Penicillin Suspension (Powder)	15.00 for 150 ml.
Piperazine	1.00 for 10 cc
Anusol Suppositories	1.00 for 1
Benzyl Benzoate	1.00 for 10 cc
Calamine Lotion	1.00 for 10 cc
Tetracycline Eye Ointment (Aadreomycin)	5.00 for 1 tube
Tineafax Ointment	16.00 for 1 tube
Zinc Oxide Ointment	1.00 for 10 cc
Bags for tablets (plastic)	.20 each
Bandages - gauze 5 cm	3.00 for one roll