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Matching Grant Proposal

EXTENDING AGRICULTURAL DEVELOPMENT  
AND  
FAMILY HEALTH AND NUTRITION EDUCATION  
TO THE COMMUNITIES AROUND  
EXISTING SAWS INSTITUTIONS

1981 - 1984

Submitted to  
THE UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT  
By  
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**AGRICULTURAL DEVELOPMENT  
AND  
FAMILY HEALTH AND NUTRITION EDUCATION**

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## PART I

### INTRODUCTION AND OVERVIEW

#### A. Introduction

"The Global 2,000 Report to the President" published by AID in September, 1980, states that by the year 2,000 "for hundreds of millions of the desperately poor, the outlook for food and other necessities of life will be no better; for many it will be worse." "Per capita consumption of food in South Asia, the Middle East, and Africa... will actually decline below present inadequate levels." The Seventh-day Adventist World Service (SAWS) is committed to using its formidable infrastructure of health care and educational institutions around the world to negate this gloomy prediction for those who live within the radius of its institutions.

As a first step, SAWS will give the people in the communities it serves the health and nutrition counseling usually provided health care inpatients, and will share with farm families in the environs of its educational institutions the farming and gardening techniques practiced so successfully by the students for their own sustenance.

This decision has already been translated into action in several countries of the world, but it is the experience of our organization in Tanzania, East Africa, that we propose using as a model for this matching grant community health and nutrition education/farm and garden upgrading program.

## B. Background of the Organization

From their very beginning 120 years ago, Seventh-day Adventists had as their 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." Seventh-day Adventists now work in 190 of the 218 countries recognized by the United Nations and operate 345 medical institutions and 441 schools above the elementary level in 70 countries outside North America.

### 1. Purpose and Objectives

Seventh-day Adventist World Service (SAWS) was organized by the General Conference of Seventh-day Adventists at World Headquarters as a voluntary agency in 1956. As an humanitarian relief and development agency, its primary mission is to supply material aid on a world-wide basis to victims of disasters of all kinds and to aid people in the developing nations, fostering and operating developmental programs which aid these countries to improve the well-being of their population.

SAWS is an international relief agency of the Seventh-day Adventist Church and is non-sectarian in its operational outreach. It is a further development of earlier efforts of the Church to help meet the needs of its own members following the two World Wars, which also included the relocation of refugees in cooperation with other volunteer agencies. While the organization has a particular responsibility to SDA members, its resources do not stop there for they are available, based on need, to all races, creeds, color, religion, sexes, and without regard to politics or national origin. SAWS strives to develop and operate programs directed to the neediest sector of the population in developing countries. The scope of service includes the areas of agriculture, community development, nutrition, literacy, adult education and some aspects of maternal-child health and public health.

SAWS also supports programs which benefit the general population that have priority in the development plan of the country.

### 2. Principal Activities of the Organization

SAWS is currently supporting humanitarian and developmental programs in 55 countries of the world. SAWS is one of the ten largest voluntary agencies in America and also has homebase operations that work out of Australia, Canada and Europe.

SAWS is presently carrying on nutrition programs which provide nutrition education and food supplements to approximately 350,000 persons daily in Africa, Latin America and the Caribbean, utilizing Food for Work, mother-child and school feeding programs.

In addition to regular programs already in operation in Chad, plans are underway to expand the agriculture outreach to the Sudan, Tanzania, Kenya and Upper Volta. SAWS is also conducting ongoing relief programs of medical and public health to the refugees in Thailand, Pakistan and in the near future, Somalia.

SAWS is totally responsible for its programs in overseas countries. That is, it does not function through separate or counterpart organizations but is authorized as a registered voluntary agency in the countries where it has programs and has authorized representatives in these countries.

PART II

SAWS TRACK RECORD

A. AID Programs

As indicated above, Seventh-day Adventists operate major medical educational institutions in all of the countries targeted for this program. In addition to its own medical, educational and developmental programs, SAWS has used development grants from the Agency for International Development to supplement its own resources. Among the grants received or currently in process are:

Food for Peace:

SAWS is one of the six private voluntary organizations authorized to distribute Title II Food for Peace commodities and has a track record of almost 30 years in this program. Current programs include Chile, Peru, Haiti, and Rwanda.

		4 quarters FY 80	1 quarter FY 81
Child Nutrition	(Chile)	\$ 1,895,400	\$ 525,100
School Feeding	(Haiti)	693,400	131,300
Community Development	(Peru)	4,074,900	471,400
MCH and Food for Work	(Rwanda)	19,900	111,500

ASHA:

From FY '78 to '81, SAWS has received grants totaling almost three million dollars from the American Schools and Hospitals Abroad program of AID. Grants for FY '81 include:

Bandung Hospital	(Indonesia)	\$ 300,000
L'Hospital Adventista	(Haiti)	235,000
Kanye Hospital	(Botswana)	1,000,000
Malamulo Hospital	(Malawi)	550,000
Heri Hospital	(Tanzania)	275,000
Mugonero Hospital	(Rwanda)	750,000

Outreach Grants:

FY '81 Outreach Grants are:

Warehouse Construction	Haiti	328,000
Warehouse Construction	Rwanda	251,000

SAWS receives a normal freight allotment in the amount of \$ 425,000, and a PL 480 freight allotment in the amount of \$ 2,629,050.

SAWS has sponsored health and nutrition education programs in the Philippines, Vietnam, India, Tanzania and Guyana. Of these, the program in Tanzania will serve as a model for the program proposed for this Matching Grant.

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B. Health and Nutrition Programs

1. SAWS Tanzania Experience

In 1962 Loma Linda University Division of Tropical Medicine began a rural health training program based at Heri Mission Hospital in northwestern Tanzania. The intent was to train local teachers, ministers and other community leaders together with their wives in a one year program designed to provide them with basic health knowledge. This included an understanding of basic nutrition, agriculture, sanitation, and simple home treatments. In addition, they would have a better understanding of the traditional health care system in the country, the emerging western based health care system, and the appropriate use of each.

Approximately twelve couples per year were trained between 1962 and 1974, when the program was moved to Arusha, Tanzania. After receiving training, the graduates returned to their previous employment but with this additional knowledge which they could share with the village people in whose localities they lived and worked. Over one hundred graduates are now scattered throughout East and Central Africa, carrying on major health education activities and utilizing simple health materials to help their own people.

a. US/AID MCH Project

In 1974, Loma Linda University School of Health was awarded a US/AID contract to develop a national maternal and child health program for the Ministry of Health. This was a direct government to government aid project utilizing the University's expertise and did not relate directly to the existing SAWS programs in Tanzania. Since 1974, a team of experts have been based in the Ministry of Health and have assisted in the development of a national MCH program that is now well established throughout the country. Eighteen MCH Aide schools have been built and staffed and nearly 2,500 MCH aides have now graduated and been posted to rural dispensaries, health centers and hospitals to promote maternal and child health activities. In addition, a basic maternal and child health program has been formulated together with appropriate records and reporting system throughout the country. This project, which will be completed in 1981, has been established as the number one health priority in the country by the Tanzania government and clearly provides the manpower and protocol for continued expansion of maternal and child health care.

b. SAWS Health Services

By 1974-75, the Seventh-day Adventist World Service in Tanzania had committed itself to rural health projects through the Heri Mission Hospital program and expanded training based at the Arusha Adventist Seminary. In view of the government's increased interest in maternal and child health and the expertise available to SAWS through the Loma Linda University team, SAWS/Tanzania re-organized the health care work in the country to meet these new objectives. The "Tanzania Adventist Health Services" was incorporated.

The new corporation, which consisted of thirty dispensaries and the Heri Mission Hospital, could now address the problems of rural health in Tanzania more effectively. It allowed for better utilization of staff, a stronger negotiating stance with suppliers and the government, and justification for qualified administrative personnel to provide direction for the overall program. Since 1975, a physician with extensive African experience and public

health training has been directing the program and has formulated policies that are in keeping with the government directives but often are more successfully implemented because of the SAWS commitment and the motivation of its staff. It has also made a sound financial basis possible, with tighter control on each dispensary's cash flow and medicine utilization.

c. SAWS Rural Health Program

The Rural Health Program now being provided through the dispensary network, churches and village health centers includes emphases on nutrition, agriculture, sanitation, and home health care. The nutritional component is primarily educational, encouraging the utilization of a wider diversity of home grown food products. This includes the promotion of various food mixtures such as utilizing beans with rice or beans with maize, rather than the typical primarily maize diet. A variety of nutrition demonstrations have been offered in the villages, with mothers and children being encouraged to sample the new food combinations. A variety of local recipes appropriate to the individual cultures are available and mothers are encouraged to experiment with these. Food supplements provided through the US/AID Food for Peace Program are utilized for selected, severely malnourished groups only. It is felt that this is imperative to avoid an overt reliance on external food sources and to encourage local self-sufficiency.

One of the most successful components of the nutrition/agriculture program has been the promotion of "kitchen gardens." These are small plots which families are encouraged to plant in close proximity to their homes rather than some miles away where the regular gardens are often located. In these kitchen gardens are grown a variety of fresh vegetables such as cabbages, tomatoes, carrots, onions, etc. Their ready availability encourages their usefulness and frequent addition to the more staple, carbohydrate-based meals. Where necessary, seeds and planting instructions are provided to the villagers to enable them to implement this kitchen garden concept.

An additional emphasis on agriculture has been promoted through several agricultural training programs. These are organized so that village people may come and take part over a several weeks or months period and gain a better understanding of the utilization of fertilizers and irrigation in particular. A greater variety of garden products is also encouraged. However, success at convincing villagers to attempt new seeds has often been discouraging because of their realization that one serious mistake may result in severe famine the following year. The new health workers being trained at Arusha Adventist Seminary are also encouraged to maintain gardens, which are grown under supervision. At this time they are given additional expertise which they can later share in their villages.

Sanitation and water supply problems constitute one of the major sources of communicable diseases in developing countries. This is certainly true in Tanzania, particularly in the rural areas. The dispensary workers encourage the construction of latrines and procurement of safe water supplies, and the health workers follow up in the homes with advice. Concrete latrine slabs are available in certain areas and families are encouraged to dig pits and construct shelters so they can have their own latrines.

The rural health program has also encouraged government to provide a piped water supply to selected villages. Because it is estimated that the African woman spends 50-70% of her time carrying water, the provision of piped water to the village can provide a tremendous saving of labor, therefore, additional time can be invested in agriculture and family development. In addition to better sanitation and water supplies, the correct use of water for cleansing of lacerations and wounds is taught. Also, various physical therapy modalities such as hot towel compresses for relief of arthritic symptoms and cool towels for fever control have been promoted.

The introduction of Western-type medicine to rural areas of Africa has resulted in a tremendous and still increasing dependence upon medication as the solution to most medical problems. It seems imperative to somehow break this cycle and teach people that all medications have a specific and limited role, but more important are simple modalities they can undertake by themselves at home. These include the correct use of water and understanding of a few basic disease processes and the availability of select medicines for particular problems.

Screening of homes and other measures to protect against malaria, avoiding water areas contaminated by Schistosomiasis, and obtaining routine childhood immunizations are all important components in the learning and practice of disease prevention. The basic maternal and child health program available through the dispensary network provides the technical aspects of prevention such as immunizations, antenatal care, simple deliveries, and malaria chemosuppression. Regular follow-up home visits are utilized to encourage the educational aspects of preventive care such as the improved sanitation, nutrition, and other home measures that will result in improved health.

d. Rural Health Workers

A variety of personnel are utilized to promote health in this rural health program. The dispensary often serves as the activity base for many of these village programs. However, when the "health promoter" is a teacher, minister or other village leader, the activities often take place from a school, church or home base. An increasing number of bright young primary and secondary school graduates are employed as cashiers or assistants in the dispensary, where they can gradually be taught various health education modalities which they can then share with patients who come to the dispensary and individuals they contact through home visits. There is a strong emphasis on the home visitation program because it is felt that most patients attending a dispensary are primarily concerned with an immediate problem that presupposes their attention to significant learning in other health-related areas. Consequently, the follow-up visits for that problem and/or general health education measures are primarily provided in the evening in the homes or villages.

Individual counseling is emphasized rather than group meetings, though both are utilized. As mentioned previously, these rural health workers may have been trained in the program originally based at Heri Mission Hospital but now a part of Arusha Adventist Seminary. Others have gained their training in other ways. A series of seminars is now being conducted in different areas to continue to upgrade their knowledge.

e. Relation to Health Care System

It has become evident that rural health workers who cannot provide answers themselves or at least referral for acute clinical problems soon lose credibility in the eyes of the villagers. Because of this, the Rural Health Program has been directly tied to the dispensary system to provide answers to acute problems as they arise. The rural health workers also promote regular attendance for immunizations and antenatal care and other aspects of maternal and child health. By relating the rural workers to the dispensaries and encouraging their joint endeavors, it is possible for the dispensary medical assistant to request follow-up of particular cases by the rural health workers so that a tie-in is achieved between clinical medical care and the routine health care problems and perceptions in the rural areas. Finally, through this kind of joint endeavor, it has been possible to utilize the small financial profit available through the clinical work of the dispensaries to underwrite the educational activities of the rural health workers. This seems an appropriate relationship consistent with the goals and objectives of the government of Tanzania.

f. Administrative Framework

The thirty dispensaries and rural hospitals that constitute the Adventist Health Services system are scattered throughout the rural areas and several urban areas of Tanzania. This has required a national administrative organization to deal with manpower placement, purchasing, and program supervision. At the present time, a full-time physician with international experience and public health training, coordinates this activity. He is assisted by a full-time accountant to monitor the financial activities. A pilot and plane are also available to them to facilitate site visitations. It has clearly become evident in Tanzania that at least this degree of supervision is a vital prerequisite to successful rural programs. Without preferably quarterly visits to each site or worker, the activities tend to decrease and the efficiency is hampered.

Manpower for the rural health program comes from two sources. Medical assistants to operate the clinical aspects of the dispensaries are trained, usually in government programs, and then provided to SAWS for their health units. These are usually people that have been perhaps working for SAWS before or at least identified by them as potential future staff members. Once they join the organization a salary is provided from it. The rural health outreach workers come from teachers, ministers and other community leaders who are provided with a semi-formal education in the health areas outlined above.

A specific attempt not to categorize their work in great detail has been made to provide the flexibility necessary for adaptability in each particular instance. Regular upgrading seminars are conducted for both the medical assistants and the rural health workers as a part of improving their skills and acquainting them with additional educational materials as they are developed.

The dispensary clinics are supplied with medicines from a common purchasing pool. These are sold for a small fee for support of clinic activities. This small profit per dispensary is utilized to develop additional materials

and provide some travel expenses and other support for the rural health workers. This plan is consistent with the Tanzanian government's objectives and indeed is encouraged by them as a complement to their government health care system. The small financial profit produced has been minimal for program development and expansion into new areas and the development of additional materials has been limited by the funds available.

g. Expertise and Knowledge Developed

The eighteen years involvement of SAWS with Tanzania's rural health program has created a reservoir of personnel experienced and knowledgeable in health education in developing countries. This includes experience in manpower training, educational material development, supply distribution, service provision, and techniques of supervision, protocol, accounting, etc.

The initial enthusiasm of SAWS has been tempered by a realization of the enormity and inherent difficulty in bringing about behavior modification in an educationally developing country. Specific lessons learned include the value of tying educational efforts to "felt" clinical needs, the importance of identifying and working through local village leaders, techniques of using small amounts of external aid appropriately so as not to distant the indigenous self-help nature of the endeavor, and methods of relating PVO programs to the overall government health plan.

The experience described above has enabled SAWS to develop expertise, contacts, organizational relationships, and practical know-how from which the proposed project will benefit. The AID-funded FP/POP/MCH project in Tanzania has been an especially valuable experience. From this project we have learned:

- (1) How to administer a large extramurally funded project. In the Tanzania project our technical and field operations have been effective, but we have found that a much stronger administration of the project has been needed for necessary reporting to top project personnel and especially for careful administration and reporting of project finances. On the basis of this direct, personal experience regarding the management and administrative personnel and structures required, SAWS has set up the organization described previously to manage and administer the project. You will note that the overall director is an administrator with adequate support staff competent in accounting, logistics and planning, all necessary to make a development program work.
- (2) What the typical problems are in transporting people and materials in difficult environments, what considerations must be made of weather, seasons, etc.
- (3) How fragile and highly prized is the indigenous sense of self-determinism, the necessity of cooperating with local nationals to further the aims they have set for themselves.
- (4) To what extent technically skilled personnel are typically available in developing countries.
- (5) What the major obstacles usually are in implementing training programs in such countries. In our experience, a major obstacle has

been the cumbersome administrative systems with which the trainees must deal and which cause delays that tend to impede delivery of training and services. Our project will be conducted so as to take these cumbersome administrative systems into account and move around them.

- (6) How to prevent and cope with tropical diseases and environment.
- (7) How to cope with primitive facilities.
- (8) How to work with diverse governments and political philosophies.
- (9) How to promote the project through direct, active participation in international medical associations and in the professional associations of the third world countries.
- (10) How to work with VOLAGS in meeting their special needs for reports to their supporting constituencies and donors.

h. Relations to Government and Other Voluntary Agencies

Personnel have cooperated with the Tanzanian government's Ministry of Health and many international development agencies to advance the program. Some of these agencies have been:

- (1) Danish International Development Agency (DANIDA)
- (2) Canada's International Development Research Center (IDRC)
- (3) Swedish International Development Agency
- (4) World Health Organization (WHO)
- (5) Japanese Agency for International Development (tuberculosis)
- (6) Norwegian Agency for International Development (NORAIID) for construction of health facilities
- (7) United National Family Planning Agency
- (8) UMATI (the family planning association of Tanzania)

Tanzania Adventist Health Services (TAHS) is affiliated with the Tanzania Christian Medical Association (TCMA), which coordinates all Christian medical work in the country. This cooperation includes the formulation of common policies, upgrading of health staff and joint relations with government.

In addition, Tanzania Adventist Health Service has had direct relationships with the Ministry of Health of the government. This has primarily been with the Maternal and Child Health (MCH) Unit and the Health Education Unit. The MCH unit has provided dispensary equipment, e.g. scales, refrigerators, etc. as well as consumerable supplies such as vaccines, clinic cards and syringes and needles.

The Adventist Health Service has been applauded by government and encouraged to expand its efforts to better serve the rural areas with basic health services and education. This is particularly significant in view of the government's recognized commitment to self-help development projects, and is a recognition of TAHS' reliance on the resources and people of the villages.

i. Summary of Results

It is easy to quantify and summarize services provided, but difficult to measure the actual results in improved health at the village level. As part of the collaborative efforts of SAWS, other voluntary agencies, and the government, it is now estimated that 95% of Tanzania's population, which is principally rural, live within 10 km of a facility providing primary health care. With the predictable lag time, this coverage has started to impact the morbidity and mortality indices, with particular drops noted in the infant mortality rate, maternal mortality rate and the prevalence of certain communicable diseases. The improved supervision and supply distribution system developed by SAWS has been particularly successful in maintaining the continuity of service that is so vital in convincing rural populations to place their reliance in the health care system.

We believe that the pooled resources, expertise, local community ties, cross-cultural experience of SAWS and Loma Linda University bring together what is needed to tackle the particularly pressing needs in the area of health education and nutrition in the targeted countries. With a strong Christian commitment and humanitarian perspective plus sound scientific and applied knowledge and experience, we believe we can achieve the goals and objectives described in this proposal. Specific strengths and capabilities which our combined effort will bring to bear on the problem are:

- (1) Tested methods and wide experience in a nation-wide MCH program funded by USAID in Tanzania.
- (2) An already in place country-wide SAWS program that has the existing infrastructure needed to carry out the project.
- (3) A trained and available local cadre of personnel who can assume leadership in implementing the project at both the village and regional level.
- (4) Strong local community ties through the hundreds of local SDA and other collaborating church groups who are ready and willing to participate in self-help nutrition education and community development activities.
- (5) A demonstrated and documented need based on recent scientific evaluations which explicitly calls for just the type of program herein described.

i. Answers to Questions

Following are answers to some questions raised about the Tanzania program:

Why is the Tanzania program outstanding?

The Tanzania program is outstanding because it is a country-wide unified effort to integrate health, nutrition, agriculture and education through local centers be they hospitals, dispensaries, churches or schools. Tanzania was unique because it has a network of 30 Adventist dispensaries which served as a financial and administrative base for community health education. The present Adventist Health Corporation which unites the hospitals and dispensaries into one corporation facilitates purchasing, employment, training and further strengthens a unified community health outreach program.

Has there been an intensive evaluation of the program?

Several evaluation studies were done on the Tanzania program at different stages of its history. The one in Appendix A was done in 1972 and includes an evaluation of the original program at Heri Hospital. This summary points out some of the strengths and weaknesses of the program. Most of the concerns expressed in this evaluation were satisfied when the Adventist Health Corporation was formed and the institutions were brought under one management at Arusha.

What is the participation level of beneficiaries?

The unparalleled advantage that Adventists have in conducting community health education program is that good health is at the heart of their religious philosophy. For Adventists, good health is part of good religion. Therefore, when a call is made for a community to participate in a health project, the Adventists in the community are the first to respond and this interest on their part serves as a magnet to attract others to the program. The participation level of beneficiaries of health activities sponsored by SAWS is, therefore, always very high.

Community leaders, usually the teachers, pastors and village leaders have always been involved in the planning and directing of the Tanzania outreach program. This was necessary because very often they had to serve as translators and because their input in the program is considered crucial for the success of the program.

How has SAWS and the beneficiaries developed skills through this program?

The School of Health of Loma Linda University (LLU) has sent a large number of public health graduate students to Tanzania for field experience. These students are now filling important positions in health education programs in the U.S. and overseas.

Several different generations of health educational material has been developed and utilized both in this project and in the Loma Linda University contract with the government of Tanzania. This material is made available to all health professionals who can use it.

SAWS/Tanzania, the Tanzania Christian Medical Association and other voluntary agencies in country have integrated their activities and have developed a smooth working relationship. Medical institutions operated by these organizations now follow standard government health-care procedure developed by LLU through its contract with the Tanzanian Government. This has been a great benefit to the entire country.

Over the years, LLU has trained approximately 25 Tanzanian nurses and 10 Tanzanian physicians who have returned to senior positions in the government health-care system.

## 2. SAWS Philippines Experience

Mountain View College (MVC) is a liberal arts college operated by Seventh-day Adventists in the central highlands of Mindanao in southern Philippines. Founded in 1953, it was established to offer an educational model of the SDA educational system in the Philippines. MVC puts a great emphasis on community development programs that offer many unique features. A summary of some of these are as follows:

- A 24-hour clinic/hospital located on the campus which acts as a community health center, and a laboratory school for public health student trainees.
- A college radio station which specializes in community development. It is a non-commercial station specializing in programming geared to nutrition, child health, agriculture, character building, news, etc. Several languages or dialects are used to maximize the listener comprehension.
- Weekly visitation programs by students and faculty to communities within the radius of about 50 miles.
- The operation of 5 extension schools to cultural minorities of the central highlands.
- Ongoing health education programs among select barrio communities through the invitation of the local governments.
- Use of food for work programs to assist in water systems improvement, tree planting and other projects.

### a. Clinic Hospital Program

The clinic/hospital, which also serves as the campus health central, provides medical service to the entire community. It is staffed by a full-time physician/surgeon, a full-time dentist, a staff of nurses and paramedical personnel. The dentist holds a masters degree in Dental Public Health. The clinic provides free medical and dental service to those who cannot afford to pay. No patient is turned away because of inability to pay.

Regular field clinics are conducted in surrounding communities. All health personnel give health and nutrition lectures and demonstrations in the communities to improve the health and well-being of the community.

Regular requests are received from local governments to act as health education consultants for local government projects.

Monthly reports are compiled to determine the types of health care given and the number served. From time to time studies are made to determine effects of various treatments on select communities on selected health problems. i.e. effect of bathing upon incidence of skin problems.

b. College Radio Stations

The college radio station is the only one of its kind located in the central highlands of Mindanao. The station specializes in developmental programming, and reaches a broad segment of the rural community with programs on nutrition, sanitation and other special programs promoting various subjects of practical benefit to the listener. A radio station seedbank provides vegetable seeds to farmers who request them. A ready supply of books on a variety of developmental topics are offered to listeners without charge. Radio station rallies are held in barrios to answer questions and discuss topics which are of interest to listeners.

Regular spots are aired in several dialects to promote governmental and non governmental subjects. The station offers the only known radio broadcast for the cultural minorities in the area.

Letters from listeners are compiled regularly to determine the attitude and location of listener. Suggestions for improving the programs are taken seriously. Government officials responsible for media evaluation do surveys and share the results of their findings with the station.

c. Home Visitation Program

Each week students and faculty of MVC are assigned to visit the communities or barrios in the environs of the college. During the visitation programs homes are visited to assess the needs of the family. Assistance is given where necessary. In many cases, instruction and counsel is all that is needed. Direct assistance is given if needed. Typical problems encountered are financial setbacks, nutrition problems, sickness which is not being treated, and various domestic problems. Steps are then taken, as appropriate, to alleviate the problems. School transportation is used for visitation, but in some cases transportation is provided by the communities served.

The students are divided into teams with a team leader. Each leader is responsible for making a weekly report to the program coordinator. The report includes a number of objective factors which serve as a statistical basis of evaluating the program. Numerous subjective evaluations are made, and are reported to a committee which acts as the controlling body for the visitation program.

d. Extension School Program

For about 10 years the college has operated an informal education extension program among the cultural minorities. The program calls for two mature students to spend a year in a barrio where they assist in various aspects of barrio improvement and development.

Students who participate in the program are selected on the basis of their skills, interests, training, and ability to get along with others. Each student is required to attend a training program which is held twice yearly by the faculty of the college. Topics covered in the training program include:

- Cultural anthropology
- Principles of barrio economics

- Simple home treatments
- Barrio nutrition
- Sanitation
- Growing of farm animals
- Growing of home gardens
- Principles of teaching and instruction
- The establishing of home industry and self-support
- Others as deemed necessary

Upon assignment the students hold regular adult education and child education programs in the village with definite and measurable goals in mind. Children are taught the basics of reading, writing, and math while the adults are taught non academic courses. All are involved in growing gardens, improving water supplies, etc. The program is operated on an ongoing basis.

While official government assistance or recognition has not been requested, government is kept informed of our activities and has given the project its wholehearted support. They have further allowed us to the freedom to make changes we consider necessary to meet the needs of the people we serve. Equivalency examinations are given by the government to the graduates of the program. All those taking these examinations are placed in regular government schools and, without exception, have done well. From time to time teams from the Ministry of Education and Culture come to study the program to glean ideas for other programs which the government sponsors.

Depending on the location the student/teacher assists the village or barrio in various self-help industries. The college guarantees a market for the product. Some products include the growing of rice, soybeans, corn, vegetables, and the making of baskets and other handicrafts.

Support for the program comes largely from donors outside the Philippines. Each student is given a small living, travel, medicine allowances, and a scholarship to assist him to return to regular study.

Regular monthly reports are made by each student/teacher covering a wide variety of objective and subjective evaluation material. A constant census is made of each family to determine nutrition needs, the number of family gardens, the incidence of various diseases, the number taking baths, etc. A monthly record is also taken to determine the status of various developmental projects in progress. Such projects include:

- Improved water supply
- Fencing of farm and gardens
- Planting of fruit trees

- Growing of rice or legumes

All data is kept on record and summary reports are made from time to time. The program has a coordinator and an assistant coordinator who report to a controlling committee made of faculty members. 15 students are presently assigned to six locations. Over 650 children are in the informal class programs.

Measured achievements are as follows:

- Reduced incidence of diseases from poor sanitation.
- Reduction in constant mobility of cultural minorities.
- Marked improvement of economic well-being through the development of home and barrio industries.
- Marked improvement of law and order within these communities.

e. Health Education Program

The college has formed a new academic and field program in health education directed by the Health Education Department which spends considerable time in field work with students. Even though it has only been in operation for two years, it has gained much recognition by local governments which have used it as a pattern in designing community health programs. At present three model communities are being developed under the supervision of the Department. An evaluation component is being developed for this program.

f. Food for Work Programs

With the cooperation of SAWS, CARE, and MSSD, MVC has assisted in food for work programs utilizing bulgar wheat as an incentive for various projects. Under the program water supplies have been improved, reforestation has taken place, and other small projects have been completed.

An evaluation component is in process and will include the results of the projects themselves as well as the effect of the feeding projects on the nutrition of the participants. The Health Education Department of the college is responsible for the evaluation of this program.

g. Future Plans for the Projects

From time to time an evaluation is made by the college administration and the various coordinators to determine where improvements can be made in existing programs. These evaluations include written reports and on-the-spot visits to the project sites. Present evaluation suggests the following plans for the future:

- (1) Expanding of the present clinic services through small local clinics. Increased services, particularly in education are planned. A home-care program is planned to educate families in preventive as well as curative remedies.

- (2) The radio station will soon begin the construction of a new studio. The present power of 5,000 watts will be doubled and a new transmitter and antenna will be constructed. The objective is to reach a wider area and be able to operate over a longer broadcast day.
- (3) Due to dramatic increases in local fuel cost, transportation is sought which will make transportation less costly. Present visitations are supported entirely from donations, and recently cutbacks have been made in visitation programs due to lack of funds. Small diesel-powered buses are needed.
- (4) Requests for extension school programs exceed the financial ability for the college. Each extension school program costs approximately \$2,500 per year to operate. Additional funding would provide considerable ability to expand and improve this program.
- (5) Funds for starting more home industries, putting in wells, providing farm animals, etc., are needed in order to start viable programs for self-support. The use of locally designed and used items are encouraged.
- (6) It is felt that the extension program would be improved if a vocational school for the cultural minorities would be established. The school would be located in an existing barrio and made from local materials. Skills of self-support would be taught to selected students who would return to their own barrio upon graduation to assist in development of that barrio. Cost of project would be very little more, but would increase the exposure of the present program manifold.
- (7) Increased use of the food work program rather than give away programs.
- (8) Restructuring of the evaluation procedure to provide integrated reports and evaluation so that this can be a ready resource for others interested in starting similar programs.

C. Agriculture Program

The philosophy behind the involvement of the Seventh-day Adventist Church in agriculture is based on the Biblical example of God putting man in the Garden of Eden as the ideal environment to develop and learn. It has moved from that base to a recognition of the benefits of agriculture in personal development and ultimately to using agriculture as a means of serving humanity for the betterment of all of God's creation.

Agriculture has, therefore, been important in Adventist lifestyle since the beginning of the church. Members have been encouraged to live in a rural environment where possible and to engage in some kind of agricultural activity. Working with the soil, plants, and animals has been encouraged as a means of character development and self-discipline.

Adventist educational institutions have traditionally had farms and gardens for both training students in useful occupations and for the economic benefit of the school. In the United States many Adventist secondary schools have farms that provide useful work opportunities for students. Generally these secondary schools do not emphasize the academic aspects of agriculture, but it is considered a useful learning experience to work on the farms. Outside the U.S. many Adventist schools have training programs in agricultural skills. Local culture does not always encourage education for agricultural work, but often just working on the farm provides valuable education for graduates who will wind up working the land at the end of their education experience.

Four Adventist colleges and universities in the U.S. offer degrees in agriculture. These degree programs are primarily oriented toward production and management rather than basic research. Animal Science and Food Production are the major areas with Ornamental Horticulture included to lesser extent. Several foreign colleges have agricultural programs. As in the secondary schools, agriculture is not always an important academic subject in some countries, but this attitude is changing in some countries as the need for efficient means of feeding the people becomes more urgent.

Graduates of Adventist agriculture training programs can be found throughout the world. These people are both earning a living and serving the local population with their products and services.

In some cases Adventist institutions such as hospitals and clinics have garden projects which serve as models and demonstration center for people who come with nutrition related illnesses, and need to be shown how to produce the foods that can alleviate the nutritional stress. The Adventist Church has always placed a premium on good health for its members and education if food production has been part of the church's effort to promote healthful living.

D. Agro-Business Programs

Few people know that cornflakes, peanut butter, Postum and Granola were given to the world by Seventh-day Adventists.

"Battle Creek did not become the cereal capital of the world by chance. Nor was it a happenstance that from this small Michigan city came both the first peanut butter and the first vegetable protein foods specifically designed to resemble meat. These developments and others are traceable to Dr. John Harvey Kellogg's commitment to improving the eating habits of Battle Creek Sanitarium patients and those of his fellow Seventh-day Adventists. As his vision broadened and the profitability of some items became apparent to others, the dream expanded. Some dared to think changing the eating habits of mankind-- and they partially succeeded.

"Since Colonial days Americans had depended heavily on meat as a major item in their diet. In his classic picture of American society at the opening of the nineteenth century, Henry Adams notes the prevalence of salt pork at every meal. Other staples included potatoes, cornmeal in mush or puddings, and molasses; all were washed down by liberal amounts of coffee or tea. Even after Americans no longer endured the rigors of frontier life or the twelve-hour day in the factories, old habits of eating persisted. Small wonder that Battle Creek Sanitarium patients often complained of dyspepsia!

"After her vision in Otsego, Michigan, Ellen White persistently pointed Seventh-day Adventists to the virtues of a vegetarian diet. Fruits, grains, and nuts had been man's original bill of fare, she reminded them. With the addition of vegetables, modest amounts of dairy products, and a few eggs from "healthy" hens, it still best served his needs. All of this John Kellogg had accepted as a youth. Even while boarding himself as a medical student in New York City, Kellogg had practiced a "reform" diet. He had lived principally on graham crackers and apples, with an occasional baked potato or coconut to add variety. His limited time and cooking facilities had not allowed him to prepare cooked wheat, oats, rice, or other grains. He had no place to keep fresh vegetables or fruits even if they had been available and he could have afford them. Still he had maintained good health and gained seventeen pounds on what must have been a monotonous diet.

"Years later at the Battle Creek Sanitarium, Dr. Kellogg soon found that keeping paying patients happy on a radically different diet was quite different from disciplining himself. At the outset, he wisely refrained from imposing a ban on meat. Instead, he attempted by his personal example in the dining room to show the "better way." It wasn't enough. Patients professed a willingness to try the vegetables and grains Kellogg ate, but complained of their monotony. Something had to be done.

"Kellogg turned to a heavier reliance on bread and other wheat products. Sylvester Graham had promoted whole wheat as a panacea thirty years earlier, and Graham's writings had made their impact on Kellogg. With the aid of Mrs. Kellogg, the doctor soon had the Sanitarium bakery producing a tempting variety of breads and crackers. Some of these were laced with dried fruits, others included oatmeal, rice flour, or a variety of whole grains. As his studies

in food chemistry progressed, Dr. Kellogg became aware of certain problems connected with the consumption of whole grains. These foods possessed a high starch content, which meant slower digestion. Kellogg also learned that prolonged baking started the destrinization of starches, the first step in their digestion. This led him to an emphasis on zwieback, twice-baked bread.

"At Dansville, New York, Dr. Jackson, who had also been influenced by Graham, was producing probably the first cold cereal breakfast food. He called it Granula. In reality, Granula was simple Graham flour made from "Genesee Valley white winter wheat," mixed with water and baked in sheets in a slow oven. Later, this thin unleavened bread was broken up, rebaked, and ground into small pieces about the size of modern Grape-Nuts. To be edible, Granula needed to be soaked for at least twenty minutes in milk or cream. Many preferred to let it stand overnight in a bowl of whole milk in a cool icebox.

"Dr. Kellogg decided to try an adaptation of the Dansville product at the Sanitarium. He added cornmeal and oatmeal in various amounts to Graham flour until a product with satisfactory taste appeal emerged. Kellogg baked and ground up his cereal like Granula, and he acknowledged his debt to Jackson by calling the Battle Creek cereal Granola. Dansville people caused rumblings of legal action, but the name stuck. Kellogg's attempts to secure grain products that were tasty as well as healthful paid off. Not only did patients complain less over the menus, but more and more of them sent back to the Sanitarium for supplies of Granola or a favorite fruit cracker after they had returned home."<sup>1</sup> (For the rest of the story see Appendix B.)

The Kellogg Company passed out of the control of Seventh-day Adventists in the middle of nineteen hundreds, but the conviction that a vegetarian diet improved the quality of health and the length of life grew deeper as research proved the pronouncements of Ellen White correct. Soon the task of producing tasty and inexpensive health foods came to be regarded as a "divine instrument" which was regarded as a gift of God to His people" to be shared with the world.<sup>2</sup>

Small food factories were established in many countries to supply the demand for an alternate source of protein. Today, Seventh-day Adventists own and operate more than thirty food factories around the world. (See Appendix C). Of these Loma Linda Foods in Riverside, California, and Sanitarium Foods in Wahroonga, Australia, are the largest. Gross sales were as follows:

1978	\$164,297,825
1979	\$194,677,626

1980 figures are expected to show an even greater gain in sales. Smaller factories are being established in developing countries to supply a growing demand for an inexpensive source of protein.

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<sup>1</sup>Ellen G. White, The Health Food Ministry (Washington, D.C.: Ellen White Publications, 1970), p. 56.

<sup>2</sup>Warren L. Johns & Richard Utt, The Vision Bold (Washington, D.C.: Review & Herald Publishing Association, 1977), p.p. 75,76.

Research has proven that the most important time in the life of a child is from the time of weaning to 5 years. If there is a lack of protein in the diet, his mind and body will not develop as it should. The most common way of obtaining protein for the child's diet is from cow's milk, but in many parts of the world there is an insufficient supply of this type of protein. To meet this growing world need, Seventh-day Adventists have worked hard to develop a simple inexpensive method of processing soy beans into a beverage that is tasty and higher in protein than cow's milk. Now "soy milk" is produced in powder form in several flavors and can be reconstituted by adding water.

As a result of the invention and production of simple and inexpensive machinery in our laboratories, (see Appendix D ) small indigenously owned and operated food factories can now be established in developing countries. Following is a report from the Caribbean and Latin America where the factories have now been brought under central management to provide competent technical and financial advice.

The Inter-American Food Company was organized at the end of 1977 to help small food processing plants provide nutritious foods more efficiently. Latin America is not an easy field for the development of industrial and commercial activities. The political and economic instability that characterizes almost all the countries where the company has branches is a disadvantage for the development of the industries in the way we would like to do it. The high inflationary rates that are characteristic of the Inter-American countries require us to exercise a more rigorous control over all the activities that we develop, not only in production and sales, but also in investments on the basis of loans in U.S. currency.

In spite of all the problems, the results attained in the almost three years of the company's operations have been remarkable.

In the following paragraphs we will analyze some of the features that stand out in our work:

a. Alimentos Colpac (Colpac Food Factory) Navajoa, Mexico.

The protein plan of Alimentos Colpac, in spite of being situated in a place somewhat far from the great cities of Mexico, has shown a progress that could be considered above normal. After having closed the books with a loss of approximately M\$500,000 in 1977, it has shown a profit of more than M\$2,200,000 in just a little over two years after it became part of the company. Annual sales in 1980 will be over M\$700,000 up from M\$2,429,945 in 1977. The company received the factory with a debt of U.S. \$75,000. By December 31, 1980, the debt was only US \$33,000. The farm, whose operations are not included in the preceding figures, has also shown progress.

The food company has made special efforts to improve the quality and appearance of the products in Alimentos Colpac. These efforts have been very successful. The factory has developed a

modern laboratory for analysis and quality control. This facility is directed by a competent professional. Changes are being made in the appearance of the containers and labels in order to make the products more appealing to the eye and thus enlarge our market in Mexico City and other important consuming centers of the country. During 1980, a bakery was added to the production line and it is working presently on its first production capacity.

b. Industrias Covac, S.A. (Costa Rica)

This factory was turned over to the Food Company at the beginning of 1978. The annual financial statement for September 30, 1977, showed sales that amounted to approximately C\$2,000,000 with a net profit of C\$61,443,02. Under the administration of the company during the last two and one-half years, the factory has shown a total net profit of C\$691,212.00. Its total annual sales for the period ending September 30, 1980, went up to C\$3,800,232.

The most outstanding addition in the operation of Industrias Covac is the construction of a new and modern bakery inaugurated at the beginning of 1980. This bakery is equipped with semi-automatic machinery and equipment that allows us to reach high productivity together with good quality products. The construction of the bakery was financed through a seven-year loan. In reference to the protein line, during 1980 a new line of canned protein was introduced in the market, and there is a great demand in the Costa Rican and Central American markets already.

c. Westico Foods, Jamaica

Due to the political and economic situation of Jamaica, it has not been possible to reach the goals in sales and profits that were expected from this factory. Nevertheless, the factory will close the 1980 financial statement with approximately J\$1,500,000 of sales in its two sections, the protein plant and the bakery. These figures show an increase of almost 100% from 1978 when the Food Company took over the factory. The profits for 1980 will hopefully be over J\$100,000.

During the last two years much work has been done in expanding the buildings at Westico Foods; the area of the buildings is now three times what it used to be. The factory is also well equipped with machinery and the necessary equipment in order to produce breakfast cereals and dehydrated and canned protein. During this same period of time the following products have been launched in the market: Cereal line: Crispop, Seven Grain, Hi Fi, Banana Plus and Granola. Canned protein line: A variety of four products, both dehydrated and canned.

d. Productos Icolpan (Colombia)

Among all the factories operated by the company, Productos Icolpan has yielded the most outstanding results. The factory

became part of the company in May, 1979, when it was producing less than 1,000 units daily, with an annual sale of approximately 3,000,000 Colombian pesos. During 1980 the factory sold products worth approximately 16,500,000 Colombian pesos, and the net profit was more than US\$100,000. The 1979 and 1980 profits have been reinvested almost entirely and at present the bakery is operating with three modern ovens, modern bakery equipment and three large vehicles used for the distribution of products. Thanks to the Icolven College and the Colombia-Venezuela Union, it has been possible to receive loans for the purchase of this equipment, and these loans are now almost paid off. There are plans to establish a soy milk plant in Icolpan during 1981.

e. Montemorelos Factory

The Montemorelos Factory started to operate during September 1980, taking as a basis the small bakery and soy milk plant operated by the university. At the moment it is working rapidly in the installation of a plant for canned protein, in the enlargement of the soy milk plant and in the enlargement of the bakery. Almost all the equipment have been acquired for this project, and we trust that this factory will shortly become the biggest one operated by the Inter-American Division. The potential of the Mexican market leads us to believe so.

f. Egypt Food Factory

The food factory is in Heliopolis, Egypt. It opened officially in the summer of 1977. The leaders there had built a nice building and were anticipating help for equipment from friends in the United States. Some of this help did not materialize, but the World Foods Service Department of the General Conference of Seventh-day Adventists offered to help them with technology and sent Paul Allred, a food technologist, to give them a start. Their first stage of development was to begin a soy beverage plant and to get it out in various flavors. Mr. Allred had been working with irradiated cooked soybeans as a base for soy milk and had machinery built for producing the dry-cooked soybeans. To do the complete processing of this type of soy beverage the following equipments were purchased. From the United States they purchased a Gualin homogenizer, Bottle Washer, 2 Autoclaves, Bottle Filler & Capper, Electric Portable Can Sealer, and 2 Microwave Cookers. Besides this equipment they purchased a large Roll Mill from Switzerland. They bought a boiler and other smaller equipment locally.

When they first started production, they were bottling a liquid soy beverage, Now they are making a nice dry soy powder in various flavors that is dispersable in water and are marketing it quite well. The factory in Egypt is making good progress.

## PART. III

### OVERVIEW AND DESCRIPTION OF THE PROGRAM

#### A. Overview

As a result of its vast experience operating health care institutions in developing countries, and on the basis of the statistics published by the World Health Organization of the United Nations and other health organizations, Seventh-day Adventists have come to the conclusion that the most urgent need of the population in the countries targeted for this Matching Grant Program is family health and nutrition education coupled with programs to help communities grow and preserve the foods they need for a balanced and nutritious diet.

The main causes of morbidity and mortality in the specified areas are environmentally, sanitary and nutritionally related. The low socio-economic status of the people is also related to lack of technology to exploit the available natural resources for the benefit of the masses. The problems described above vary in magnitude and acuteness among and within the targeted countries, however the rural population is the most seriously affected due to the mal-distribution of the available resources, non-provision of services, and skewness in internal population migration.

The health problems of Haiti are not atypical:

In Haiti, malnutrition exacerbates disease and disease exacerbates malnutrition. Most Haitians suffer from multiple nutritional deficiencies. The most important nutritional disease is protein - calorie malnutrition in children under 5 years of age.

There are approximately 800,000 children under 5 years of age in Haiti. Best available data show that approximately 80% of these children are malnourished based on a weight for age classification. Ten percent may be considered severely malnourished (3rd degree, Gomez Classification with clinical signs of kwashiorkor marasmus) approximately thirty percent may be considered moderately malnourished (2nd degree). The remainder, approximately 40% may be classified as 1st degree, or mildly malnourished.

The reported deaths among children, especially in the 1-4 age group are attributed to diarrhea and respiratory infections. However, in light of the statistical situation and based upon similar situations in other developing countries, it seems highly probable that the underlying cause of death is malnutrition. Had these children been adequately nourished, there is a much higher probability they would not have died from diarrhea or respiratory infections.

It is estimated that the daily per capita food consumption of Haiti falls between 400 to 300 calories short of recommended levels. Hospital records and data from nutrition clinics indicate that serious protein deficiency exists in the adult population. In addition, vitamin A deficiency, goiter (iodine deficiency), ariboflavinosis (riboflavin - vitamin B12) and

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folic acid deficiency are specific problems in certain regions and in certain population subgroups. The Health Sector Assessment has identified three population subgroups, in addition to children under five, as high risk groups: a) pregnant women; b) lactating women; and c) newly arrived rural poor in urban areas.

The problems facing the sixteen target countries are complex, and the proposed program will not attempt to deal with all of them. Therefore, the program activities will concentrate on the most immediate and acute health and economic problems in the rural areas, which are:

- a. Poor environmental and sanitary conditions.
- b. Protein energy malnutrition in children under five years of age.
- c. Lack of trained medical, health and agricultural extension personnel to provide the necessary medical-health services and education at the grass root level.
- d. The absence of small businesses designed to encourage farmers to grow more food.

The solution proposed for reaching the objective of this proposal is to create a health conscious and nutritionally informed community motivated to practice and promote good health principles and dedicated to the proposition that as a community, their destiny is largely in their hands.

It must be made abundantly clear, however, that it is not intended that the services and programs offered in this Matching Grant proposal be implemented in each of the sixteen countries listed, nor in every community in the environs of the institutions operated by SAWS in these countries.

After feasibility studies and base surveys are made in the six new target countries, each target community will decide what its needs are in the areas of health, nutrition, agriculture and food technology. SAWS will then provide:

- Technical assistance from the central and regional offices,
- A country organization headed by a director to coordinate and administer the programs,
- A local organization headed by a "health promoter" to provide information and to help communities organize to help themselves, and
- A limited amount of funds where necessary.

The programs now in operation in ten countries will be evaluated and strengthened with funds from this proposal. Our hypothesis, based on our experience, is that these ingredients will produce results that will be visible and measureable in three years.

## B. The Program

### 1. Program Goal and Purpose

- a. Goal: With the application and adaptation of its community based integrated human development CBIHD approach in target countries, the broad objectives of SAWS 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.
  - To expand community health and agricultural education outreach programs from SAWS health-care and educational institutions.
- b. Purpose: To attain the goal stated above, the specific purpose of the SAWS program in target countries is:
- To adapt, implement and test a community based integrated health and nutrition education CBIHNE methodology in selected communities in target countries.
  - Support a community based program that will provide for new programs in designated communities of six countries and expand ongoing programs in designated communities of ten countries within the overall context of SAWS integrated development framework in the following areas:
    - (1) Community nutrition awareness
    - (2) Health and sanitation reforms
    - (3) Improved gardening practices
    - (4) Improved production of protein-rich legumes
    - (5) Small community operated agro-businesses
    - (6) Data collection system in place

It is hypothesized that the successful implementation of the CBIHNE and the CBIAD will directly result in the improvement of the physical, social, economic and environmental conditions, all external factors remaining the same.

- c. Variable Indicators: The community based integrated health and nutrition education and the community based integrated agriculture development methodology basically means that the local community and its representative health committee develop capabilities in planning and implementing projects. With this goal, the planners of SAWS must avoid the temptation to define project results or result oriented indicators before each program begins. An attempt is, therefore, made to define process indicators in broad terms which could prepare the base for evaluation.

The indicators, however, would focus primarily on the overall process of project identification and development and training skills rather than specific program activities which will be planned and implemented at a pace set by the Community Health Committee.

The level of achievement of goal and purpose of the SAWS program in target countries for the first three years could be determined through the following indicators of outputs.

(1) Indicators of goal:

Beginning in 1982:

Annual improvement of health and economic conditions of beneficiaries, measured by:

Decrease in nutrition and sanitation related infant morbidity and mortality in target communities.

Increase supply of protein-rich legumes and their byproducts at affordable prices in target communities.

Develop attitudinal and participatory community support for the establishment of permanent health information dissemination in target communities.

(2) Indicators of Purpose:

- A minimum of 40 communities in the environs of 47 SAWS health-care institutions in 13 countries will have community health outreach programs focussing on nutrition, sanitation and general health principles.
- A minimum of 30 communities in the environs of 38 SAWS education institutions in 16 countries will have community health outreach programs or agricultural extension programs focussing on better methods of growing garden vegetables and legumes rich in proteins.
- A minimum of 10 impact areas will have small community projects utilizing some appropriate technology to preserve seasonal foods or produce food byproducts.
- Community committees established and managed by local leaders in all impact areas organized to provide health nutrition information.
- Comprehensive programmatic plans prepared by community committees on a multi-village level by the end of year 3.
- Local and national officials demonstrate interest in expansion/replication of process in other communities with SAWS/Institution financial assistance by the end of year 3.
- Residents and leaders from at least 3 other communities observe projects implemented in target communities by end of year 3.

- Improved community access to government health and agriculture personnel and other health and agriculture resources demonstrated by end of year 3.
- Government officials and representatives of other health organizations collaborate in program planning and implementation by end of year 3.
- Significant improvement in health, sanitation, social, economic and environmental conditions in participating families in target countries demonstrated by end of year 3.

d. Assumptions:

(1) Assumptions Goal

The following major assumptions have been made at the goal level.

- No major global conflict.
- World economic system does not deteriorate.
- Political situation in countries remains stable.
- That SAWS relationship with private donors is maintained to sustain its matching funds capability.

(2) Assumption of Purpose

The following major assumptions have been made at the purpose level.

- Communities are willing to cooperate and work together.
- Communities can be motivated to have control over their own physical wellbeing.
- Residents of other communities are interested, motivated and participate in integrated village health education programs in their village.
- Leaders exist in communities.
- New techniques can be successfully transmitted to various distinct cultures.
- Aid funding will be acceptable to national governments.
- Political climate is conducive to community organization and programs.

- Economic and social conditions and SAWS institutional structures remain stable.
- Program is effectively coordinated with government service.
- Local and national officials encourage replication in other rural communities.

## 2. Program Strategy

Within the framework of SAWS goal and purpose of health and nutrition education and agriculture extension programming as stated in this proposal, the MG programs in the 16 target countries will be independent programs coordinated and supported by technical advisors and consultants from SAWS/Washington and regional offices.

The programs in each country will be coordinated by the country SAWS Board of Directors and the country director. Duties and responsibilities of the board and the director are described hereinafter.

### a. The Community Health Committee

The Community Health Committee (CHC) in the SAWS methodology plays a primary development role at the village level. SAWS will work with the CHC through the health promoter. The committee will serve as a forum of discussion and decision making, planning and implementation of projects in a leadership role. SAWS will focus its efforts on strengthening the committee through nonformal education and training.

The CHC will be responsible for community mobilization and self-help through financial or material support and voluntary labor. The educational process will determine the pace and substance of the development process and that SAWS will not make choices and decisions for the communities.

### b. Needs Assessments and Project Planning

Health, nutrition and agriculture problems identified through the baseline study will be discussed with groups in the community in informal training sessions by the health promoter assigned to the village and other SAWS staff. The most pressing needs and problems will be discussed and priorities will be determined jointly. Advantages and disadvantages of different means to resolve priority problems will be measured and weighed, and expert advice will be sought when necessary to finalize the means of problem solving and it is at this stage the project planning process will be initiated.

As projects are selected and approved for implementation, the committee will finalize details on the contributions in cash and kind from the local community, the local health-care or educational institution, the government and SAWS. The specific needs for technical

assistance and training will be determined. The committee will undertake project implementation with assistance from SAWS. As the local CHC's planning capabilities begin to develop, attempts will be made to train the committees in preparation of annual project plans.

c. Institutions as Bases

The SAWS Tanzania and Philippines experiences have established that when health workers can name a reputable health-care or educational institution as their base of operation they enhance their credibility in the community. The health-care centers operated by SAWS in target countries will serve as home bases for the "health promoters." Health-care centers will provide in-kind contributions to the program in the form of classroom facilities for training, accommodation for trainees where necessary and possible, and the use of their financial system to manage the budget of the program operating from that center. SAWS health-care centers are committed to the support in every way of the health outreach program.

SAWS education centers will serve as bases for the agricultural education program. Education centers will provide in-kind contributions to the program in the form of classroom facilities to train extension workers. They will permit the use of their farms and gardens as demonstration centers for extension worker trainees, and where possible, farmer groups. Education centers will, where necessary and possible, provide accommodation for trainees, and will allow the use of their financial system to manage the budget of the education extension program.

d. Nationals Trained as Health Promoters

Four to six indigenous persons will be selected according to the criteria set forth in this proposal, trained as health promoters and employed to work from the health-care institution. Health promoters will conduct health education and nutrition classes in five to seven villages around the center, thus making it possible for up to 42 villages around the health-care center to benefit from the health education services of each center.

Four to six persons with experience in farming will be trained as agro-extension workers. Each one will be assigned to work in five to seven villages around the institution. It is proposed that each agro-extension worker assist five to seven farm families in target village, thus making it possible for 294 farm families to receive training and assistance from each education center in the program.

e. Program Framework

An analysis of the problems and needs identified through the baseline studies and surveys done by Adventist health-care and educational institutions lead the planners at SAWS to believe that the following program strategies will provide the planning framework for the programs

in target countries. As stated earlier, the specific problems and needs will be discussed with the community people and CHC members who will identify priorities, measure pros and cons for suggested solutions and make project plans.

The following sections, therefore, provides a programmatic framework and a set of ideas rather than specific project plans. The program ideas have been classified into three groups. The three groups include most of the programming emphasized in SAWS programs.

- (1) Social Development
- (2) Agricultural Development
- (3) Economic Development
- (4) Resource Conservation

While this may appear to be an all-inclusive and ambitious plan, it only provides a general direction and planning framework for an integrated program for the community level decision making.

(1) Social Development

The problems of the people of the sixteen target countries in the areas of health, nutrition, family planning, sanitation, hygiene and child care will require particular attention and program emphasis. If the major bottlenecks in these areas of physical and social well-being are removed, at least partially, it will be easier for the people to achieve their potentials for significant human resource development.

Since it is the children's group that is most severely affected by the problems of health, education, sanitation, nutrition and child care and children constitute the focal point of SAWS philosophy and methodology, the program in these areas will concentrate on children in the 0-5 groups and mother's/women's groups. The following plans of action that have worked in other programs of SAWS will be discussed for community decision making.

- Technical experts in health/nutrition including SAWS resource staff will make an assessment of children in the 0-5 age groups in the community and review height, weight, immunization, nutritional status and related family data. Action plans will be prepared to improve the health and nutritional status of children.
- Community health promoters, if not already in place, will be selected and trained in primary health care, sanitation, nutrition, family planning, and other related areas for outreach programs.

- Mothers will be trained in the preparation of weaning foods and the nutritional status of children will be monitored with the health promoters' involvement.
- Traditional midwives and magic healers will receive complementary training and will be encouraged to participate in the outreach programs of primary health care.
- Educational materials will be prepared for health and nutrition education and used in the training programs for children, mothers, youth and women. Attempts will be made to incorporate audiovisual materials into the school curriculum and teacher training programs.
- The institutional workers will be trained in family planning education and motivational techniques. Attempts will be made to improve the system of contraceptive supplies and facilities in the area.
- A school snack program with locally made foods will be considered to supplement children's diet, to encourage school gardening with student participation, and to encourage mothers' participation in the school programs for cooking and serving meals.
- Nonformal education programs will be planned for out-of-school children and youth including school drop-outs and children who are never enrolled in school due to common problems of access, household chores or poverty.
- Community education and action programs for hygiene, sanitation, and cleanliness in the home and community will be planned to encourage group mobilization and improved quality of life.
- Informal and formal activities for recreation, entertainment and cultural enrichment will be planned for special groups of children, youth, women, and for the community as a whole.

(2) Agricultural Development

With a high percentage of the community residents in target countries depending on subsistence agriculture to earn their livelihood, the program will require plans to improve agricultural production. This will include plans for:

- Agricultural extension education and training of youth and farmers to demonstrate improved techniques, land preparation, multiple cropping, composting, and appropriate means of water conservation and irrigation.

- Incentives for farmers to grow protein-rich legumes to meet the nutritional needs of the community. It has been established that the cause for protein energy malnutrition is only partially a lack of knowledge. The primary cause is often the unavailability of an inexpensive source of protein rich foods.
- Promotion and teaching of farmers to grow a variety of legumes such as beans, peas and lentils. Emphasis will be placed on the growing of soybeans to produce soy grits and flour to enrich other foods.
- Demonstration and training in vegetable gardening and kitchen gardens;
- Establishing fruit tree nurseries;
- Investigating current methods of food drying and storage to reduce crop losses and experimenting with improved methods;
- Assisting farmers in developing overall farm plans for improvement in the quality and quantity of farm products;
- Investigating the utilization of grain mills, oil pressing tools and other simple implements in the homes and farms;
- Reviewing the credit needs for farming and small industries;
- Making effective links with the markets and developing appropriate distribution and marketing systems for the maximum benefit of farmers.
- Similar attempts will be made to help improve family income by investigating other options such as animal husbandry, home industries and crafts. An effort will be made to include women and youth in these programs of skill training, production, marketing and credit.

(3) Economic Development

SAWS experience in target countries is that the lack of storage facilities and steady market for their produce is the primary reason farmers do not grow more legumes. SAWS will address this problem by helping CHC in the development of small businesses to facilitate the storage, transportation and marketing of legumes. These could run all the way from a small, rodent-free warehouse to store the product, to a small factory to process soybeans into grits and flour. It is proposed that these agro-businesses be owned and managed by community health committees.

Seventh-day Adventists through its World Foods Service (WFS) have been pioneers in food technology and in the development of machinery to manufacture products such as canned and dehydrated protein products, soy milk, cereals and soy flour.

In countries with a high incidence of protein energy malnutrition, the technology and experience developed by WFS can be brought to bear on the problem.

Major project activities in this area, however, are likely to require large amounts of funds, and SAWS may not be in a position to undertake such large scale activities. The focus in this area will, therefore, be to:

- Provide seed money to carry on surveys and do feasibility studies for the establishment of large food manufacturing plants.
- Provide assistance in locating funding sources for investment in the manufacture of foods.
- Provide consultant service for the development of food factories.

(4) Resource Conservation

In the area of resource conservation it is often the case in the target countries that there is a problem of soil erosion, deforestation, and inadequate supplies of water for drinking and for irrigation.

While SAWS feels that programming efforts in these areas will lead to environmental improvement and consequently increase the probability of increasing agricultural productions and improving the quality of life, it also recognizes that major activities in this area will require large amounts of funds which SAWS may not be in a position to provide. The focus in this area will, therefore, be to develop an awareness among community members about the need for conservation of natural resources needed in their daily life. An attempt will be made to introduce alternate resources to meet consumption needs and to encourage innovations and acceptance of appropriate technology.

As the resource conservation programs funded by other private and public agencies get underway in the target countries, attempts will be made by SAWS to establish appropriate linkages between the community development activity and the resource conservation program.

Possible action plans in this area are suggested here:

Studies and resource conservation plans for the area which have already been prepared by technical experts will be reviewed. Locations in which erosion, deforestation, and scarcity of water supply are most critical will be identified.

Local action plans, reflecting problems and possible solutions will be presented to the responsible government ministry.

- - Fuel consumption, with special attention to wood usage and deforestation practices, will be studied in further detail to determine if improvements could be made in the design, construction and use of alternate technology. The introduction of fuel efficient stoves will be considered as will biogas.
- Water catchment and distribution systems will be designed to meet peoples' needs of water supply through water conservation and storage.
- People will be encouraged to plan nurseries to reduce soil erosion.
- The potential of wind and solar energy will be examined and appropriate applications will be tested.

f. Coordination of Program with Host Governments

There will be constant consultation between SAWS and each host government and other PVO's during the operation of the program. Every effort will be made to adhere to each individual government's political ideologies (in line with USAID's legislative priorities), economic development and health policies as related to externally and privately funded and operated programs. Maximum cooperation will be sought between SAWS and AID funded programs and the host country's Ministry of Health, especially in those matters concerned with rural primary health-care programs. In order to avoid duplication of program activities with those operated by the host governments, efforts will be made to identify the types of services provided by the existing on-going primary health-care programs in the target areas.

g. Evaluation

Evaluation of community projects and the overall country program will be an integral part of the development process.

SAWS will establish a comprehensive system to evaluate the project. SAWS has used the case study technique to evaluate its existing development projects. It is recognized, however, that a more comprehensive methodology is necessary. SAWS has, therefore, undertaken to

engage an experienced and qualified evaluation officer to set up a system on every level of the program to evaluate the progress and long term objectives and impact on the target population.

Baseline data on the levels of protein energy malnutrition, prevalence and incidence rates of major communicable diseases, level of agricultural out-put, sanitary conditions in homes, food preparation and storage, degree of cooperation among community members and between neighboring communities in improving environmental and sanitary conditions in their communities and utilization of available medical facilities. Data collected before the implementation of the program will be analyzed and the results will be used as a base with which to compare the program performances.

Periodic surveys will be carried out on randomly selected villages and data will be collected by SAWS on health and socio-economic status of the people using acceptable health and socio-economic parameters and measures specified in the evaluation instrument developed before the implementation of the proposed program. A system of collecting, analyzing, storing and retrieving information relevant to the activities of this data will be used by program management to assess program performance and progress toward achieving the long term objectives and goal.

Each year projects will be analyzed and evaluated by the CHC and field staff to assess their impact on the quality of life and the benefits made available to the children and families in the area. The evaluation will ascertain the achievements of the community development process, peoples' self-confidence and participation, access to resources, services, facilities and opportunities, usefulness of technical assistance and effectiveness of training completed during the project period.

Outside consultants or research agencies will be involved in conducting a systematic midterm evaluation during the second or the third year. A final evaluation at the end of the third year will be conducted to compare the achievements with data gathered through the initial baseline study.

A case study of each program will be prepared to analyze the process of community based integrated development at the end of the third year which will be made available to appropriate government agencies for practical lessons and possible replication and expansion.

h. End of Project Goal

The ultimate goal of these projects is:

- (1) To develop functioning, self-reliant, community based organizations in the rural areas of each target country, which have the technical, educational and organizational skills necessary to define and solve problems related to community

health, sanitation, nutrition and the growth, preservation, marketing of protein-rich foods.

- (2) To develop a reservoir of trained and fully functioning indigenous health workers (health promoters, health trainers, nutrition aids) who possess the leadership and organizational skills and tools to branch out into other development areas at the local level as employees of:
  - (i) Community health organizations that will have become convinced of the need for continued health education programs in the community.
  - (ii) Public health agencies of the government.
  - (iii) Other PVO's with health education programs.
- (3) To show local communities how they can:
  - (i) Increase the supply of affordable protein rich foods to eliminate protein malnutrition.
  - (ii) Substantially increase their income by the growth, preservation and sale of vegetable protein foods and the manufacture of protein cereals.

### 3. Program Management Operations

#### a. Headquarters Staff

The Matching Grant program will be coordinated at SAWS world headquarters by the Deputy Director for Development. He will be assisted by staff personnel including the Assistant Director for Planning and Evaluation, the Assistant Director for Health and Nutrition and the Assistant Director for Agriculture (See Appendix E&F) and other consultants as needed.

#### b. Country SAWS Board of Directors

The country program will be under the supervision of the Country SAWS Board of Directors. The board will consist of directors of the health-care and educational institutions participating in the MG program, such other technicians and administrators as the Regional Board Directors shall appoint. The country director shall serve as secretary of the Board.

#### c. Country Director

A director will be appointed to coordinate the program in each target country. The director will be responsible for the operating budget of the program. She/he will supervise the health education outreach program, the agro-extension education program, the development of small agro-businesses, and the establishment of the country evaluation system. The director will supervise the work of the health and nutrition training officer and the agricultural training officer.

The essential function of the director is to ensure creative imaginative planning and innovative experimentation in program development and to play a leadership role in program administration and management. He will collaborate with the Social Services National Coordination Council, the Community Services Coordination Committee and other government funding agencies and other institutions within the country and abroad, and liaison with the agency's headquarters in the United States. The director is responsible to the director for the region in which he is located and through the regional director to the director of SAWS/Washington.

d. Country Office Staff

A team of program staff members will assist the director in planning and implementing the programs and projects, and training the field staff and community members. The main function of the program staff will be to provide program support to the impact area team through training, nonformal education, establishment and maintenance of institutional contacts to strengthen the village level program and arrangements for technical experts, materials and supplies to facilitate project implementation. Although the program team will be stationed in country of headquarters, the staff will spend a considerable amount of time in areas where base institutions are located. The two program officers will be either a health and nutrition training officer or an agricultural training officer depending on the program that will be implemented in the country. Training officers may be nationals or foreign personnel.

e. Country Administrative Team

The program team will be assisted by the administrative team at the base institution in matters related to administration, finance, personnel, management of funds from multiple sources, programmatic and financial reporting, correspondence and logistical support. This will include an accountant, a secretary, and a translator/secretary.

f. Training Officers

A qualified person will be appointed to train four to six "health promoters" (HP) who will work out of each health-care center. An agricultural expert will be appointed to train four to six "ag-extension workers" (AEW) who will work out of each education center. The health trainer and agriculture trainer will be responsible for supervising the work of the health promoters and the ag-extension workers in the field. The trainers will conduct refresher seminars for field workers every six months and be responsible for assisting them in every way.

g. Health Promoters

- Health promoters will be recruited and trained to conduct nutrition classes, cooking schools, health and sanitation classes and classes in maternal and child health care in each target village. Visual aids and other techniques material will be provided and community groups will be organized to promote and encourage participation in the education process.
- Ag-extension workers will be recruited and trained to encourage and assist farmers to plant protein-rich legumes. Extension workers will promote the planting of family kitchen gardens. Where necessary, seeds and other tools will be provided. As workers will assist farmers and gardeners in the marketing of their produce.
- Health promoters and ag-extension workers will be responsible for implementing the evaluation system on the village level.

h. Consultants

Consultants will be hired from within the country or from abroad as and when necessary for technical assistance and planning. The possibility of government officials or council officials being seconded for involvement in the program and training will be explored. The field office will be based in the project country.

i. Selection of Health Promoters

The SAWS Board will work with the health-care and educational institutions in identifying potential health promoters and ag-extension workers. Criteria for the selection of workers are the following:

(1) Health Promoter Selection and Qualifications

The health promoter is a village level worker selected to provide minimal health services to the village. The health promoter selected should when possible meet the following criteria:

- i. Preferred age: between 25-35 years
- ii. Sex: female or male
- iii. Education: no minimum education mandatory, but should be able to read and comprehend health literature and communicate verbally with ease.
- iv. Should have lived in the area for at least 10 years.
- v. Should have reputation for leadership and responsibility.

j. Training and Nonformal Education

The concept of community decision making, leadership, community organization and participation is based on the principle of learning by doing, experiential learning, functional nonformal education and training. This will be achieved by the country trainer and the Impact Area Team as they work with the community people to identify needs, plan and implement projects, and as the community takes charge of the development process.

The Impact Area team including the health promoter and area supervisor will receive training to prepare them for their facilitator roles from the field office staff and the director who in turn will receive continuing education, training, program support and technical assistance from the headquarters staff and technical experts. This will be combined with seminars, conferences, study and observation tours within the region for the field office staff as well as the appropriate government officials.

A comprehensive training strategy for the target country field office will be prepared annually by the director in collaboration with the Regional Office Team and resource staff at SAWS/Washington.

The training strategy will include plans for training the program and administrative staff at the country office, and the country coordinator and the Impact Area Team as well as the community members. Training will be tailored according to program needs and will be functional and experiential.

During the first year, the Program Team will visit the programs of SAWS in other parts for regional training and observation tours. The Regional Training Coordinator will provide training assistance to the field office staff at the community level and assist them in preparation of training designs, methods and materials. The training program will be strengthened through regular visits of the Regional Team and the program staff from the headquarters to the country office. The Matching Grant funds will be used for the training support provided by the Director of Planning and Evaluation, and the regional training activities.

Seminars will be conducted during the second and third years jointly with the country officials and other appropriate government officials to review the process of community based integrated rural development and to discuss related issues and possibilities for replication of the program methodology in other parts of the country.

Training for the health promoters will be done in two phases.

(1) Phase One

In phase one the selected candidates for training will undergo a three-week course at the SAWS Training Center. The training will be conducted eight hours a day for

five days a week. A total of 120 hours of lectures and practical training will be given. Practical training will be conducted in ongoing community health programs near the center.

A pretest and post-test will be given to all the trainees. The following nutrition and related subjects will be taught:

The topics are grouped into two basic classifications. One area emphasizes that "good food is good health." The other area explores the synergistic relationship between infection and malnutrition.

- i. Good food is Good Health
    - Breast is best, bottle is "bad."
    - A good food is a mixed food.
    - Proteins build bodies.
    - Start solids at four months.
    - Bodies need fruits and vegetables.
    - The wisdom of gardens for both food and money.
    - The best food for the least money.
    - Wonderful ways to prepare and serve your food.
  - ii. Infection Causes Malnutrition and Malnutrition Leads to Infection
    - Sick children need food and drink.
    - Boil your drinking water.
    - Brush the flies from your babies' eyes.
    - Not growing means trouble; how to walk the road to health.
    - Preventing illness by good foods (a child needs protective foods each day).
- k. Model Curriculum Prepared in Haiti

In 1979, under the direction of Loma Linda University School of Public Health located in Loma Linda, California, using the facilities of the Institute Adventiste D'Haiti, SAWS developed a curriculum for training health promoters. It emphasizes the use of parables or other catchy stories designed to be easily remembered and informative. Each story contrasts the good, bad and neutral

sides of an issue and can be readily taught. Use of charts, posters and other visuals can aid in the presentation, and health promoters can be tested as to their retention of the material.

- Basic nutrition
- Food groups
- Balanced diets
- Food supplementation
- Food preparation
- Diet analysis
- Breast feeding
- Weaning methods
- Weighing and charting
- Control of infectious diseases
- Anemia and xerophthalmia
- Home crafts; sewing
- Money management in food purchasing

The training will take place under the supervision of the Training Officer, who will be assisted by a team consisting of a public health nutritionist, physician, and public health nurse aides or other medical practitioners.

(2) Phase Two

Phase two of the training will be through regular inservice training seminars conducted by the health educator, public health nutritionists and other available medical personnel. The inservice training will encompass:

- Further instruction in nutrition
- Simple treatments
- Sanitation: house hygiene, garbage and waste disposal
- Antenatal care
- Immunization
- Family planning

With inservice training and increased competency based on an evaluation protocol, the health promoter will be able to perform additional tasks:

- Sewing classes
- Simple skin and eye treatments
- Referral of cases
- Establishing and maintaining contact with local government

health agency, TBA's (traditional birth attendants) and traditional healers.

- Training Ag-extension workers

Since experience is the principle qualification for these jobs, training of ag-extension workers will be done in one phase. The selected candidates for training will undergo a three-week course at the Educational Training Center. The training will be conducted eight hours a day for five days a week. A total of 120 hours of lecture and practical training will be given. Practical training will be conducted on the school farm and garden by a team consisting of the agriculture teacher and farm manager.

1. Supervision, Remuneration, Evaluation, Upgrading

Supervision: The health promoter will function under the direct supervision of an area supervisor and the agriculture worker will function under the direct supervision of the ag trainer. Further supervision and evaluation will be performed by the program director.

Remuneration: The full-time head health promoter and ag worker will receive a salary and travel allowance in keeping with established local rates.

Expenses of training, travel, per diem (during extended time periods away from home) will also be covered by the project.

Evaluation: The evaluation of the health promoter and ag worker will be based on the following criteria:

- Individual performance in teaching
- Increasing competency in skills taught
- Relations with the community
- To what extent the HP (health promoter) and AEW (ag-extension worker) is meeting the project objectives.
- Accuracy in record keeping

Upgrading: A system of upgrading will be set up so as to increase the motivation of the health promoter and ag worker. The following avenues will be used:

- Salary increments
- Increased responsibilities in conducting sessions
- Certificates of merit and achievement
- Regional supervisory duties (increased responsibility over additional centers to be added later.)

Ideally, some of the most capable promoters and ag workers will seek additional training through the proposed government programs and become full-time community workers in the expanding rural health-care and ag programs developed by local governments.

**LOGICAL FRAMEWORK:** The following logical framework is a program outline which illustrates SAWS objectives for the MG program in broad terms. More specific indicators may be established by community members and staff at a later period when beneficiaries are actively participating in the planning process.

**NARRATIVE OBJECTIVE**

**Program Goal:** The broader objective to which this project contributes:

To improve the health, nutrition and socio-economic conditions of the rural population within a defined radius of the health care and educational institutions operated by SAWS in targeted countries.

**Sub Goal:**

To expand community health and agricultural education outreach programs from SAWS health care and educational institutions.

**VERIFIABLE INDICATORS**

Measures of Goal Achievement:

Beginning in 1982:

Annual improvement of health and economic conditions of beneficiaries, measured by:

Decrease in nutrition and sanitation related infant morbidity and mortality in target communities.

Increase of garden vegetables in target communities.

Increase supply of protein-rich legumes and their byproducts at affordable prices in target communities.

Develop attitudinal and participatory community support for the establishment of permanent health information dissemination in target communities.

**Project Purpose:**

Over a three-year period SAWS will support a community development process that will emphasize new programs in designated communities of six countries, and expand ongoing programs in designated communities of ten countries within the overall context of SAWS integrated community development framework in the following areas.

1. Community nutrition awareness.
2. Health and sanitation reforms.
3. Improved gardening practices.
4. Improved production of protein-rich legumes.
5. Small community operated agro-businesses.
6. Data collection system in place.

Conditions that will indicate purpose has been achieved:

End of project status:

1. A minimum of 40 communities in the environs of 47 SAWS health-care institutions in 13 countries will have community health outreach programs focussing on nutrition, sanitation and general health principles.
2. A minimum of 30 communities in the environs of 38 SAWS education institutions in 16 countries will have community health outreach programs or agricultural extension programs focussing on better methods of growing garden vegetables and legumes rich in proteins.
3. A minimum of 10 impact areas will have small community projects utilizing some appropriate technology to preserve seasonal foods or produce food byproducts.
4. Community committees established and managed by local leaders in all impact areas organized to provide health nutrition information.

Outputs:

Program Planning:

1. Feasibility studies for new impact areas and new country programs implemented.
2. Planning system implemented.

Country Programs:

3. Trained group of local national community health educators working from each health-care center.
4. Trained group of national agricultural extension workers based at each educational center.
5. Small agro-businesses established in target communities.
6. Information system in place in each target country.

Program Support:

7. Training needs assessment and comprehensive training plan for field staff developed.
8. Field staff and communities trained in basic health education needs.
9. Administrative support systems refined and functioning.
10. Functional evaluation system developed.

Project Inputs:

1 Program coordinator	16 country directors
1 Health/Nutrition director	Technical consultants
1 Agricultural director	Project funds
1 Planning/Evaluation director	Program structure and network
1 Food technology consultant	Regional staff support
1 Regional directors (SAWS)	

Magnitude of Outputs:

Program Planning:

1. Feasibility studies for 6 new countries and 29 new impact areas and programs completed by end of year 3.
2. Systematic application of planning processes implemented in 100% of all projects and programs by end of 3 years.

Country Programs:

3. Four to six trained community health educators based at each health-care center and working in target communities.
4. Four to six trained agro-extension workers based at each educational center and working in target communities.
5. Community groups organized to plan and establish small agro-businesses in each target community.
6. Each community worker trained in data collection, responsible for locally based program, provide data to national director. National director supply baseline data to SAWS/ Washington monitoring reports as required.

Program Support:

7. Comprehensive training program plan for each country developed and at least one training program being implemented in each country by end of year 1.
8. All field staff have participated in training activity by end of year 1.
9. Reporting system fully implemented in all programs by end of year 1.
10. An evaluation of all projects in all impact areas will be conducted using the evaluation system by end of year 3 in 16 countries.

Implementation Target (Type and Quantity)

	<u>1st year</u>	<u>2nd year</u>	<u>3rd year</u>	<u>Total</u>
AID	602	797	752	<u>\$2,151</u>
SAWS	601	797	753	<u>\$2,151</u>

## MEANS OF VERIFICATION

### Means of Verifying Goal:

- Case studies by international agencies
- Government statistics
- Census reports
- Evaluation reports
- Planning documents
- Community reports

### Means of Verifying Purpose:

- Project reports
- On-site visits and surveys
- Special office reports
- Evaluation reports
- Planning documents
- Community reports

## ASSUMPTIONS

### Assumptions for Achieving Goal Targets:

- No major global conflict
- World economic system does not deteriorate
- Climatic conditions do not change radically
- Political situation in countries remains stable
- That SAWS relationship with private donors is maintained to sustain its matching funds capability.

### Assumptions for Achieving Purpose:

- Communities are willing to cooperate and work together.
- Communities can be motivated to have control over their own physical wellbeing.
- Local and national governments want development initiation at community level.
- Leaders exist in communities.
- New techniques can be successfully transmitted to various distinct cultures.
- AID funding will be acceptable to national governments.
- Political climate is conducive to community organization and programs.

Means of Verifying Outputs:

- Existence of comprehensive training plan for countries and regions.
- Reports on workshops and seminars.
- Project Reports.
- Existence of project proposals.
- Existence of feasibility studies.
- Existence of appropriate country technology guidelines.
- Community committee reports on funds.
- Field office reports.
- Evaluation reports.
- Field visits.

Assumption for Achieving Outputs:

- Training is relevant, effective and culturally appropriate.
- Participation of communities is active, not passive.
- Evaluation system designed is relevant and effective.
- Time for training will be allowed by communities and SAWS.
- Staff turnover is minimal.

Means of Verifying Inputs:

- Financial Reports
- SAWS Office Reporting System
- Annual Audit Report
- Personnel Reports

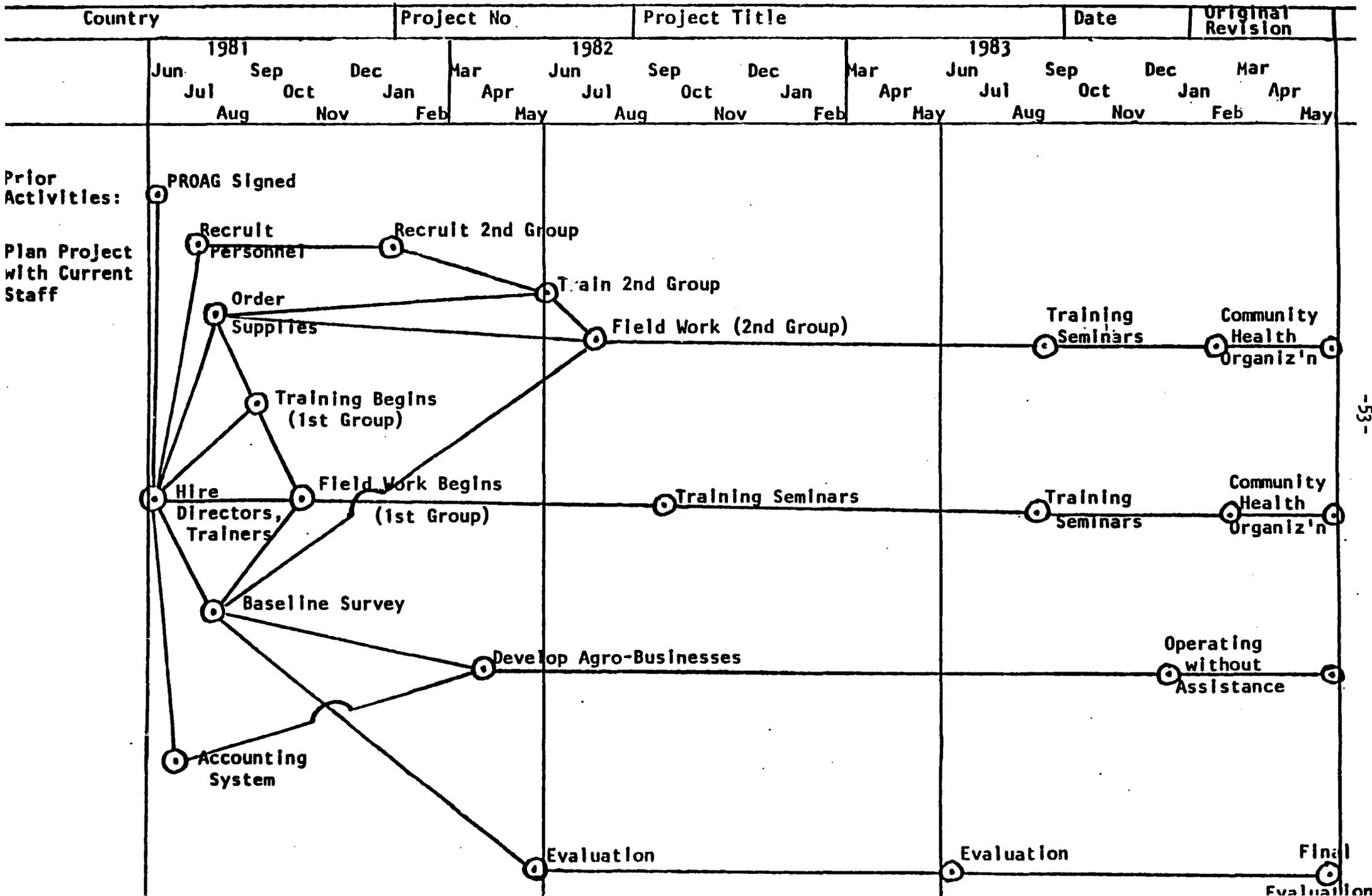
Assumptions for Providing Inputs:

- Funds available when needed.
- Qualified personnel available as programmed.
- Sufficient coordination will be maintained.
- Advice provided by technical staff will be utilized by SAWS staff and community committee.
- SAWS will sustain its normal program and projected income.

TIME FRAME/SCHEDULE OF SIGNIFICANT EVENTS  
(Months)

ACTIVITY	0	6	12	18	24	30	36
<b>PHASE I</b>							
Program starts	----->						
Selection of training sites and expansion of training facilities	----->						
Hiring of technical personnel and staffing of training centers	----->						
Purchase and shipment of training equipment and supplies to program sites	----->						
Recruitment of suitable local persons to undergo training	----->						
Carrying out of community surveys to collect baseline data; analysis of data	----->						
Training of community health and agricultural extension workers starts	----->						
Selection and organization of communities where program activities will be carried out	----->						
<b>PHASE II (6 - 9 months later)</b>							
Training of first group ends and training of second group starts		----->					
Detailed analysis of rest of baseline data continues		----->					
Full-scale operation of program activities in first sites starts		----->					
Training of second (last) group of health and agricultural 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						----->	

PROJECT PERFORMANCE TRACKING NETWORK CHART



PART IV

IMPLEMENTATION OF THE PROGRAM

The proposed Matching Grant Program will be implemented in the following regions and countries:

<u>Region</u>	<u>Country</u>	<u>Centers</u>
Africa	Burundi	1
	Ghana	3
	Kenya	8
	Rwanda	5
	Tanzania	10
	Zimbabwe	7
Asia	Bangladesh	4
	Pakistan	4
	Sri Lanka	2
Latin America/Caribbean	Bolivia	2
	Haiti	5
	Honduras	2
	Jamaica	5
Pacific	Papua-New Guinea	9
	Philippines	12
	Sarawak	2

A description of each country project and the names and addresses of the proposed centers in each country follows.

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A. Region: Africa

1. Country: Burundi

The first Seventh-day Adventists to enter Burundi in 1925 made education the focus of their outreach activities. This has remained the case until recent years when it was documented that protein energy malnutrition among children under five years of age had become widespread.

Burundi is one of the most densely populated countries of Africa. Agricultural practices are primitive, but it would appear that the high incidence of malnutrition exists more from ignorance than from a lack of food supply. However, unless steps are taken to increase food supply, the rapidly growing population will compound the problem that now exists.

SAWS operates an extensive education system in Burundi. The outreach program there is manned by 127 full-time workers. SAWS will work through the infrastructure of local schools to upgrade the health and nutrition awareness of the community.

SAWS will implement its program in Burundi through:

Education Center

Kivoga College  
(College Adventiste de Kivoga)  
Boite Postale 1800  
Bujumbura, Burundi, Africa

- A. Region: Africa
- 2. Country: Ghana

Seventh-day Adventists began their humanitarian work in Ghana in 1892. Medical work was first started there in 1895 and the first school was built in 1896. Today SAWS operates a teacher training college, a vocational institute, and two secondary schools.

The matching Grant Project in Ghana will be conducted with personnel who have reached a higher level of formal education than those we expect to use in the other countries in this proposal. Because better transportation facilities will be available, it is also expected that the defined radius of the project will also extend much farther from the education centers than will be the case in other countries. SAWS will watch these differences closely to see what results they will produce.

The Matching Grant Program in Ghana will be conducted from the following centers:

Education Centers

Seventh-day Adventist Teacher  
Training College  
P.O. Box 18  
Asokore-Koforidua, Ghana  
West Africa

Seventh-day Adventist Secondary School  
P.O. Box 30  
Agona, Ashanti, Ghana  
West Africa

Seventh-day Adventist Secondary School  
P.O. Box 45  
Bekwai, Ghana  
West Africa

A. Region: Africa

3. Country: Kenya

Seventh-day Adventists began work in Kenya in 1906. There are 691 community service and institutional workers serving in the employ of the organization. University College of Eastern Africa and Kamagambo High School and Teacher's College will serve as bases for the agricultural project.

Thirteen dispensaries and Kendu Mission Hospital with its nursing school and multi-specialty city clinic are operated by the Seventh-day Adventist World Service in Kenya. The health director of this complex is now obtaining advanced studies in public health at Loma Linda University and is seeking to implement an expanded rural health program throughout the country.

The Kendu Bay Hospital has been training nurses/medical assistants for a number of years and now utilizes these personnel to staff the various dispensaries. The dispensaries are located primarily in the rural areas and would be ideal bases for expansion into rural health programs.

Additional planning is underway to develop a short training course for the preparation of rural health workers. This would probably be located at Kendu Bay Hospital or the nearby secondary school and would prepare staff to expand the preventive activities of each dispensary. The government of Kenya is supportive of this type of endeavor and will provide conceptual assistance from the Ministry of Health.

SAWS will implement the Matching Grant Program in Kenya from the following centers:

Health Centers

Kendu Adventist Hospital  
P.O. Box 5059  
Kendu Bay, Kenya, East Africa

Likoni Road Clinic  
P.O. Box 48629  
Nairobi, Kenya, East Africa

Enkorika S.D.A. Health Center  
P.O. Box 57  
Kajiado, Kenya, East Africa

Nairobi S.D.A. Medical Service  
P.O. Box 48629  
Nairobi, Kenya, East Africa

Gesusu Dispensary  
P.O. Box 3  
Gesusu via Keroka, Kenya  
East Africa

Riodindo Health Centre  
Mayoge Location  
P.O. Box Kenyanya, via Kisii  
Kenya, East Africa

Education Centers

University College of Eastern  
Africa  
Private Bag  
Eldoret, Kenya, East Africa

Kamagambo High School  
and Teacher's College  
P.O. Box 591  
Kisii, Kenya, East Africa

A. Region: Africa

4. Country: Rwanda

Seventh-day Adventists began to work in the territory now known as Rwanda during the Great War. By 1924, several missionaries had established educational, medical and spiritual uplift work in this beautiful country. There are now over 700 full-time workers serving the people of Rwanda. Over 400 of these are teachers serving in 290 elementary schools. A strong primary health care program is also well established there.

SAWS Rwanda will direct its health education to school age children primarily. The principles of disease prevention, home gardens, food preservation, a balanced diet will be instilled in them. Because the extreme density of population has created a high incidence of protein energy malnutrition, particular emphasis will be given to maternal child care and cooking schools for mothers and teenaged girls.

In addition to its work through health education centers, SAWS will conduct a PL480 Primary School Feeding program to relieve severe malnutrition among 6,000 school age children in the area of Gikongoro. This figure will increase to 15,000 by FY '82.

The Ministry of Social Affairs has requested that SAWS aid in the resettlement and rehabilitation of 1,000 families who have been moved from extremely low income, overcrowded and distressed areas to a commune at Rusomo. SAWS will over the next two years assist them through Food for Work for land clearing, home building, garden planting on their own land. Seed for gardens and other supplies will be provided by SAWS.

SAWS will implement its Matching Grant Project in Rwanda from the following health care and education centers:

Health Centers

Mugonero Hospital  
Boîte Postale 65  
Kibuye, Rwanda, Africa

Kinunu Dispensary  
B.P. 63  
Kibuye, Rwanda, Africa

Gitwe Dispensary  
B.P. 1  
Nyabisindu, Rwanda, Africa

Education Centers

Adventist University of Central Africa  
B.P. 33  
Ruhengeri, Rwanda, Africa

Gitwe College  
(College Adventiste de Gitwe)  
B.P. 1  
Nyabisindu, Rwanda, Africa

A. Region: Africa

5. Country: Tanzania

The work of the Seventh-day Adventists in Tanzania dates back to 1903. Five hundred forty-eight community service and institutional workers are employed by the organization in this country. Three secondary schools will serve as bases for the agricultural program and Heri Hospital and 14 of the 29 clinics and dispensaries will serve as bases for health and nutrition education in the first phase of the program.

Although SAWS and Loma Linda University have done health and nutrition education in Tanzania since 1924, this country still offers many challenging opportunities to expand the work that has already begun. SAWS operates a large number of health care centers in this country, and most of them have well developed health and nutrition education programs. All of these will be expanded further through this Matching Grant Program.

The program will also provide an opportunity for SAWS program directors to gather answers for some of the questions in health and nutrition education. Among these are the following:

- a. How much more effective would better educated and trained health promoters be in working with village level people?
- b. How much time is needed to effect significant behavior modification among unsophisticated village people?
- c. What are the results of health and nutrition education among various age groups of children?
- d. How far from the health center base can health promoters do effective work?

SAWS will implement the Matching Grant Program in Tanzania from the following centers:

Health Centers

Heri Mission Hospital  
P.B. Kigoma  
Tanzania, East Africa

Busegwe S.D.A. Clinic  
P.O. Box 26  
Musoma, Tanzania, East Africa

Arusha Adventist Seminary  
Dispensary  
P.O. Box 7  
Usa River, Tanzania  
East Africa

Bwasi Dispensary  
P.O. Box 243  
Musoma, Tanzania  
East Africa

(Tanzania)  
Health Centers

Dar es Salaam Magomeni SDA Dispensary  
P.O. Box 15083  
Dar es Salaam, Tanzania  
East Africa

Dodoma SDA Dispensary  
P.O. Box 346  
Dodoma, Tanzania, East Africa

Ikizu  
Via Musoma, Tanzania  
East Africa

Kasamwa Dispensary  
P.O. Box Kasamwa  
Via Geita, Tanzania, East Africa

Education Centers

Tanzania Adventist Seminary and College  
P.O. Box 7  
Usa River, Via Arusha  
Tanzania, East Africa

Ikizu SDA Seminary  
P.O. Box Ikizu  
Via Musoma, Tanzania, East Africa

A. Region: Africa

6. Country: Zimbabwe

The medical, educational and spiritual work of Seventh-day Adventists in Zimbabwe began before the turn of the century with the establishment of Solusi College in 1894. There are now four other secondary schools from which to operate the agricultural education program and four clinics to serve as training centers for health and nutrition workers. Six hundred eight workers are employed by the organization in this country.

As a newly independent country, Zimbabwe is seeking to make giant strides in the development of rural health programs for their local populations. Though there are several city clinics operated by the Adventist Church in Zimbabwe, there is no rural hospital and only a very minimal dispensary network. It is proposed that this be expanded further and a rural health component developed. The short-term training for preparation of rural health workers is proposed to be based at Solusi College near Bulawayo. Coordination of these village health programs would be directed from the national headquarters in Salisbury.

SAWS will implement the Matching Grant Program in Zimbabwe from the following centers:

Health Centers

Lower Gwelo Dispensary  
Private Bag 9002  
Gwelo, Zimbabwe Rhodesia, Africa

Solusi Dispensary  
Private Bag T-5399  
Bulawayo, Zimbabwe Rhodesia  
Africa

Bulawayo Dental Services  
P.O. Box 573  
Bulawayo, Zimbabwe Rhodesia, Africa

Education Centers

Lower Gwelo College  
Private Bag 9002  
Gwelo, Zimbabwe Rhodesia, Africa

Solusi College  
Private Bag T-5399  
Bulawayo, Zimbabwe Rhodesia  
Africa

Hanke Secondary School  
P.O. Box 230  
Selukwe, Zimbabwe Rhodesia, Africa

Inyazura Secondary School  
P.O. Box 56  
Inyazura, Zimbabwe Rhodesia  
Africa

B. Region: Asia

1. Country: Bangladesh

Seventh-day Adventists began work in the territory of Bangladesh in the last decade of the nineteenth century. In the early 1900's, schools were established and soon followed by medical centers. Today, 212 full-time workers carry on the medical, educational and spiritual uplift work of SAWS in Bangladesh.

Preliminary work has been done by the staff of the health care institution to provide health education to the community. Sanitation and nutrition are major problems in this the world's most densely populated country. SAWS will expand its efforts through its centers of higher education to provide health and nutrition education, conduct cooking and food preserving schools, and conduct classes in child care.

SAWS will implement its program in Bangladesh from the following centers:

Health Centers

Gopalganj Hospital  
Gopalganj P.O.  
Faridpur District, Bangladesh

Adventist Dental Clinic  
70 Gulshan Avenue  
Dacca, Bangladesh

Education Centers

Bangladesh Adventist Seminary  
Goalbathan  
Kaliakoir Post  
Dacca District, Bangladesh

Kellogg-Mookerjee Memorial  
Seminary  
Jalirpar, Faridpur District  
Bangladesh

B. Region: Asia

2. Country: Pakistan

The outreach work of Seventh-day Adventists in Pakistan had its beginning in 1901. The emphasis of the work here has always been health and medical. There are now four health care institutions operating in the country, with a strong emphasis on community health education. Eighty-seven full-time workers now carry on the outreach programs of SAWS.

An extensive training and village health program has been developed in Chuharkana Mandi district near Lahore, Pakistan. This is based at Pakistan Adventist Seminary and College and includes a two-year training program for village health workers. Two classes have already graduated and approximately 30 students are now in training.

Upon completion of training, the students are based in the surrounding villages to provide rural health care, including maternal and child health immunizations, nutrition, agriculture and sanitation advice. This program has met a definite need in rural Pakistan, where the National Health Care System is almost non-existent. Health center and training facilities have recently been constructed at the college and now expansion into the rural areas is taking place with each succeeding graduating class.

The college has an official affiliation with Loma Linda University School of Health to assist in the development and direction of this program. At the present time one of the professors of International Health from Loma Linda is based at Chuharkana to direct the activities there.

It is expected that further expansion can take place as more graduates are prepared and village contacts can be made. In particular, the villagers are asked to assist in the construction of a small health center, including facilities for first aid and simple curative care as well as educational activities about nutrition, agriculture and sanitation.

SAWS will implement the Matching Grant Program in Pakistan in the following centers:

Health Centers

Karachi Hospital  
91 Depot Lines  
Post Box 7289  
Karachi, Pakistan

Adventpura Dispensary  
Adventpura Post  
Multan Road  
Lahore, Pakistan

Chuharkana Dispensary  
Chuharkana Mandi  
Sheikhupura District  
Pakistan

Education Center

Pakistan Adventist Seminary  
and College  
Chuharkana Mandi  
Sheikhupura District, Pakistan

- B. Region: Asia
- 3. Country: Sri Lanka

Seventh-day Adventists began work in Sri Lanka in 1903 with an educational outreach program. One hundred thirty full-time health and educational workers now serve the needs of the people of Sri Lanka through SAWS activities.

The Lakeside Medical Center in Kandy, Sri Lanka has been very active in developing rural health programs in the surrounding areas. The national physician in charge has public health training and, together with his wife, has spearheaded this effort.

In conjunction with the Medical Center a college is training several kinds of health cadres, including nurses. The college administration is also supportive of establishing additional programs for rural health workers that can serve Sri Lanka. It is proposed that further expansion of rural health work under the medical supervision of the hospital and with the cooperation of the college academic program is now appropriate.

There is particular interest in agriculture and utilization of soybean products as a means of solving the malnutrition problems on the island. The rural health workers will be given specific expertise in the growing, marketing and processing of these products.

SAWS will implement its Matching Grant Program in Sri Lanka through the following institutions:

Health Center

Lakeside Medical Centre  
40 Victoria Drive  
Kandy, Sri Lanka

Education Center

Lakpahana Adventist Seminary  
Mailapitiya  
Sri Lanka

C. Region: Latin America/Caribbean

1. Country: Bolivia

Bolivia was the last of the countries of South America in which Seventh-day Adventists began their educational, medical and spiritual uplift work, but by 1897, considerable progress had been made to bring help to the Indians around Lake Titicaca. By 1909, medical work was well established and a comprehensive elementary school system, particularly among the Indians, was developed. There are now 188 full-time workers serving the needs of the people of Bolivia.

SAWS Bolivia and its counterpart indigenous relief organization OFASA (Obra Filantrópica y Asistencia Social Adventista) de Bolivia is currently operating health education programs which need to be enlarged. One of the things that inspires SAWS/OFASA to enlarge its medical program to include vaccination campaigns is the report found in the Evaluación Integral del Sector de Salud en Bolivia, Mission Económica de los Estados Unidos USAID/Bolivia, 1978, page 92, which says that measles is still the second principal cause of death in children of less than five years of age. Of course, it also indicates that this is complicated by the malnutrition of the child, therefore it is important for SAWS/OFASA to not only have immunization campaigns but also to give nutrition instruction to the communities. The need for nutrition instruction is again evident from the report, which states that disease and malnutrition are inter-related, forming a vicious circle in the cause of death.

SAWS/OFASA plans to continue the operation of its Mobil Medical Unit in the Altiplano surrounding the city of La Paz. An area will be selected for weekly medical attention and health education, then the other days would be spent in the back country of the Altiplano delivering First Aid medical attention, vaccination programs and health education lectures. In addition to the health education lectures and medical attention some medicines, vitamins, minerals, etc. will be provided free for patients of the more needy class.

It is the plan to have outpost medical clinics such as in the area of Cochabamba for vaccination programs, medical attention, screening for tuberculosis and venereal disease. When one leaves the Altiplano of Bolivia and begins to move into the jungle area, one finds that the people are scattered and the population is very sparse. In many of these areas there is a lack of medical attention because it is difficult for a doctor to travel from place to place using many hours of precious time and much expense. For these reasons SAWS/OFASA would like to enlarge their medical programs.

It is the philosophy of SAWS/OFASA that to only give emergency medical attention or to only give food to satisfy the immediate hunger is to fulfill just a part of the responsibility we have to humanity. It is good to give this attention but it is also necessary to educate the person. Therefore, it is the plan to have nutrition education programs presenting the theory of good nutrition and the practice of preparing nutritious foods. It is also necessary to provide training in hygiene, pre-natal care, family planning and child development.

(Bolivia)

Statistics show that for every 1,000 of the population in Bolivia 19 die each year as compared to Mexico for which of every 1,000 of the population only 9 die. This is evidence to indicate that the high per cent of malnourishment is taking its toll among the people of Bolivia.

SAWS/OFASA has been invited to operate 38 maternal child health programs involving nearly 10,000 recipients. The operation of these mother/child programs will begin in January, 1981.

SAWS will implement the Matching Grants Program in Bolivia from the following centers:

Health Centers

Clinic Adventista  
de Santa Cruz  
Santa Cruz, Bolivia

Clinic Adventista  
de La Paz  
La Paz, Bolivia

Clinic Adventista  
de Cochabamba  
Cochabamba, Bolivia

C. Region: Latin America/Caribbean

2. Country: Haiti

The work of Seventh-day Adventists in Haiti began in 1879 with an educational outreach program in Cap-Haitian. Education dominated the outreach work of the church for many years. The church now operates 88 primary schools, an academy in Cap-Haitian and the Seminaire Adventiste Franco-Haitian near Port-au-Prince. Medical work came much later, but the Hospital Adventiste D'Haiti is the only full service medical facility serving the entire community.

SAWS carries on an extensive Food for Peace feeding program in Haiti. This is done through distribution centers throughout the country. SAWS proposes to use the health-care and educational institutions in the country as bases from which to carry on health, nutrition and maternal child health education throughout the country. The institutions which will serve as bases are:

Health Centers

Adventiste Hospital of Haiti  
P.O. Box 2355  
Route de Diquini  
Port-au-Prince, Haiti

Polyclinique Adventiste  
P.O. Box 1339  
Route de Diquini  
Port-au-Prince, Haiti

Franco-Haitian Health Institute  
Ruelle Ganot 78  
Port-au-Prince, Haiti

Education Centers

Cap-Haitian Adventist Academy  
P.O. Box 28  
Cap-Haitian, Haiti

Franco-Haitian Adventist Seminary  
Boite Postale 1339  
Port-au-Prince, Haiti

C. Region: Latin America/Caribbean

3. Country: Honduras

Seventh-day Adventists established their presence in Honduras well before the turn of the century. By 1892, educational work was underway in the English speaking Bay Islands of the country. Outreach work on the mainland followed soon after. There are now 87 full-time workers serving the uplift needs of the community.

According to UN statistics, Honduras is at or near the bottom in economic development in Latin American countries. This is reflected in the poor state of nutrition in the population. SAWS has two institutions in Honduras which will be used as bases for an expanded health and nutrition project as well as agricultural development. It is expected that the project's influence on this nutritional deficit in Honduras will be extensive.

SAWS work in Honduras will be directed from:

Health Center

Hospital Adventista de Valle  
de Angeles  
Valle de Angeles  
Francisco Moran, Honduras, CA

Education Center

Centro Educational Adventista  
Pena Blanca  
Cortes, Honduras, CA

C. Region: Latin America/Caribbean

4. Country: Jamaica

Seventh-day Adventists date the beginning of the outreach work in Jamaica from 1890. The great emphasis of their work has been educational. Despite the large, effective public school system, they still operate 35 elementary schools, 8 large high schools and a four-year liberal arts college in the island. Health and medical work came later, and nearly 700 full-time workers now serve the people of Jamaica through SAWS activities on the island.

In response to widespread community interest, Andrews Memorial Hospital in Kingston, Jamaica, has developed plans to extend their health education outreach into the slum areas of Kingston. Students from the school of nursing will be trained to conduct health and nutrition classes, classes in sanitation and maternal child care. SAWS is happy to assist with the expansion of this program.

West Indies College in Mandeville, Jamaica, as well as three of nine other educational institutions will also serve as bases for health and nutrition education. The centers which will be used in Jamaica are:

Health Center

Andrews Memorial Hospital  
P.O. Box 70  
Kingston, Jamaica

Education Centers

West Indies College  
Mandeville  
Jamaica

Willowdene High School  
58 Brunswick Avenue  
Spanish Town, Jamaica

Harrison Memorial High School  
3 Cottage Road  
Montego Bay, Jamaica

May Pen High School  
18-A Bryant Crescent  
May Pen, Jamaica

D. Region: Pacific

1. Country: Papua-New Guinea

As was the case in most South Pacific territories, Seventh-day Adventists began work in Papua-New Guinea in the early years of the 1900's. Educational work was started in 1908, but it was not until 1924 that medical outreach began. One thousand forty-four full-time workers now carry on the outreach efforts of SAWS in this country.

The Sopas Adventist Hospital in Wabag, Papua-New Guinea has been operational for many years in providing care for the surrounding villages. The current medical director at Sopas desires to intensify their rural involvement. They already operate a nurse training program that is utilized to reach into the villages. The students are all assigned activities in maternal and child health and various educational efforts for the villages. They have recently begun to develop plans for an expansion of this involvement in a more formal way. It is proposed that additional funding and direction can enable them to considerably expand their rural health involvement and make a significantly greater impact in the area.

SAWS will implement the Matching Grant Program in Papua-New Guinea from the following centers:

Health Centers

Sopas Adventist Hospital  
Wabag  
Papua New Guinea

Homu  
P.O. Box 966  
Goroka, P.N.G.

Togoba Rural Health Center  
Togoba, via Mount Hagen  
Papua New Guinea

Menyamy  
via Lae  
Papua New Guinea

Awoma  
P.O. Box 53  
Popondetta, P.N.G.

Moruma  
P.O. Box 56  
Keŕowagi, P.N.G.

Bali  
SDA Mission, Nihilani  
Bali Island, P.N.G.

Nomad River  
Western Province  
Papua New Guinea

Education Center

Sonoma Adventist College  
Rabaul  
Papua New Guinea

D. Region: Pacific

2. Country: Philippines

The Uplift work of Seventh-day Adventists in the Philippines had its beginning in 1906 with the establishment of educational outreach work in Manila. This emphasis on education has continued, and today there are 198 primary schools, 17 academies and 2 liberal arts senior colleges.

The community outreach program cited as a model in this proposal is typical of the involvement of the personnel of the educational institutions in community development.

Health-care facilities were also developed in the Philippines in the early years of our involvement. There are now 6 hospitals in the Philippines and the development work is manned by 4,700 full time employees. MG funds provided by SAWS will expand the community outreach work now being conducted from the following eight medical and educational centers in the Philippines.

Education Centers

Mountain View College  
College Heights, Malaybalay  
Bukidnon, Philippines

Philippine Union College  
P.O. Box 1772  
Manila, Philippines 2800

Mindanao Mission Academy  
Manticao, Misamis  
Oriental, Philippines

Pasay City Adventist Academy  
2059 Donada Street  
Pasay City, Philippines

Palawan Adventist Academy  
Tacras, Panacan  
Palawan, Philippines 2918

Health Centers

Mindanao Sanitarium and Hospital  
P.O. Box 5449  
Iligan City, Mindanao, Philippines

Bacolod Sanitarium and Hospital  
P.O. Box 309  
Bacolod City 6001  
Philippines

Cagayan Valley Sanitarium and Hospital  
Santiago  
Isabela, Philippines 1322

Gingoog City Community Hospital  
Gingoog City  
Philippines

Manila Sanitarium & Hospital  
P.O. Box 1592  
Manila, Philippines 2800

Calbayog Sanitarium & Hospital  
P.O. Box 6  
Calbayog City, Philippines 7316

H.W. Miller Memorial Sanitarium & Hospital  
P.O. Box 1592  
Cebu City 6401, Philippines

D. Region: Pacific

3. Country: Sarawak

Seventh-day Adventist involvement in outreach work in Sabah and Sarawak began at the turn of the century. Seventy full-time workers carry on the medical, educational and spiritual outreach of SAWS in this territory.

Sarawak is on a beautiful tropical island but with considerable problems in rural health care. For the past three years a rural health project has been operated there, reaching into the Iban villages with village reconstruction, agriculture and health projects. This has been directed by public health personnel assisted by local Iban people who have been provided specific training in these areas. The Malaysian Ministry of Health is supportive of this endeavor and has provided some staff and materials to assist in it.

At the present time filmstrips are being developed for educational purposes and a rural health center has been constructed in a rural area to serve the surrounding villages. Seminars have already been started providing villagers with updated information on vegetable production and home health care. This program has a potential for considerable expansion into other Iban villages, both in terms of greater coverage and more intense involvement.

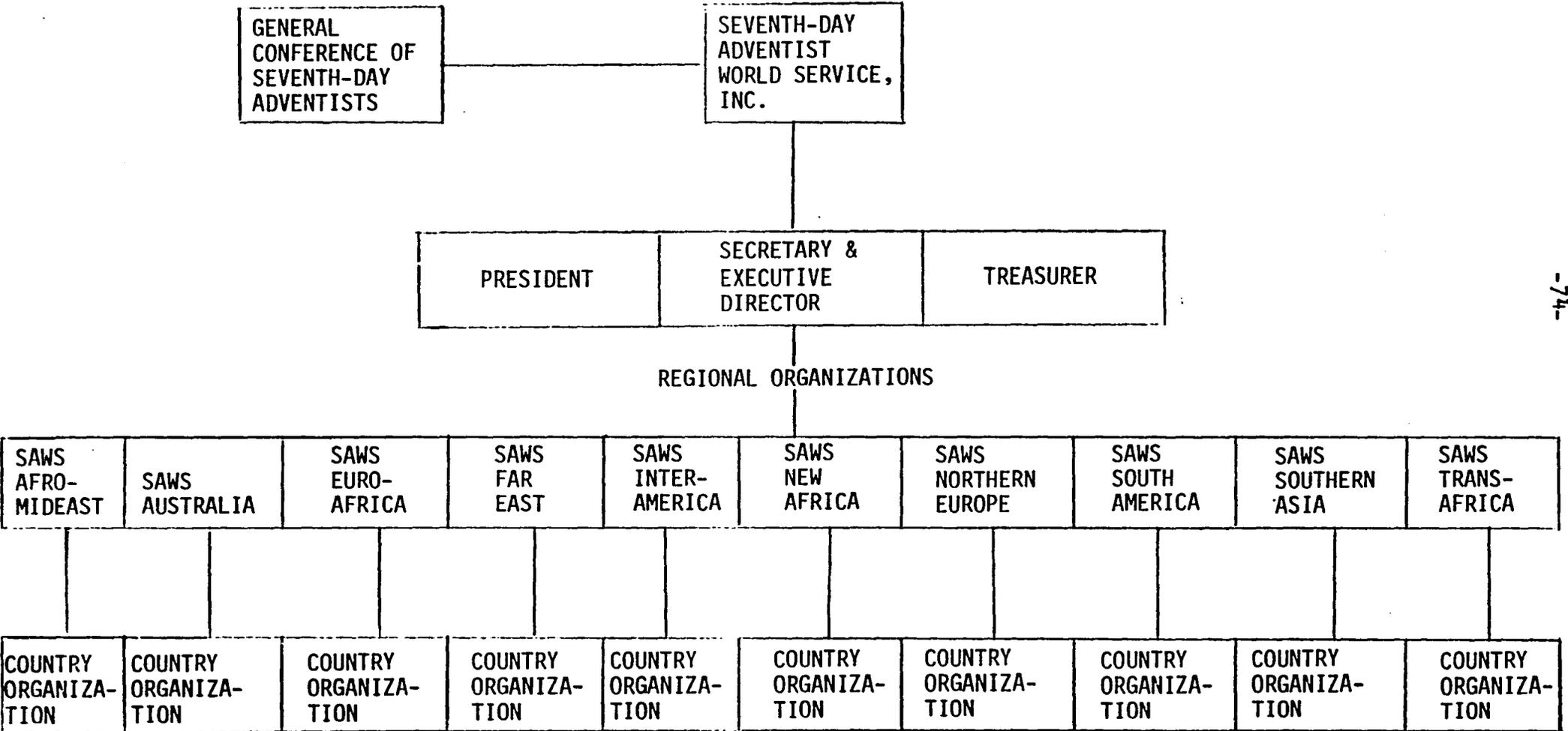
SAWS will implement the Matching Grant Program in Sarawak from:

Education Centers

Goshen Adventist Secondary School  
Goshen  
Sabah, East Malaysia

Sabah Adventist Sec. School  
Tamparuli  
Sabah

SAWS INTERNATIONAL ORGANIZATION



**PART V**  
**FINANCE & BUDGET**

**MATCHING GRANT BUDGET BY YEAR, ACTIVITY AND LOCATION  
(\$000)**

	<u>Year 1</u>	<u>Year 11</u>	<u>Year 111</u>	<u>TOTAL</u>
<b>A. Program Services</b>				
1. <u>SAWS Support</u>	<u>381</u>	<u>419</u>	<u>461</u>	<u>1,261</u>
Africa	148	163	179	490
Asia	81	89	98	268
Pacific	78	86	94	258
Latin America & Carribean	74	81	90	245
2. <u>Training Materials</u>	<u>116</u>	<u>122</u>	<u>-0-</u>	<u>238</u>
Africa	41	58	-0-	99
Asia	17	12	-0-	29
Pacific	26	17	-0-	43
Latin America & Caribbean	32	35	-0-	67
3. <u>Education Service Programs</u>	<u>360</u>	<u>698</u>	<u>656</u>	<u>1,714</u>
Africa	126	292	272	690
Asia	54	84	80	218
Pacific	81	126	120	327
Latin America & Caribbean	99	196	184	479
4. <u>Development Projects Support</u>	<u>96</u>	<u>80</u>	<u>80</u>	<u>256</u>
Africa	36	30	30	96
Asia	18	15	15	48
Pacific	24	20	20	64
Latin America & Caribbean	18	15	15	48
<u>Total Program Services</u>	<u>953</u>	<u>1,319</u>	<u>1,197</u>	<u>3,469</u>
<b>B. Supporting Services</b>				
1. <u>Direct Costs Program Admin.</u>	<u>205</u>	<u>221</u>	<u>243</u>	<u>669</u>
Health Director	50	55	60.5	165.5
Agriculture Director	50	55	60.5	165.5
Evaluation Director	50	55	60.5	165.5
Evaluation System Management	55	56	61.5	172.5
2. Indirect Costs (Overhead 24%)	<u>45</u>	<u>54</u>	<u>65</u>	<u>164</u>
<u>Total Supporting Services Costs</u>	<u>250</u>	<u>275</u>	<u>308</u>	<u>833</u>
<b>TOTAL MATCHING GRANT BUDGET</b>	<u>1203</u>	<u>1594</u>	<u>1505</u>	<u>4,302</u>
(of which: AID -	602	797	752	2,151
SAWS -	601	797	753	2,151

MATCHING GRANT REQUEST: BUDGET FOR THREE YEAR PROGRAM

1. SUMMARY (by source of funds) (\$000)

EXPENDITURES (3 years)	Priv. Cont.	Match'g Grant	Total MG Grant	Other AID	Other Gov't	Total Cash	In- Kind Cont.	Total SAWS
<b>A. MG Program Services</b>	<u>1,734</u>	<u>1,735</u>	<u>3,469</u>	<u>(3,400)</u> <sup>(6)</sup>	<u>0-</u>	<u>3,469</u>	<u>3,457</u> <sup>(9)</sup>	<u>6,926</u>
1. SAWS Support	630	631	1,261	-	-	1,261	-	1,261
2. Training Material	119	119	238	-	-	238	-	238
3. Ed Services Program	857	857	1,714	-	-	1,714	-	1,714
4. Dev. Projects aid	128	128	256	(3,400)	-	256	3,457	3,713
<b>B. MG Supporting Program</b>	<u>416</u>	<u>417</u>	<u>833</u>	<u>-0-</u>	<u>-0-</u>	<u>833</u>	<u>-0-</u>	<u>833</u>
1. Dir. Cost Priv. Adm.	334	335	669	-	-	669	-	669
2. Indirect Costs	82	82	164	-	-	164	-	164
<b>C. Total MG Programs</b>	<u>2,151</u>	<u>2,151</u>	<u>4,302</u>	<u>(3,400)</u>	<u>-0-</u>	<u>4,302</u>	<u>3,457</u>	<u>7,759</u>
<b>A. Other SAWS Programs</b>	<u>13,504</u>	<u>-0-</u>	<u>-0-</u>	<u>(12,579)</u> <sup>(7)</sup>	<u>(615)</u> <sup>(8)</sup>	<u>13,504</u>	<u>6,290</u> <sup>(9)</sup>	<u>19,794</u>
1. General Projects	2,933 <sup>(2)</sup>	-	-	-	(615)	2,933	6,290	9,223
2. Specific Projects	3,566 <sup>(2)</sup>	-	-	(12,579)	-	3,566	-	3,566
3. Ocean Freight	7,005 <sup>(3)</sup>	-	-	-	-	7,005	-	7,005
<b>B. Other SAWS Support</b>	<u>3,908</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>3,908</u>	<u>-0-</u>	<u>3,908</u>
1. Mgt. and General	3,852 <sup>(4)</sup>	-	-	-	-	3,852	-	3,852
2. Fund Raising	56 <sup>(5)</sup>	-	-	-	-	56	-	56
<b>C. Total Other SAWS Program</b>	<u>17,412</u>	<u>-0-</u>	<u>-0-</u>	<u>(12,579)</u>	<u>(615)</u>	<u>(17,412)</u>	<u>6,290</u>	<u>23,702</u>
<b>AND TOTAL SAWS SERVICES FOR TARGET COUNTRIES</b>	<u>19,563</u>	<u>2,151</u>	<u>4,302</u>	<u>(15,979)</u>	<u>(615)</u>	<u>21,714</u>	<u>9,747</u>	<u>31,461</u>

(1) p 83            (5) p 83            (9) p 83  
(2) p 84,85,86    (6) p 80  
(3) p 84            (7) p 80  
(4) p 83            (8) p 87

SAWS FUNDING CAPABILITY

Donations:

Donations to SAWS for the past three years are as follows:

<u>Year</u>	<u>Cash Donations</u>	<u>Materials</u>
1978	\$1,062,087	\$1,546,827
1979	2,601,884	1,339,340
1980	1,401,721	3,633,783 (2)

As of December 31, 1980, all donations to SAWS projects were kept in the accounts of the parent organization, the General Conference of Seventh-day Adventists. The attached affidavit certify the 1980 donations receipts.

Cash Reserves:

The attached affidavit certify that our unrestricted cash reserves exceed the amount needed to make the match in this proposal.

Professional Fundraising:

In January 1981 SAWS employed two full-time Public Relations/Fundraisers for the organization. It is expected that the activities of these professionals will increase the charitable donations to the organization.

Contributions and Grants:

Supplimentary funds will be raised by the introduction of a computerized mailing system to private donors and specific program grants from corporations, foundations, or multilateral, international organizations.

TREASURY



General Conference of

# Seventh-day Adventists

CHURCH WORLD HEADQUARTERS: 6840 EASTERN AVENUE NW, WASHINGTON, DC 20012 USA  
TELEPHONE: (202) 723-0800 • CABLE: ADVENTIST, WASHINGTON • TELEX: 89-580

March 5, 1981

Mr Thomas H Fox, Director  
Office of Private & Voluntary Cooperation  
Agency for International Development  
Washington, D C 20523

Dear Mr Fox:

This is to certify that SAWS has funds in trust in the Treasury of the General Conference of Seventh-day Adventists in excess of the amount needed to make the match for the three-year period of the Matching Grant Program proposed herein. These funds can be drawn on by action of the Board of Directors.

Respectfully,

R R Drachenberg  
Assistant Treasurer

Subscribed and sworn to before  
me this 5th day of March, 1981.

Notary Public  
District of Columbia

My Commission Expires  
June 14, 1985

TREASURY



General Conference of

# Seventh-day Adventists

CHURCH WORLD HEADQUARTERS: 6840 EASTERN AVENUE NW, WASHINGTON, DC 20012 USA  
TELEPHONE: (202) 723-0800 • CABLE: ADVENTIST, WASHINGTON • TELEX: 89-580

March 5, 1981

Mr Thomas H Fox, Director  
Office of Private & Voluntary Cooperation  
Agency for International Development  
Washington, D C 20523

Dear Mr Fox:

This is to certify that general and specific donations made to SAWS during 1980 were as follows:

Cambodia Relief	\$ 352,985.85
East African Relief	33,532.94
General Donations	<u>1,015,203.00</u>
Total	<u>\$1,401,721.79</u>

Respectfully,

R R Drachenberg  
Assistant Treasurer

Subscribed and sworn to before  
me this 5th day of March, 1981.

Notary Public  
District of Columbia

My Commission Expires  
June 14, 1985

**BUDGET**

Country Sri Lanka

No. Health Care Centers (1) No. Educational Centers /1/

	1st Year	2nd Year	3rd Year	Total
No. Centers from which programs launched	(1) /1/			
<b>SAWS SUPPORT:</b>				
Program Administrator @ \$15,000	15,000	16,500	18,150	49,650
Health Training Officer @ \$7,000	7,000	7,700	8,470	23,170
Agriculture Training Officer @ \$5,000	5,000	5,500	6,050	16,550
<b>TOTAL</b>	27,000	29,700	32,670	89,370
<b>TRAINING MATERIALS:</b>				
Supplies & Equipment @ \$1,500 per center	3,000			3,000
Teaching Aids @ \$1,000 per center	2,000			2,000
Trainee Allowance @ \$100 per trainee	800			800
<b>TOTAL</b>	5,800			5,800
<b>EDUCATION SERVICE PROGRAMS:</b>				
Community Health Workers @ \$2,000 per annum	8,000	8,000	8,000	24,000
Health Worker Teaching Aids @ \$250	1,000			1,000
Agriculture Extension Workers @ \$2,000 per annum 4 per center	8,000	8,000	8,000	24,000
Agriculture Worker Supplies @ \$250	1,000			1,000
<b>TOTAL</b>	18,000	16,000	16,000	50,000
<b>DEVELOPMENT PROJECTS SUPPORT:</b>				
Health Projects Assistance	4,000	3,000	3,000	10,000
Agro-Industrial Projects Assistance	2,000	2,000	2,000	6,000
<b>TOTAL</b>	6,000	5,000	5,000	16,000
<b>GRAND TOTAL</b>	<u>\$56,800</u>	<u>\$50,700</u>	<u>\$53,670</u>	<u>\$161,170</u>

## COUNTRY BUDGET NOTES

### Personnel:

The item designated "SAWS Support" in the budget consists of the salaries and expenses of the director, the health trainer, the agriculture trainer for each country projects. Expenditures in excess of the amount budgeted will be borne by SAWS.

### Office Administration:

The base institution and SAWS will provide for office administration including office rent, auto operation, telephone/telegraph, office supplies, printing, photo-copying, postage, legal and audit fees, insurance and maintenance services and repairs.

SAWS will also fund other administrative charges such as heat, water and electricity, membership dues and subscriptions, program and staff development.

### Consultants:

MG funds will be used to obtain technical expertise and consultants from the most economical source for the country program outlined in the body of the proposal.

MG funds will be used for international consultancies, particularly for extensive periods, in planning, evaluation, training and seminars.

### Training:

The training funds in the budget will be used to provide training aids for the training center and teaching materials for health promoters and ag extension workers. Training will be done at the base institution of each project.

MG funds will be used for training activities by central office personnel. The expenses of training done by regional office personnel will be borne by the regional office.

All other country budgets are identical except for changes that occur as a result of an increase in the number of centers operated in that country.

A I D G R A N T S

	<u>Project/Country</u>	<u>Contract Period</u>	
+ AID - ASHA - 171	Bandung Hosp., Indonesia	8/29/78 - 8/31/81	300,000
* AID - ASHA - 189	L'Hospital Adventista, Haiti	7/25/79 - 6/30/81	235,000
+ AID - ASHA - 203	Kanye Hosp., Botswana	8/21/79 - 12/31/81	1,000,000
+ AID - ASHA - 204	Malamulo Hosp., Malawi	8/21/79 - 6/30/81	550,000
* AID - ASHA - 227	Heri Hosp., Tanzania	8/21/80 - 12/31/81	275,000
* AID - ASHA - 220	Mugonero Hosp., Rwanda	8/12/80 - 6/30/82	750,000
+ AID - ASHA - 245	Kanye Hosp., Botswana	2/6/81 - 6/30/82	900,000
+ AID - ASHA - 248	Malamulo Hosp., Malawi	2/6/81 - 12/30/82	750,000
+ AID - ASHA	Mwami Hosp., Zambia	2/6/81 - 12/30/82	300,000
* AID - ASHA	L'Hospital Adventiste, Haiti	2/6/81 - 12/30/82	<u>400,000</u>

FOODS

+ AID - PL480	Chile	1/8/60 - ongoing	1,896,000
* AID - PL480	Haiti	1/8/78 - ongoing	693,000
+ AID - PL480	Peru	1/8/68 - ongoing	4,075,000
* AID - PL480	Rwanda	1/8/80 - ongoing	<u>20,000</u>
* AID Outreach 0182	Haiti	9/15/80 - 6/14/81	328,700
* AID Outreach 10681	Rwanda	8/21/80 - 7/31/81	251,800
+ AID - OPG - 527-0212	Peru	5/80 -- 3/81	<u>200,000</u>
* NORMAL AND PL480 FREIGHT (MG Countries)			446,000
+ PL480 FREIGHT (Non MG Countries)			<u>2,607,800</u>
		GRAND TOTAL	<u>15,978,300</u>

\* Other AID projects in MG countries \$ 3,400  
 + Other AID projects in non-MG countries \$12,579

SEVENTH DAY ADVENTIST WORLD SERVICE INC

Balance Sheet

December 31, 1980

ASSETS

Cash and Bank

Petty Cash - Eastern Wrhse	4 300 00	
Petty Cash - Western Wrhse	7 000 00	
Suburban Trust Company	61 164 80	
Riggs National Bank	<u>3 000 00</u>	75 464 80

Investments

Commercial Paper		300 000 00
------------------	--	------------

Accounts Receivable

G C Cambodia Indo China Relief	794 274 33	
AID - General	295 539 57	
AID - Haiti Hospital Project	4 140 14	
Miscellaneous	2 882 16	
Accrued Accounts Receivable	<u>37 926 88</u>	1 134 763 08

Inventories

Eastern Wrhse	9 142 94	
Western Wrhse	117 339 73	
Donated - East Wrhse	196 147 60	
Donated - West Wrhse	128 144 42	
Prepaid Expense	<u>8 433 97</u>	459 208 66

Total Assets

1 969 436 54

LIABILITIES

Accounts Payable - Gen Conf	210 731 00	
Accrued Accounts Payable	51 639 22	
Defferred Income - AID	14 104 27	
Defferred Income - Cambodia	794 274 33	
Defferred Income - East Africa	31 251 83	
Defferred Income - Matching Grant	<u>300 000 00</u>	1 402 000 65

FUND BALANCES

00001 Miscellaneous Projects	00	
00010 Housing	00	
10038 Bandung Hospital	00	
10040 Bangkok Hospital	00	
10080 Cambodia Indo China	00	
10091 Chad Project	00	
10160 East Africa Emergency	00	
10280 Haiti Hospital	00	
10281 Haiti Outreach	00	
10400 Kanye Hospital	00	
10480 Malamulo Hospital	00	
10512 Mugonero Hospital	00	
10681 Rwanda Outreach	00	
10720 Sahel Project	<u>00</u>	00

Undesignated Fund Balance Available

Beginning Balance Jan 1, 1980	572 290 82	
Decrease this period	<u>(4 854 93)</u>	<u>567 435 89</u>

Total Liabilities & Fund Balances

1 969 436 54

SEVENTH DAY ADVENTIST WORLD SERVICE INC

Statement of Income

For Twelve Months Ended December 31, 1980

INCOME

Support and Revenue

Donated Materials - etc	5 630 05
Donated Materials - Clothing	2 390 755 50
Donated Materials - Food	6 186 583 25
Donated Materials - Medical	1 237 397 87
General Conference Appro	600 000 00
Interest & Dividends	5 249 62
Loss Claims Settlements	43 898 98
Survey Fees	<u>8 016 18</u>

Total Income

10 477 531 45

## SEVENTH DAY ADVENTIST WORLD SERVICE INC

## Statement of Expense

For Twelve Months Ended December 31, 1980

EXPENSEAppropriations Made

Am Council of Vol Agencies	22 400 00	
Church World Service	4 000 00	
Emergencies Overseas	212 633 62	
Emergencies North America	19 808 67	
Interchurch Med Assistance	9 990 00	
Non Emergencies Overseas	<u>24 500 00</u>	293 332 29 (7)

General

Donated Materials - etc	69 641 87	
Donated Materials - Clothing	2 390 755 50	
Donated Materials - Food	6 186 583 25	
Donated Materials - Medical	1 068 513 68	
Loss Claims Settlements	18 577 21	
Relief Supplies	9 01	
Survey Fees	<u>13 453 46</u>	9 747 533 98 (9)

SAWS - Eastern Wrhse

Depreciation	6 671 75	
Salaries & Allowances	70 853 63	
Travel	523 88	
Freight & Shipping	14 204 01	
General	6 160 39	
Maint - Bldgs & Equip	1 851 85	
Office Supplies & Postage	602 16	
Packing Materials	45 866 13	
Telephone	1 016 42	
Transportation Subsidy	24 197 00	
Truck & Forklift	3 925 01	
Utilities	6 819 53	
Income	<u>(1 524 04)</u>	181 167 72 (4)

SAWS - Western Wrhse

Depreciation	3 374 76	
Salaries & Allowances	42 792 46	
Travel	552 63	
Freight & Shipping	11 667 86	
General	1 532 91	
Labor	15 193 50	
Maint - Bldgs & Equip	931 18	
Office Supplies & Postage	326 97	
Packing Materials	44 548 61	
Telephone	1 328 29	
Transportation Subsidy	20 330 24	
Truck & Forklift	1 278 79	
Utilities	1 165 71	
Income	<u>(18 323 12)</u>	126 700 79 (4)

Management & General

Salaries & Allowances	61 535 28	
Travel	10 219 39	
Office Supplies & Expense	<u>5 630 06</u>	77 384 73 (4)

Fund Raising

Promotion	13 836 83	
Promotion Films	<u>42 430 04</u>	<u>56 266 87 (5)</u>

Total Expense

10 482 386 38

Net Loss

(4 854 93)

SEVENTH DAY ADVENTIST WORLD SERVICE INC  
 Analysis of Fund Balances  
 December 31, 1980

<u>00001 Miscellaneous Projects</u>			
Beginning Balance			69 529 91
Income:			
Miscellaneous Income	520 26		
Ocean Freight Reimbursement	<u>2 946 961 22</u>	2 947 481 48	
Expense:			
Freight Payments - PL 480	3 431 75		
Freight Payments - Normal	52 320 85		
Miscellaneous	4 170 58		
Ocean Freight Costs - AID	2 946 961 22		
Ocean Freight Costs - Other	<u>10 126 99</u>	<u>3 017 011 39</u>	
Net Expense			<u>69 529 91 (3)</u>
Ending Balance			<u>00</u>
<u>00010 Housing</u>			
Beginning Balance			
No Activity			
Ending Balance			<u>00</u>
<u>10038 Bandung Adventist Hospital</u>			
Income:			
AID/ASHA Grant # 171		286 473 66	
Expense:			
Equipment Cost		<u>286 473 66</u>	
Ending Balance			<u>00</u>
<u>10040 Bangkok Adventist Hospital</u>			
Income:			
AID/ASHA Grant # 172		250 000 00	
Expense:			
Building Construction		<u>250 000 00</u>	
Ending Balance			<u>00</u>
<u>10080 Cambodia Indo China Relief</u>			
Income:			
Donations		305 517 97	
Expense:			
Salaries & Allowances	5 256 53		
Appropriations	257 276 11		
Travel	26 837 34		
General Expense	<u>16 147 99</u>	<u>305 517 97 (2)</u>	
Ending Balance			<u>00</u>
<u>10091 Chad Project</u>			
Beginning Balance			31 703 57
Expense:			
Salaries & Allowances	23 615 53		
Travel	145 12		
Commodities	504 78		
Land Preparation	1 859 37		
General Expense	<u>5 578 77</u>		
Net Expense			<u>31 703 57 (2)</u>
Ending Balance			<u>00</u>

SEVENTH DAY ADVENTIST WORLD SERVICE INC  
Analysis of Fund Balances  
December 31, 1980

10160 East Africa Emergency

Income:			
Donations		2 280 47	
Expense:			
General Expense		<u>2 280 47</u>	(2)
Ending Balance			<u>00</u>

10280 Haiti Adventist Hospital

Income:			
AID/ASHA Grant # 189		142 134 64	
Expense:			
Supplies	123 612 25		
Equipment	<u>18 522 39</u>	<u>142 134 64</u>	
Ending Balance			<u>00</u>

10281 Haiti Outreach

Income:			
AID/ASHA Grant # 182		76 085 69	
Expense:			
Travel & Per Diam	85 69		
Appropriations	<u>76 000 00</u>	<u>76 085 69</u>	
Ending Balance			<u>00</u>

10400 Kanye Adventist Hospital

Income:			
AID/ASHA Grant # 203		356 134 20	
Expense:			
Architectural Services	1 110 00		
Building Construction	230 000 00		
Equipment Costs	125 000 00		
General Expense	<u>24 20</u>	<u>356 134 20</u>	
Ending Balance			<u>00</u>

10480 Malamulo Adventist Hospital

Income:			
AID/ASHA Grant # 204		518 659 70	
Expense:			
Architectual Services	568 50		
Appropriations	518 000 00		
Cable & Commissions	<u>91 20</u>	<u>518 659 70</u>	
Ending Balance			<u>00</u>

10512 Mugonero Adventist Hospital

Income:			
AID/ASHA Grant # 220		36 211 00	
Expense:			
Architectual Services	35 160 00		
General Expense	<u>1 051 00</u>	<u>36 211 00</u>	
Ending Balance			<u>00</u>

SEVENTH DAY ADVENTIST WORLD SERVICE INC  
Analysis of Fund Balances  
December 31, 1980

10681 Rwanda Outreach

Income:			
AID/SOD/PDC-G-388		161 384 74	
Expense:			
Appropriations	161 371 50		
General Expense	<u>13 24</u>	<u>161 384 74</u>	
Ending Balance			<u>00</u>

(2) 10720 Sahel Project

Beginning Balance			5 819 45
Income:			
Appropriations - G C & Divisions		11 341 18	
Expense:			
Salaries & Allowances	15 911 28		
Travel	79 35		
Equipment	<u>1 170 00</u>	<u>17 160 63</u>	
Net Expense			<u>5 819 45</u>
Ending Balance			<u>00</u>

CANADIAN PROJECTS

<u>Project</u>	<u>Country</u>	<u>Funding Source</u>	<u>Amount</u>	<u>Duration</u>
Agriculture Training	Upper Volta	Gov. of Canada/SAWS	\$300,000	1983
Nutrition	Upper Volta	Gov. of Canada/SAWS	35,000	1983
Better Living Center	Zaire	Gov. of Canada	57,950	1983
Dental Clinic	Zaire	Gov. of Canada	40,000	1983
Agriculture Institute	Zaire	Gov. of Canada	50,000	1983
Community Health	Zaire	Gov. of Canada	41,000	1983
New Equipment	Lesetho	Gov. of Canada	35,000	1983
Portable Water System	Zambia	Gov. of Canada	56,000	1983
		<u>TOTAL</u>	<u>\$614,950</u>	

**PART VI**

**APPENDIX**

# Health Problems of the Waha Tribe: Part V

P. WILLIAM DYSINGER, M.D., M.P.H.  
Professor of International Health

CHARLES R. STAFFORD, M.P.H.  
Instructor in Tropical Health

RICHARD H. HART, M.D., M.P.H.  
Instructor in International Health

LESTER H. LONERGAN, M.D., M.P.H.  
Associate Professor of Health Education

REUBEN G. LORENSEN  
Department of National Health and Welfare Medical Services  
Edmonton, Alberta, Canada

The decade of the 1960s brought tremendous change to Africa. A continent with 42 independent states, most of which became free during this ten-year period, Africa covers almost 20 percent of the world's land surface and has 9 percent of the total world population. Although the population is comparatively sparse, Africa's 500 million people are currently increasing at an annual rate conservatively estimated at 2.4 percent. Some estimate a population total of 800 million by the year 2000.

Life expectancy in sub-Sahara Africa averages about forty-one years, infant and child mortality remains very high, and malnutrition and poor sanitation are the most significant causes of death. For most of Africa there is a physician-to-population ratio of approximately 1 to 50,000. The current ratio in the United States is about 1 to 650. Since most physicians congregate in cities, Africans who live in rural areas — 85-90 percent of the total population — have far fewer physicians than this ratio would indicate. For most African nations, the annual expenditure per person on health and medical care is less than one United States dollar — at a time when such expenditure in the United States is nearing \$400 per person yearly. Though change is occurring, the magnitude of Africa's health

problem is such that rapid improvement in the economics of health or the numbers of health professionals cannot be expected.

The recent changes in Africa have profoundly affected Christian medical missions. This continent was largely opened up by the early medical missionary, David Livingstone. But Lewis P. Bird has stated that "the death of the world's best known medical missionary, Albert Schweitzer, in 1965, sounded the death knell for the great white father stereotype of stethoscope and pith helmet." He goes on to say that "emerging nationalism, evolving governmental health care programs, increasing costs in upgrading mission medical facilities, and exploding population argue effectively and urgently against perpetuating into the seventies those provincial, antiquated medical properties which serve only parochial and independent interests."<sup>1</sup>

Africa's greatest current and future need is generally recognized by medical personnel as *preventive medicine*. Most African countries, however, continue to place great emphasis on the development of medical services in which foreign mission groups continue to play an important role. Change is occurring, though, and how to develop and organize economical and effective preventive medicine and public health programs is currently of great interest to many organizations and nations in Africa. Loma Linda University has developed such a program among the Waha in western Tanzania.

#### ADVENTIST SEMINARY OF HEALTH EVANGELISM

The University program in Africa began in 1956 and 1957 with cultural and health surveys conducted among the Waha by the former School of Tropical and Preventive Medicine (precursor of the School of Health). The results of those surveys have been previously published.<sup>2</sup> As an outgrowth of the surveys, a pilot study in health education was recommended to extend and improve the quality of preventive services by mission hospitals. Heri Hospital near Kigoma in western Tanzania was chosen as the site for this project. Under the auspices of the Division of Public Health and Tropical Medicine (the 1961-64 nomenclature of the precursor of the University School of Health), the physical facilities were developed and a training program for HEALTH EDUCATION ASSISTANTS was initiated in 1962.<sup>3</sup> The early program was developed with funds entirely outside Africa — mainly from private donations and the direct support of the University. During a two-year pilot phase, a ten-month curriculum was developed and two classes completed it.<sup>4</sup>

In November 1963 the Trans-Africa Division of Seventh-day Adventists voted to continue the project as an endeavor of the church. The facilities were turned over to the Seventh-day Adventist church at that time, and the program has been financed and operated since then by that organization. Charles R. Stafford, who earned a Master of Science degree in health education at the University, was appointed director and has continued in that capacity. As a member of the field faculty of the University School of Health, he maintains a close affiliation with the program.

The University has provided consultants and has utilized the Tanzania program for student field projects. To date, six master's degree candidates have completed all or part of their fieldwork at the Heri Field Station. Specific projects have included local health and sanitation surveys, parasitological studies, and development of course outlines in public health, maternal and child health, and school health. In addition, faculty from Loma Linda have conducted two church-sponsored health institutes. In December 1965 Dean Mervyn G. Hardinge conducted a health institute at Bugema Missionary College in Uganda. This institute served as a refresher course for previous registrants for the health education assistants curriculum. In 1968 a similar, but shorter, institute was held at Heri Hospital for the Tanzania Union of Seventh-day Adventists, with Dr. and Mrs. Lester H. Lonergan as the visiting faculty from the University.

More than 85 certificants of the health education assistants curriculum are scattered through nine countries in Central and East Africa, including the Congo, Ruanda, Burundi, Zambia, Malawi, Rhodesia, Kenya, Uganda, and Tanzania. More than 50 percent of them are serving as pastors or church administrators, and about 25 percent are associated with hospitals or church-operated dispensaries. The largest number of the remainder are teachers; a few are continuing their education or serving in other capacities. Each student was initially chosen by his local church field to attend the training program at Heri, and most have returned to their fields to continue their work as pastors, medical workers, or teachers. Only five or six have left church employment.

#### EVALUATION

Any evaluation of the health education program at Heri must take into consideration the limitations within which the program has had to operate: (a) it is presented to those who usually have no science background; their educational levels vary, the majority of them having less than ten years of education; (b)

the local operating expense budget of approximately \$2,000 a year includes an annual subsidy for textbooks, general maintenance of the teaching facilities and student village, local transportation, and office and school supplies; (c) the program was not developed to train new types of workers but to supplement the training and work of pastors, teachers, and local medical workers. After completing the training program at Heri, the certificants resume their previous responsibilities and work voluntarily in health education as much as their regular duties allow.

The hopes the church had for the program are indicated in the following list of objectives voted by the Trans-Africa Division of Seventh-day Adventists in 1963 when it assumed responsibility for the health education program at Heri.

*General goals for the public health program at Heri Hospital:*

1. To instill a better understanding and appreciation of the relation of the body to the mind and soul;
2. To prepare the graduates for public health work at the home, school, and community levels;
3. To prepare families to be practical examples of healthful Christian living in their home communities;
4. To train workers in healthful building construction, sanitation, ventilation, food and water supplies;
5. To organize and conduct health programs at camp meetings, institutes, and other public gatherings;
6. To teach temperance principles as applied to alcohol, tobacco, and other harmful substances;
7. To teach nutrition, growing and preparation of foods, and making and care of clothing.

*Additional goals for the following specific personnel:*

1. PASTORS AND EVANGELISTS: (a) to use their knowledge of health principles in sermons and health classes in connection with public meetings; (b) to organize classes . . . in hygiene, first aid, nutrition, etc.; (c) to assist the Dorcas Society in its public health and welfare programs; (d) to promote community outreach programs.
2. TEACHERS: (a) to teach health science more effectively; (b) to cooperate more effectively in government community health programs; (c) to guide in the development of better gardens and orchard programs; (d) to improve the ability of the teacher to evaluate health problems in his pupils.
3. MEDICAL WORKERS: (a) to teach the sick more effectively how to get well and maintain health; (b) to organize special classes in hospitals and dispensaries [in the prevention of] malnutrition, parasitic diseases, tuberculosis, etc.; (c) to assist in health programs at camp meetings, churches, etc.; (d) to organize prenatal and well-baby clinics and school health programs.

The effectiveness of the work of the *health education assistants* is the main consideration of any evaluation of the training program. In this program it has

been measured by individual reports of the certificants and personal observations of church administrators and others. Included have been personal visits with the certificants and their employers on four different occasions between 1963 and 1969 by Drs. Mervyn G. Hardinge, Richard T. Walden, P. William Dysinger, and Lester H. Loneragan from the School of Health faculty at Loma Linda, and Dr. Marlowe H. Schaffner (then health secretary for the Trans-Africa Division of Seventh-day Adventists).

Also, questionnaires developed at Loma Linda were mailed in 1967 to each of 51 health education assistants and their employers. In these questionnaires the certificants were asked about their work in the church and community and their family health patterns. The local administrators were asked to evaluate in similar parameters each specific health education assistant working under him. Of the 51 certificants, 40 returned usable questionnaires (a return rate of 78 percent). At least one of the questionnaires not returned failed to reach the certificant because of an insufficient address. Of the administrators, 35 returned their questionnaires; 6 of these were evaluations of certificants who had not returned their own questionnaires. This left 29 complete reports, with evaluations by both assistant and administrator.

#### SPECIFIC IMPACTS

Perhaps the impact of the Heri program can be measured best by looking at (a) the personal life and health of the assistant and his family; (b) the local health and environmental changes that have occurred in the vicinity of Heri Hospital that are at least in part a result of the program there; (c) the attitudes of the local district and national government toward the program; and (d) the impact of the program on the Seventh-day Adventist mission program in Africa.

*Personal life and health.* From its beginning, the program at Heri has sought to encourage each student to make application of health principles to his own way of life. The program has also encouraged family participation, with special classes taught in Swahili for the wives, in addition to the courses taught in English for their husbands. In the 1967 questionnaire, 87 percent (35) of the assistants indicated an improvement in their family's health because of the training they had at Heri. Only two reported poorer health in their families (and one of these gave as the reason the fact that his wife had recently contracted hepatitis). To determine the dietary knowledge and practices of the assistants, the questionnaire asked them to list the protein foods they used in their diets. Their knowledge of

protein appeared generally good, but 15 percent (6) included in their lists foods with questionable protein content. Several indicated that their improved health has been so evident that this alone has inspired change to more healthful ways of life in friends and relatives.

*Local changes in the vicinity of Heri Hospital.* Because the relationship between general community development and health is important, much effort has been put into the practical field training of the health education assistants. Community health efforts are held each year in different locations, and community improvement projects provide practical experience. These projects have included the development of a solid-waste disposal pit for the hospital, development of latrines for the school and for the local public market, building of an improved house for a widow in the community, cooperation in the digging of a well, and building of eight home latrines in a nearby community. In addition, the student village has been improved by the replacement of thatched roofs, dirt floors, and mud-brick walls with metal roofs, cement floors, and cement exterior walls. These environmental projects, together with annual agricultural projects, provide practical applications of principles learned in class. They also help illustrate the importance and value of physical labor to a group whose cultural background tends to make them look down on physical labor.

*Impact on the government.* There has never been an attempt to obtain accreditation or government recognition for this church-operated program undertaken as a project to train workers for the church. On the other hand, the government has observed the program with interest and on several occasions has expressed appreciation. The local district "community development day" was headquartered at the health school in 1969. Representatives from the ministry of health who have visited the project on several different occasions appear to have been pleased with their observations. Annually for four years, the students, cooperating with the local government health office, have conducted house-to-house health and sanitation surveys and have educated community groups on how to improve local public health practices.

In July 1970 the Adventist Seminary of Health Evangelism (as the Heri program is now called) was invited by the regional office of the ministry of health in Kigoma to participate in demonstrating health topics to the crowds attending the large annual independence day — *Saba Saba* — celebration at Kiwawa Stadium in Ujiji, forty-two miles from Heri Hospital. Each student was assigned demonstrations or topics to present. These included a poster display about leprosy, a dis-

play of health books and literature, a mosquito eradication demonstration, a nutrition demonstration, a demonstration of how to make an oven from kerosene tins and how to bake bread, a smoking cessation demonstration (with a smoking manikin), a lecture and demonstration on how to avoid the common helminth infestations by use of a deep pit latrine, an anatomy and physiology display (with a transparent man and a heart model), and slides showing how disease is spread. The program was considered a great success, and the ministry of health booth was awarded the first prize as the best at the *Saba Saba* day festivities.

More recently the government has designated Heri Hospital as a regional center for leprosy rehabilitation and control and appears to be more and more impressed with the contributions the health school is able to provide.

*Impact on the church program.* One of the greatest handicaps of preventive medicine and public health is its financial support. To charge fees for health education services does not appear feasible. The Adventist Seminary of Health Evangelism perhaps offers a unique answer to this problem by teaching regular church employees how to provide health education services. This requires no new budgets. Since almost all the certificants of the training program at Heri have continued in church employment, their greatest impact would be expected in the church mission program.

The impact needs to be measured in several spheres. Church leaders generally recognize that Heri health education assistants are better workers after they take their training — although the ways they are better have not been specified clearly. Perhaps one of the assistants summed it up well when he reported that "the people love us for what they see we are [unselfishly] doing for them." Foreign missionaries report a common response from Africans to health teaching: "That's all right for you, but we're different." When the Heri assistant teaches the same thing, there is no such response; considerable evidence indicates his success in promoting the use of latrines, the boiling of contaminated water, and the improving of nutrition.

Since only one or two assistants are working full-time in health education, it is amazing how much health work is done above and beyond the usual duties of teaching, pastoral, or other work within the mission setting. The 1967 questionnaire revealed that in 1966 the 40 reporting certificants averaged approximately 40 health teaching sessions each in their local Seventh-day Adventist churches, in schools, and elsewhere in their communities. Many reported that they were cooperating in government programs of sanitation, communicable disease control,

nutrition education, family planning, and health surveys. The frequency with which graduates reported public health projects is indicated in TABLE 1. In addition, first aid, home nursing, and other health services were rendered to many individuals.

TABLE 1. Health Programs of the Heri Health Education Assistants

PROJECTS	NUMBER OF CERTIFICANTS	PROJECTS	NUMBER OF CERTIFICANTS
Environmental Sanitation	25	School Health	20
Nutrition	24	Family Planning	19
Health Education	23	Maternal & Child Health	17
Communicable Disease	23	Mental Health	9

A listing in order of frequency with which the certificants replying to a 1967 questionnaire listed the areas of their public health activities.

#### MATTERS OF CONCERN

Because of the limitations of their educational background, it is of concern that the health education assistants not become too independent in their provision of health services. It is of interest, therefore, that 72 percent (29) of them report having established a relationship with a local physician to whom they regularly refer seriously ill patients. Seventy-six percent (30) report having sought assistance and counsel from local Seventh-day Adventist mission doctors. To our knowledge, none has been reported to exceed his limitations by attempting the practice of medicine.

The biggest evidence that the program at Heri is well received by its sponsoring organization is the simple fact that the program continues to receive mission support at a time when budgets are ever more difficult to maintain. In such times, to have a program continued and strengthened is the highest evidence of its recognized value to a church mission organization.

The largest problem that remains is the lack of integration of the health program into the regular mission work of the church. As Heri health education assistants return to their posts as pastors, teachers, or medical workers, they are evaluated as any other pastor, teacher, or medical worker and receive little or no encouragement for their health activities. That public health work is being carried on without a public health budget is one of the strengths of the program. But if health teaching and activities are to be truly a part of the mission program, some-

one at the administrative level should be encouraging and promoting such activities, although the position need not be a full-time responsibility.

The 1967 questionnaire clearly confirmed the need for better integration of health education activities and the church mission program. Both the Heri health education assistants and their administrators or supervisors were asked about the kinds of health projects engaged in. This revealed a wide discrepancy between the certificant's activities as reported by him and by his administrator (TABLE 2).

TABLE 2. Comparison Between Reports of Assistants and Reports of Administrators

PROGRAM	AGREEMENT	DISAGREEMENT
School Health	12	12
Nutrition	13	11
Health Education	13	11
Communicable Disease	15	9
Sanitation	10	14

In 24 cases, questionnaires adequate for comparison were received from both the assistant and the administrator. Each was given the opportunity to check those public health programs the assistant had worked in. *Agreement* indicates that both reports agreed that either the assistant had or had not worked in this type of program. *Disagreement* indicates that either the certificant or his administrator had checked participation in that program but the other had not checked activity in that program.

As might be expected, the health education assistants' responses, in general, indicated more health projects than their administrators knew of. It is significant, however, that in the health education category, the administrators actually indicated more participation than the health education assistants reported. This comparison indicates a lack of communication between assistants and the administrators as well as the possibility that the administrators do not have sufficient understanding of public health to assess the work accurately. In any case, this survey, showing almost as much disagreement as agreement, strongly indicates a need for more understanding and better communication between the Heri certificant and his administrator.

### SUMMARY

Loma Linda University initiated surveys in 1956 which resulted in the development of a health education assistant's training program in Tanzania in 1962. This program, begun as a pilot project funded entirely outside Africa, was taken over in 1964 as a function of the Seventh-day Adventist mission program in Africa and has since been supported by that organization, with a continued close affiliation with the Loma Linda University School of Health. Annual visits by faculty members have been made, and 6 graduate students from Loma Linda have taken all or a portion of their field training in the field school in Tanzania.

Evaluation of the program after ten years shows that the program has been effective in improving personal and family health for those taking the ten-month training in health education at the Heri Mission Hospital. Furthermore, the program can be shown to have promoted improvements in local health and living situations, directly or indirectly, and to have been appreciated by the government both in the ministry of health and in its community development program. As would be expected, its greatest impact has been on the Seventh-day Adventist mission program in Africa. Although still a small program involving an average of ten student families a year, it is well accepted as having increased the efficiency and effectiveness of the local mission workers who attend. The major obstacle it faces is a lack of integration into the regular mission program of the church.

The Health Education Assistant's Training Program located among the Ha tribe in western Tanzania suggests an effective and economical approach to preventive medicine and public health. The existing budgets and organization of a mission program can be utilized at the local community level to promote and improve the health of tribes and nations. As a new approach to public health in a mission setting, the training program is recommended for consideration by other groups to be adapted to other areas of the world.

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# GRANOLA, POSTUM, CORN FLAKES, AND PEANUT BUTTER

SOMETHING  
NEW  
IS  
STIRRING UP  
IN BATTLE CREEK  
KITCHENS



Battle Creek did not become the cereal capital of the world by chance. Nor was it a happenstance that from this small Michigan city came both the first peanut butter and the first vegetable protein foods specifically designed to resemble meat. These developments and others are traceable to Dr. John Harvey Kellogg's commitment to improving the eating habits of Battle Creek Sanitarium patients and those of his fellow Seventh-day Adventists. As his vision broadened and the profitability of some items became apparent to others, the dream expanded. Some dared to think of changing the eating habits of mankind — and they partially succeeded.

Since Colonial days Americans had depended heavily on meat as a major item in their diet. In his classic picture of American society at the opening of the nineteenth century, Henry Adams notes the prevalence of salt pork at every meal. Other staples included potatoes, cornmeal in mush or puddings, and molasses; all were washed down by liberal amounts of coffee or tea. Even after Americans no longer endured the rigors of frontier life or the twelve-hour day in the factories, old habits of eating persisted. Small wonder that Battle Creek Sanitarium patients often complained of dyspepsia!

After her vision in Otsego, Michigan, Ellen White persistently pointed Seventh-day Adventists to the virtues of a vegetarian diet. Fruits, grains, and nuts had been man's original bill of fare, she reminded them. With the addition of vegetables, modest amounts of dairy products, and a few eggs from "healthy" hens, it still best served his needs. All of this John Kellogg had accepted as a youth. Even while boarding himself as a medical student in New York City, Kellogg had practiced a "reform" diet. He had lived principally on graham crackers and apples, with an occasional baked potato or coconut to add variety. His limited time and cooking facilities had not allowed him to prepare cooked wheat, oats, rice, or other grains. He had no place to keep fresh vegetables or fruits even if they had been available and he could have afforded them. Still he had maintained good health and gained seventeen pounds on what must have been a monotonous diet.

Years later at the Battle Creek Sanitarium, Dr. Kellogg soon found that keeping paying patients happy on a radically different diet was quite different from disciplining himself. At the outset, he wisely refrained from imposing a ban on meat. Instead, he attempted by his personal example in the dining room to show the "better way." It wasn't enough. Patients professed a

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willingness to try the vegetables and grains Kellogg ate, but complained of their monotony. Something had to be done.

Kellogg turned to a heavier reliance on bread and other wheat products. Sylvester Graham had promoted whole wheat as a panacea thirty years earlier, and Graham's writings had made their impact on Kellogg. With the aid of Mrs. Kellogg, the doctor soon had the Sanitarium bakery producing a tempting variety of breads and crackers. Some of these were laced with dried fruits; others included oatmeal, rice flour, or a variety of whole grains. As his studies in food chemistry progressed, Dr. Kellogg became aware of certain problems connected with the consumption of whole grains. These foods possessed a high starch content, which meant slower digestion. Kellogg also learned that prolonged baking started the dextrinization of starches, the first step in their digestion. This led him to an emphasis on zwieback, twice-baked bread.

At Dansville, New York, Dr. Jackson, who had also been influenced by Graham, was producing probably the first cold cereal breakfast food. He called it Granula. In reality, Granula was simply Graham flour made from "Genesee Valley white winter wheat," mixed with water and baked in sheets in a slow oven. Later, this thin unleavened bread was broken up, rebaked, and ground into small pieces about the size of modern Grape-Nuts. To be edible, Granula needed to be soaked



*Sylvester Graham (1794-1851), American food reformer whose name became synonymous with whole wheat.*

for at least twenty minutes in milk or cream. Many preferred to let it stand overnight in a bowl of whole milk in a cool icebox.

Dr. Kellogg decided to try an adaptation of the Dansville product at the Sanitarium. He added cornmeal and oatmeal in various amounts to Graham flour until a product with satisfactory taste appeal emerged. Kellogg baked and ground up his cereal like Granula, and he acknowledged his debt to Jackson by calling the Battle Creek cereal Granola. Dansville people caused rumblings of legal action, but the name stuck. Kellogg's attempts to secure grain products that were tasty as well as healthful paid off. Not only did patients complain less over the menus, but more and more of them sent back to the Sanitarium for supplies of Granola or a favorite fruit cracker after they had returned home.

Even before Dr. Kellogg launched a new era at the old Western Health Reform Institute, earlier managers had developed an imitation coffee from a mixture of roasted bran and molasses. Known as Caramel Cereal Coffee, it also owed a debt to Dansville, where Dr. Jackson had produced a concoction named "Somo." Not that Jackson was all that original; frontier women and Civil War soldiers, unable to get real coffee, had long before found that burned wheat and molasses made a tolerable substitute. Kellogg had no enthusiasm for Caramel Cereal Coffee, but patients denied the real product demanded some kind of hot drink. Here again he found it profitable to tinker with the original formula, and again a substantial mail-order business developed.

The more Dr. Kellogg studied the process of digestion, the more convinced he became that good digestion begins in the mouth with food that is thoroughly chewed. Observing that most people gulped their food, Kellogg set out to devise some way to slow down the eating habits of his patients. He fastened on the idea of requiring each to start his meal by slowly chewing a couple of pieces of zwieback or a dry Granola "cocktail." The hard nature of these foods precluded speed, and by requiring them at the start of a meal, the doctor hoped to induce a pattern of eating that would continue right through dessert. Through a combination of events, this eating formula launched Kellogg on the search which ended with the first cereal flakes.

One morning John Kellogg found himself confronted by an obviously upset lady patient. Putting on his most conciliatory manner, he

attempted to calm the woman. To his chagrin, he discovered that she had cracked her dental plate while following his recommended first course at breakfast. The lady suggested, in what he hoped was a joking manner, that he owed her at least \$10 to repair the damages. Immediately, the orders went out to the experimental kitchen: Start hunting for a way in which grain products can be baked for dextrinization and yet be more soluble.

Before long, some of Dr. Kellogg's patients had heard of his new interest. One lady shared with the doctor a new product she had received from a friend in Denver, a little pillow made from strands of boiled wheat. Kellogg was intrigued with this creation which its inventor, Henry Perky, called Shredded Whole Wheat Bread. Perky had become interested in foods for the practical reason that he had digestive troubles. As a result of reading, he became convinced of the advantages of eating wheat instead of meat. Being of an inventive turn of mind, he proceeded to boil and steam a batch of wheat, after which he ran it through a short pair of rollers, one of which was grooved. The resulting strands of wheat piled up to make the soft, puffy pillows.

Kellogg managed to get a large enough sample of Perky's wheat pillows to try in the Sanitarium dining room. The patients reacted negatively. They complained that the new product lacked taste appeal and was difficult to chew. Some said it was "like eating a whisk broom." Still the doctor was interested enough to stop off and see Perky in Denver while on a trip to the west coast. One of the problems with Shredded Wheat Bread was that its high moisture content caused it to spoil rather quickly. Perky had about given up on marketing the product, and had decided simply to sell machines for making it. Kellogg left Denver with the promise of a machine for the Sanitarium, but it never arrived. Probably John Harvey's enthusiasm for baking grain products had triggered a new idea in Perky. Soon he was baking his wheat pillows and finding that this solved the storage problem. After a couple of false starts in Massachusetts, Perky eventually located his production operations in the shadow of Niagara Falls, where he harvested a great deal of free publicity among the thousands who visited America's chief scenic attraction.

Unhappy over Perky's failure to provide the promised shredding machine, Dr. Kellogg also blamed himself for not buying out Perky's



*W. K. Kellogg in 1861 at the age of one.*



*Will Kellogg with four of his brothers and sisters, in 1866. Left to right: Preston S., Emma, W.K., Clara, John Harvey, Laura.*



*Will Kellogg at the age of fourteen.*

entire operation. He redoubled his search for a new, attractive, easily edible form of whole wheat. He began to carry on a variety of experiments in Ella Kellogg's big kitchen at night. He dreamed of being able to turn each grain of wheat into a tiny flake of toast. To accomplish this, he borrowed a pair of rollers Mrs. Kellogg used to roll out pastry crusts. After soaking some wheat, he put it through the rollers; a mixture of watery starch and coarse bran was the result. Kellogg then tried boiling and steaming the wheat for various periods of time. All he got was a pasty mess which clung to the rollers.

One night, just as he had finished cooking a batch of wheat, the doctor was called away for several hours. He left the wheat sitting on the back of the stove. When Kellogg returned, he was about to throw the old batch of wheat out and start again, but decided to run it through the rollers and see what would happen. To his surprise, each kernel of wheat flattened out on the rollers. Calling one of his foster children to aid him, he soon had the youngster scraping the flakes from the rollers with a large bread knife.

Dr. Kellogg still did not understand what had caused the change, but he felt close to success. He transferred the experiments to the big Sanitarium kitchen, where Will Keith Kellogg, the doctor's young brother, now became his chief collaborator. For years, W. K. had been serving as John's bookkeeper, business manager, purchasing agent, and "man Friday." Now, at the end of a long day's work, the two brothers pried together into a secret of the flakes. For some time, they knew only failure. Then one day it happened again. Events prevented their running a batch of cooked wheat through the rollers for about 48 hours. By that time, the wheat was moldy, but they decided to process it anyway. To their surprise, flakes, larger and thinner than the previous time, resulted. Spread out on baking sheets and toasted in the oven, they proved crisp and edible—if one ignored their slightly moldy flavor.

The brothers discovered the value of letting the boiled wheat stand for a time. During this "tempering" time, the moisture had a chance to equalize throughout the wheat berry. But how long to wait? They made more experiments. Changing atmospheric conditions made a difference, too. Meanwhile, W. K. secured an old paper-cutting knife from the Review and Herald Publishing Association. A local mechanic helped them to fasten the knife so that it scraped the

flakes from the rollers without damaging them. Dr. Kellogg was much too busy with his medical work to carry on the many experiments necessary to discover the correct tempering time and work out other production problems. This job fell to W. K. The doctor still provided ideas, and the younger brother tried out some of his own as well. Gradually, they developed a smooth, efficient system for making the flakes.

On the last day of May, 1894, Dr. Kellogg filed for a patent on flaked cereals and the process for making them. The patent covered manufacture of flakes from barley, oats, corn, and other grains as well as wheat, but they made no attempt at this time to produce other than the wheat flakes. The rollers then available were just not strong enough to crush corn or rice satisfactorily. Besides, wheat was the king of cereals in Dr. Kellogg's estimation. He named the new product Granose Flakes—*gran* from grain, and *ose*, a chemical suffix indicating a partially digested food.

After all their difficulties developing wheat flakes, Dr. Kellogg felt unsure about public acceptance. He ordered a large batch of the flakes rubbed through a sieve, so that they became a coarse meal which mushed up instantly in milk. These he labeled Granose Grits. Will Kellogg was horrified. "Keep the flakes," he implored. The older brother remained skeptical until he found out that the Sanitarium patients agreed with W.K.—almost unanimously!

As with Granola, the Kelloggs first intended Granose Flakes for use only at the Sanitarium. But, as with other San foods, a mail-order business gradually developed. A little later, Dr. Kellogg agreed to a demonstration of the flakes in some of the larger stores in the Chicago area. This resulted in more sales. In turn, production facilities had to be increased. Here the Sanitarium directors balked. As a consequence, the doctor formed his own Sanitas Company to produce flaked cereals and other food products he was already dreaming of. Brother Will handled the business end of Sanitas, receiving a 25 percent share of the profits.

During the 1890's, ideas for food products seemed to shoot out from John Kellogg's mind like sparks from a Fourth of July sparkler. The problem of correct amounts of protein for persons giving up meat concerned him. As a substitute for meat, Kellogg recommended a larger use of legumes—dried peas, beans, peanuts. Yet these foods created problems for many



*As a broom salesman for his father's factory, Will Kellogg traveled over a wide area of Michigan. A hard worker and a good manager, he saved \$1,000 from his earnings when he was seventeen.*

people. Beans, for instance, frequently caused gas pains, for which Kellogg prescribed the chewing of charcoal tablets. But even the charismatic Dr. Kellogg made very few converts to charcoal tablets. There were those who complained that peanuts irritated their digestive

tracts. John Harvey maintained that this happened because they failed to chew the peanuts well enough, but he found it even more difficult to change people's chewing habits than their dietary tastes.

The answer, of course, was peanut butter. Just when or how this product first was tried is a matter of dispute. One story credits with the discovery an unnamed young Sanitarium worker employed to roast peanuts for the patients. According to this account, Dr. Kellogg chanced upon the young peanut roaster talking to his girl friend instead of working at his job, and he proceeded to lecture the boy about honest work. Irritated and embarrassed, the lad sought to relieve his frustration by taking a nearby hammer and smashing a peanut. To his surprise the peanut, instead of flying into bits, sort of "mushed up." The boy repeated his act on several other peanuts with similar results. Scraping the smashed nuts into a little ball, he presented it to the doctor the next morning. Kellogg's eyes lit up. "I'll give you fifty dollars for it!" Thus peanut butter was born—or so one story goes.

W. K. Kellogg remembered a less dramatic beginning. One day Dr. Kellogg had sent word for his younger brother to get a batch of peanuts, remove the hulls, and run them through the flaking rollers. Ten pounds of nuts thus processed produced the first batch of peanut butter, which was sold largely to Seventh-day Adventists. Whoever created the product, and however, Dr. Kellogg made no effort to patent the soon-to-be-popular spread. As he explained it, this was something he believed "the world ought to have; let everybody that wants it have it and make the best use of it."

His zeal to win men and women to a vegetarian diet did not blind John Kellogg to the fact that steak, chops, and roasts held a powerful appeal to most Americans. He needed to develop something from vegetable sources which would actually look and taste a great deal like a beef roast. His first creation promoted commercially, called Nuttose, appeared in 1896. Subsequently, other products, of which Protose has remained the most popular, appeared at intervals. These substitute meats contained varying combinations of wheat gluten, peanut meal, and flavorings. Whether or not the Nuttose line of foods tasted "like the real thing," their nutritional value was freely conceded. Looking ahead at a rapidly expanding population, Dr. Kellogg predicted that in the years ahead Americans could not



Will Kellogg at the age of thirty, and wife, the former Ella "Puss" Davis.



afford the luxury of feeding twenty pounds of grain to get one pound of meat. Recent meat and grain shortages seem to confirm the accuracy of his prophecy.

Not all of the doctor's food innovations caught on. At about the same time that he was seeking a meat substitute, Kellogg also tested his first artificial milk. "Malted Nuts" was a powdered form of almonds and peanuts which could be mixed with water. Despite a testimonial from Clara Barton, and despite the doctor's claim that Malted Nuts was better than cows' milk in cases of "biliousness, hyperpepsia, and nervous headache," the beverage failed to attract a following. Many years later, Kellogg had more success making a milk from soybeans.

In spite of Will Kellogg's urgings, his doctor brother refused to let Will launch a major advertising campaign for Sanitas products. John was always reluctant to spend money for certain things, and he also feared lest his fellow physicians misconstrue his commercial venture: either as personal advertising or as promotion of patent-medicine type remedies. Then a brash ex-Sanitarium patient showed the Kelloggs there could be real money in a health food.

Charles W. Post was not quite forty in 1891, when his train pulled into Battle Creek. Already, he had gone through several bankruptcies and at least three physical breakdowns. He had been

partner in a hardware store in Missouri, sold real estate and run a woolen mill in Texas, and manufactured farm equipment in Illinois. After each financial reverse, his health had also nose-dived, and he had found no lasting cure. Now he had come to see what the famed Battle Creek Sanitarium could do. Hard up for funds, he paid his bills for the first several months with blankets salvaged from his Texas woolen mill. Mrs. Post also took a new type of suspenders C. W. had invented and peddled them from house to house in Battle Creek. The Kelloggs later claimed that Post had been given reduced rates as a semicharity patient at the Sanitarium.

Nine months of Sanitarium treatments left no visible improvement in Post's health, but it did leave him with an antagonism toward Dr. Kellogg and his theories. It also left him with an idea that turned him into a multimillionaire. While at the "San", Post had shown intense interest in the experimental kitchen where workers tinkered with the Caramel Cereal Coffee formula. Growing suspicious, the Sanitarium matron spoke to the doctor about it, telling him she feared Post intended to steal the recipe and sell his own brand. Should she keep Post away from the kitchen?

"No, indeed," Kellogg replied. He explained that the more cereal coffee people drank, the less they would consume of the real thing. He



Charles W. Post, of "Postum" fame, learned secrets of food processing in Battle Creek Sanitarium kitchens. One of the few mistakes Post made was "Elijah's Manna," which drew the wrath of offended clergymen. He renamed the cereal Post Toasties.

wanted reform, not profits. (Especially so, when he had no idea the profits could run into millions!)

After Post stopped treatments at the Sanitarium, he tried Christian Science and mental suggestion, effecting his own cure at last, he said, simply by telling himself he was well. Moving to the opposite side of Battle Creek, he opened a medical boardinghouse known as LaVita Inn where he practiced mental therapeutics and offered a diet free of coffee, tea, and whiskey. Post claimed a number of cures involving ailments from rheumatism to erysipelas. But Charlie Post was at heart a promoter, and the idea for a cereal coffee had been rattling around in his head.

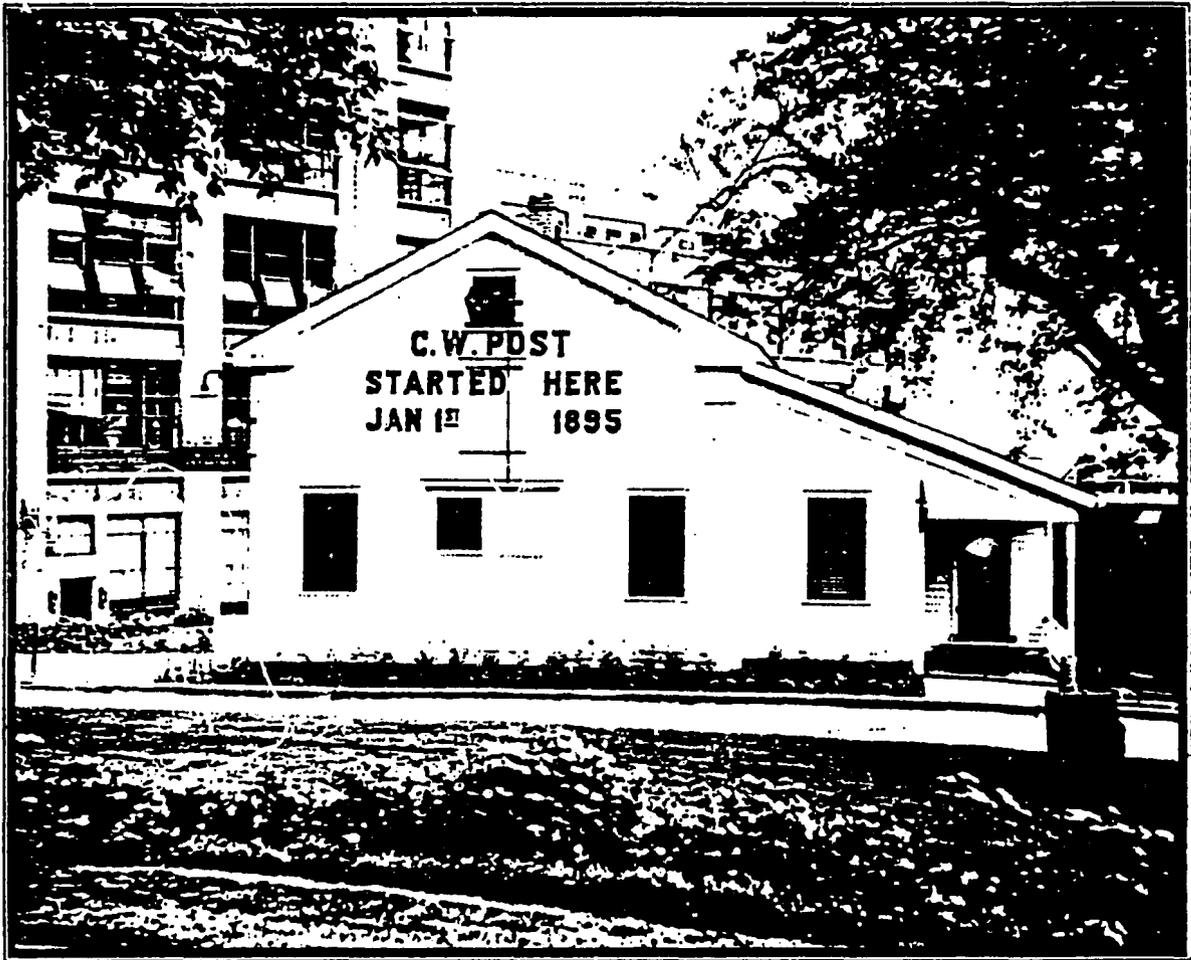
On New Year's Day, 1895, Post cooked up his first large batch of what he modestly named Postum—a mixture of wheat, beans, and molasses. Battle Creek residents remained notably unimpressed, but Charlie Post adopted two merchandising concepts which made his product click: delayed billing which allowed merchants to stock Postum and pay for it out of their sales, and massive local advertising. The advertising smacked more than a little of the patent medicine man. A Post-discovered disease suddenly appeared: coffee neuralgia. The remedy was simple; lay off the coffee and drink Postum. A catchy slogan highlighted ads and labels: "It

Makes Red Blood." How better could one appeal to red-blooded Americans?

In the second year of operation, Postum grossed over a quarter million dollars in sales; two years later the figure had trebled. Noticing that Postum sales were especially brisk during cold weather, its manufacturer decided to make a complementary product for the warm months. Again, he came up with a food that resembled an old Sanitarium standby. For several years, the Posts had concocted a homemade type of Granola for their own use. Now C. W. decided that it, too, had a commercial future. Three years after the birth of Postum, Grape-Nuts went into production, its name taken from maltose, or "grape sugar" as Post called it, and from its nutlike flavor.

The same imaginative advertising Post had used with Postum, he now turned loose on Grape-Nuts. It was a great brain food; it tightened loose teeth; it benefited victims of malaria and tuberculosis! Within ten years of his arrival in Battle Creek, Post was clearing one million dollars a year. The success of the man W. K. Kellogg termed "the original imitator" was not lost on a host of would-be competitors. Battle Creek was about to enter the Great Cereal Boom.

Just after the turn of the century, the boom began. At first, neither cereal coffees nor granulated foods like Grape-Nuts captured center



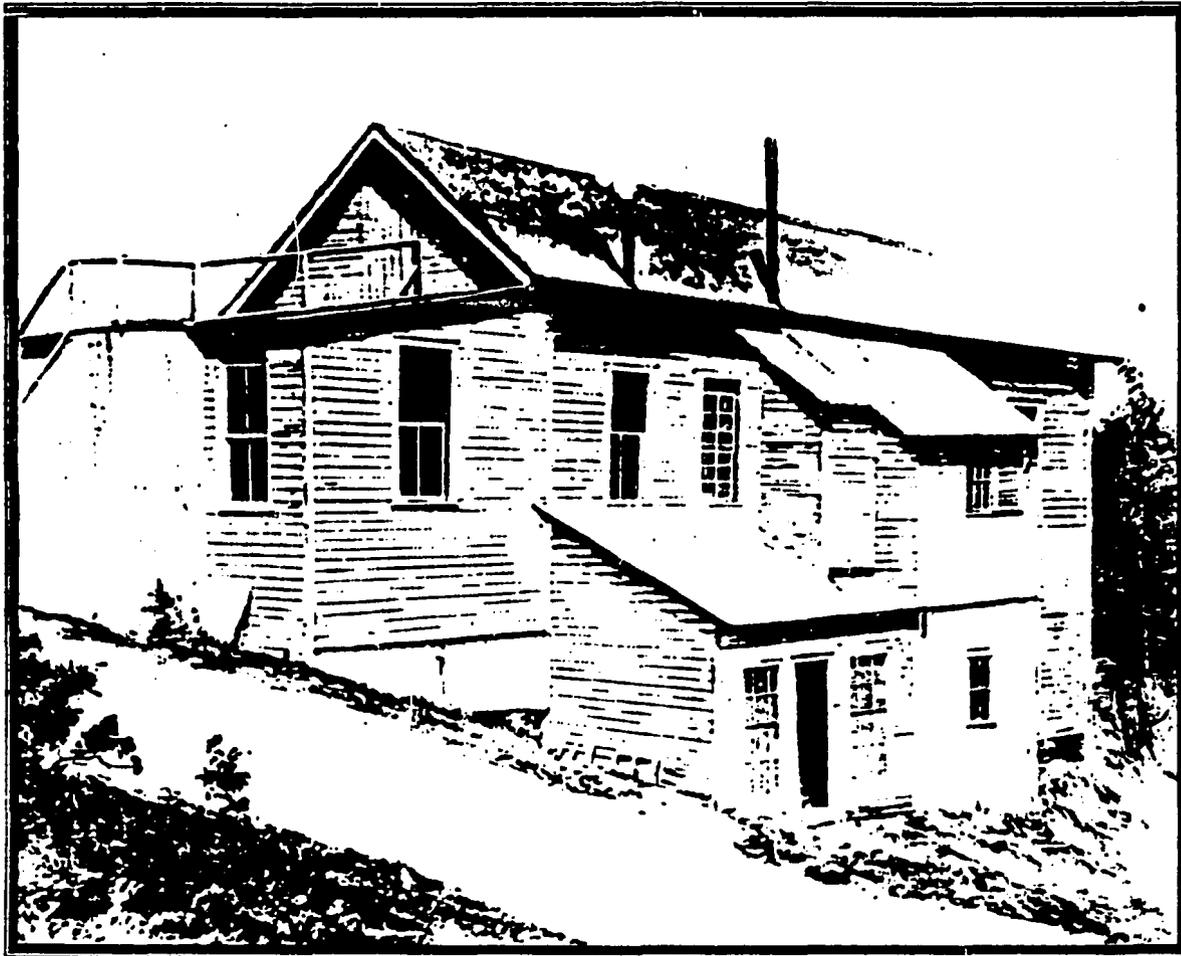
*Post started making Postum in 1895, and by 1900 his food factory was netting \$3 million.*

stage. Rather, it was wheat flakes. First on the scene was the Battle Creek Pure Food Company, producers of Malta Vita. Their basic innovation was to add barley malt syrup, a Post discovery, to the standard wheat flake which they learned to produce by luring a bakery foreman away from the Kelloggs' Sanitas Company. Sales mushroomed overnight, and collapsed nearly as fast when sloppy production policies resulted in flakes that turned moldy on grocery shelves. Malta Vita's experience was typical of many others: Force, Cero-Fruto, Mapl-Flakes, Norka Malted Oats. Over forty cereal manufacturing companies organized in Battle Creek within a couple of years. But in less than a decade they had disappeared, most without a trace, a few absorbed by the Ralston Purina Company or Quaker Oats. The two originals, Kellogg and Post, alone remained.

The cereal boom had not hurt Post, but it had played havoc with the profits of the Sanitas Company. A \$22,000 profit in 1895 had turned into a loss by 1902. It was not the competition

alone that had hurt Sanitas. To Will Kellogg's despair, his doctor brother showed more interest in dreaming up new food creations than in authorizing the concerted advertising, sales, and production efforts needed to capitalize on the appeal of any one of them. Always one to pinch his pennies, John Kellogg could not accept the idea that one must spend money in order to earn it. These were years, too, when he was pre-occupied with his growing feud with the Adventist leadership. He couldn't concentrate on selling wheat or corn flakes.

By now, Dr. Kellogg had learned to resent the competition. As much as anything, he was angry at companies who bribed key Sanitas employees into leaving with production techniques and food formulas neatly stowed away in their heads. A lawsuit against the makers of Malta Vita, however, turned out disastrously. The courts ruled that small changes in formula or production techniques were sufficient to protect Malta Vita's patents. After this reverse, Dr. Kellogg lost heart. He was still angry enough to allow



*Will Kellogg left his brother's employ and formed the Battle Creek Toasted Corn Flake Company.*

Will to take a swipe at the competition by printing what was to become a famous slogan on all Granose Flake boxes: "Beware of imitation. None genuine without this signature—W. K. Kellogg." Probably the doctor hoped to gain some advantage by connecting his famous name with Sanitas products without being subject to attack from the medical fraternity for unorthodox advertising.

The early months of the twentieth century saw an increasing tenseness develop between the Kellogg brothers. For years, W. K. had put up with a host of indignities at the hands of his imperious brother. The time came when a new factory must be built to produce Granose Flakes. When the building was completed, Dr. Kellogg said he had not authorized its construction—Will had. It would be up to W. K. to pay the \$50,000 cost, the doctor declared. That, plus differences over some Sanitarium matters, must have seemed like the last straws to Will Kellogg. He notified the doctor he was quitting at the "San." But after the 1902 fire, he relented and

for two years and a half carried a major load in financing its rebuilding.

In 1898, the Kellogg brothers had developed the first corn flakes, yet for the next five years they had done very little with the discovery. Made from whole corn without any flavorings, the flakes were thick and tasteless. Then the brothers discovered that substituting corn grits for whole corn resulted in a thinner flake; and the addition of malt improved the flavor. While John Harvey was in Europe, W. K. made a daring move: he added some sugar to the formula and found the taste better yet. John Harvey was furious, but sales increased to 150 cases of corn flakes per day, and the sugar stayed in.

Dr. Kellogg may not have understood the secrets for Charlie Post's financial success; W. K. did, and he yearned to try them out on corn flakes. The only way to do this, W. K. decided, was to form a new company and buy from the doctor the right to manufacture corn flakes. Since the patents on the flaking process had been de-

clared invalid. W. K. might simply have formed his company and begun making flakes, but this he considered dishonest. With the help of some St. Louis businessmen who had learned to respect his judgment at the Sanitarium, Will formed the Battle Creek Toasted Corn Flake Company in February, 1906. After months of negotiating, John Harvey had finally agreed to sell corn flake rights to his brother's company in exchange for \$22,400 in cash and the largest block of stock in the new concern. It was none too soon. Already Charlie Post had come out with a corn flake he called "Elijah's Manna." It was an unfortunate choice of name; people considered it sacrilegious. By the time Post caught on and changed the name to Post Toasties, W. K. was well on the way to cornering the corn flake trade.

Dr. Kellogg proceeded to scatter some of his Toasted Corn Flakes stock around to San employees as bonuses in lieu of a pay raise. Patiently, and quietly, W. K. picked the shares up at bargain prices until he had majority control of the corporation. Then, severing his connections with Sanitas, W. K. started to make and sell corn flakes in earnest. Six months after the birth of his company he bought his first full-page ad in *Ladies' Home Journal*, and one of the most imaginative advertising campaigns in history had begun. A few months later, ladies in New York, Chicago, and St. Louis were invited through major newspaper ads to "wink" at their grocer on Wednesday and see what they got. A box of Kellogg's Toasted Corn Flakes, of course. (Reasoning that "Sanitas" sounded like a disinfectant, Will had decided to drop it as part of the name and substitute "Kellogg's.") Within weeks, corn flakes sales in New York City alone had zoomed from two carloads a month to a carload per day!

Shortly after W. K. had dropped the name Sanitas, Dr. Kellogg also decided to drop "Sanitas" and establish a new Kellogg Food Company in its place. The alleged reason was to forestall a "Professor" Frank Kellogg (no relation), who was marketing a weight-reducing patent medicine in Battle Creek, from getting into the food business and causing confusion and embarrassment. When the doctor further decided to add the Kellogg name to all the food products his company made, W. K. became suspicious that John Harvey had other reasons for the name change. Will saw this as a cheap way to profit by the hundreds of thousands of dollars'



*Two brothers, two geniuses, both world-famous. A physician who knew them both well remarked, "John Harvey Kellogg and W. K. Kellogg were like two fellows trying to climb the same ladder at the same time." The brothers did not resemble each other either in appearance or temperament.*

worth of advertising purchased to promote Kellogg's Toasted Corn Flakes!

The Kellogg brothers now began a struggle in the courts that was to last for over a decade, embittering their personal relationship for most of the rest of their lives. W. K.'s wrath had been kindled earlier when John Harvey had printed on all Sanitas wheat flake cartons that his was the "only flaked product which has a legitimate pedigree." Now when the threat of bringing out a competitive wheat flake failed to convince Dr. Kellogg to drop the name Kellogg's from his products, Will offered his brother \$50,000 to discontinue the use of the family name on his foods. At first, John Harvey agreed, but when a contract to that effect was brought for his signature he changed his mind.

At last, in the late summer of 1910, Will filed suit to have the doctor enjoined from using the name Kellogg either as a descriptive food name or as part of his company name. Will's lawyers claimed that the elder brother deliberately



sought to benefit from over \$2,000,000 of advertising purchased by W. K.'s company. They also maintained that the doctor's salesmen misrepresented his products, intimating that they were produced by the makers of Kellogg's Toasted Corn Flakes.

Once so shy about seeing the Kellogg name on his food innovations, John Harvey now claimed that it was his work and reputation which gave the family name value in any kind of advertising. Will disagreed violently. The marketing of 50,000,000 boxes of corn flakes with his signature on the box should have convinced the public that more than one Kellogg in Battle Creek had something to do with food! At last, the warring brothers reached an out-of-court compromise. The doctor agreed to drop the name "Kellogg's" from his food products, but was allowed to keep it as part of his company name.

This temporary truce did not prevent W. K. from taking gleeful advantage of John Harvey whenever possible. One such incident involved a multigrain cereal which Dr. Kellogg had developed and started to market under the name "Pep." It was a catchy name, but when he came to file for the trademark, he found that a small

producer of a popcorn and candy confection in New York City already owned it. The doctor offered to buy the trademark for \$5,000; the owner asked \$7,500. Although he was making about \$2,000 per day profit on his Pep, John Harvey always wanted a bargain. He continued to haggle with the New York owner. Meanwhile, W. K. learned of the bargaining, sent his New York lawyer around, and snapped up the Pep trademark. When the doctor finally decided to pay the \$7,500, he found that "Pep" was no longer for sale. He shifted the name of his latest creation to "Zo," the Greek word for life, but somehow that never caught on. Perhaps the American public was not sophisticated enough in 1915.

Family name troubles surfaced once more with a battle over "bran." Since 1908, the doctor's company had sold granulated bran as a natural laxative for mixing with other breakfast cereals. By 1914, it was selling at the rate of 100,000 boxes per year. Early in 1915, Dr. Kellogg decided to shorten the name of his packaged bran from "Battle Creek Diet System Sterilized Bran" to "Kellogg's Sterilized Bran." He claimed that this did not violate his agreement with Will as that agreement had covered only flaked grains. The new name, plus a vigorous advertising campaign, resulted in a jump in sales to 250,000 boxes of bran in 1915 and 600,000 in 1916. W. K. decided to fight fire with fire. In the fall of 1915, he brought out Kellogg's Toasted Bran Flakes and followed it six months later with his own "Kellogg's Bran" in granular form. Confusion reigned in grocery stores!

Now it was Dr. Kellogg's turn to bring suit against his brother. He would have been farther ahead if he had not done so. He lost the initial suit in the local circuit court, and appealed to the Michigan State Supreme Court. The justices decided that it was W. K.'s company which had made the trade name "Kellogg's" valuable. He alone had a right to attach it to any food products. A quarter of a million dollars poorer as the result of his quarrels, John Harvey decided to call it quits. He changed his company's name to the Battle Creek Food Company, continuing to market breakfast cereals, digestive aids, health candies, and vegetarian proteins until his death in 1943.

W. K. saw no reason why he should not shorten the name of the Kellogg Toasted Corn Flake Company to the Kellogg Company. As he broadened his line of prepared breakfast foods,

he continued the aggressive merchandising techniques which had proved so successful with corn flakes. Even during the Great Depression, when most manufacturers were cutting back, Will Kellogg ordered the advertising budget increased. Again, he guessed right; the company's sales figures never faltered in their upward march.

What of C. W. Post, the genius who first discerned that "health" foods manufactured for people with troubled stomachs could be marketed as convenience foods for the whole gamut of Americans—well, sick, and those afraid of getting sick? In 1914, the chronic stomach problems which had plagued Post for years necessitated a hurried trip to the Mayo Brothers' Clinic for surgery. Afterwards, he returned to his Santa Barbara, California, home feeling somewhat better. But his spells of melancholia persisted. One morning, he killed himself with a 30-30 hunting rifle, the only one of his firearms collection which had not been packed away out of sight and reach. He had not quite reached his sixtieth birthday.

John Harvey Kellogg kept active as surgeon, author, food manufacturer, and health propagandist until his final bout with pneumonia just two months short of his ninety-second year. As for Will, he was determined to beat his elder brother once more by living longer. He came three months short of making good on his attempt.

Three men, vastly different in personality, talents, and motivation, had greatly modified America's eating habits—yes, and eventually those of millions more in many countries of the world.

*If Mr. Post were to be dropped from an airship on a desert island in uncharted seas, he would begin at once to take note of the things about him that were of utility.*

*If the island were inhabited, C. W. Post would proceed to round up the natives and teach them to use his special brand of coconuts. Inside of three weeks he'd have them fighting for him and organizing to repel all invaders. In six months the natives would have adopted fig leaves . . . "grown only on Post trees" . . . and inside of a year he'd be mayor of the island and king of the Lulaloos.*

*Later on he would introduce shoes and sandals made from "Post cocoa bark," and when the rescue party finally found him he'd be in a position to buy the ship and sail it home as master. —Zach Moore, journalist. 1909.*

## The great Battle Creek cereal boom as the cartoonists saw it.



"Historic moments in the annals of American Industry—An efficiency engineer discovers that printing will save Mr. Kellogg from having to sign his name on each of the Corn Flakes boxes."—Drawing by Rea Irvin; Copr. 1936. 1964 The New Yorker Magazine, Inc.

# World Foods Service

By E. W. HOWSE, Director



The General Conference World Foods Service represents an international consortium of denominationally owned food manufacturing and marketing companies, retail stores, and vegetarian restaurants. While they trade under different names, they all belong to the constituency of the church. It therefore may be said that we are reporting to a representative meeting of shareholders, not

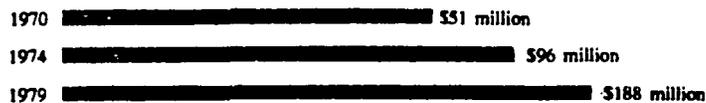
in the sense that they have a financial investment, because no person owns capital in any of these companies, but to the church members who have a pride of ownership in these fine church institutions operating in 25 countries. I am happy to bring to the church a report of outstanding progress in all aspects of the diversified activities of these institutions.

A variety of products originally based on the processes first developed in 1879 by J. H. Kellogg and his wife in their kitchen to manufacture toasted cereals, peanut butter, vegetable protein, and cereal coffee are being produced and sold in increasing quantities. As new technology has been developed, new products have been added, including extruded cereals, textured soy, yeast extracts, soy milk, multi-cereal crackers, and fruit juices.

Statistics of sales show a substantial increase from \$96 million in 1974 to \$188 million for 1979 or an increase of 95.8 percent. Comparison for the two quinquennium periods are 1970-1974—\$357 million; 1975-1979—\$686 million, or an increase of 92.2 percent.

During the period under review, \$20.5 million was appropriated by various food companies to the direct evangelistic program of the church, which on a world basis is approximately 3 percent of sales.

Total food sales



The most significant feature in the development of our worldwide food program during the quinquennium under review has been the rapid expansion of the demand for the products we have developed, necessitating either new or enlarged buildings and more modern and sophisticated equipment.

The DE-VAU-GE Food Company of Germany, which is the major manufacturing unit in the Euro-Africa Division, moved into a new building at Lueneburg in 1976 and in 1977 acquired the bakery business previously owned by Brother Bosen, of Dusseldorf. The market for their products is growing rapidly. Phag Food Factory, of Switzerland, and Pur-Aliment Food Factory, of France, also are expanding their markets and are now distributing the DE-VAU-GE products under their own label.

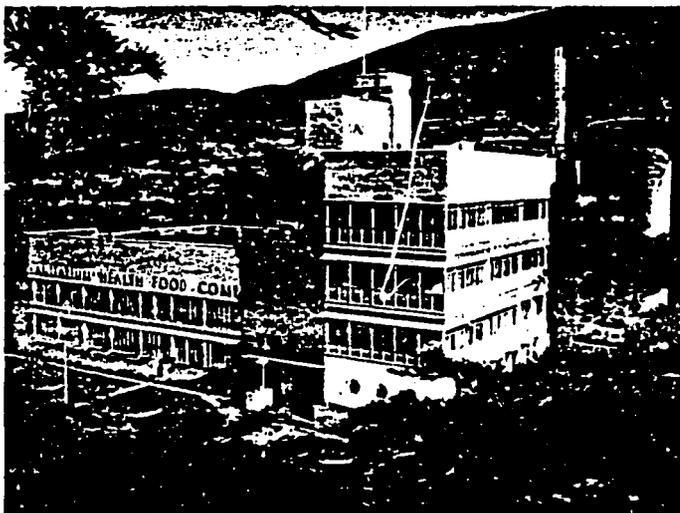
The South American Division Food Company has expanded

its operations into Chile. In 1976 a new factory on the campus of the Chile College was completed and began production of fruit products and protein foods. The market for the products produced by Alimentos Granix, of Argentina, particularly the variety of multicereal savory crackers, has grown at an amazing rate. Superbom, of Brazil, still enjoys a substantial share of the juice market. During the quinquennium they began production of vegetable-protein products, and the demand has increased rapidly to the point where they are now producing 700 tons per year.

The San-iku Foods, of Japan, moved into new facilities two years ago. Their market, especially for the soy-milk products, is growing rapidly.

National True Foods, of South Africa, moved into new facilities on the campus of the Sedaven High School, near Johannesburg, and is planning to produce and market a wider range of health products.

In the Northern Europe-West Africa Division, the Nutana production facility in Denmark has grown rapidly during the past few years, necessitating much larger production and warehouse space. A new building equipped with modern processing machinery was completed and officially opened in December, 1979. A new marketing organization trading under the name of FinnNutana has just begun operations in Finland. The marketing organizations Esdakost, of Sweden, and



Food companies in both the Australasian and South American divisions have a number of branches. Top is the Warburton factory of the Sanitarium Health Food Company in Australia. Bottom is Alimentos Granix, in Buenos Aires, a branch of South America's company.

Dagens Kost, of Norway, are expanding at a very satisfactory rate.

The Sanitarium Health Food Company, of Australia and New Zealand, continues to prosper and enjoy a significant share of the breakfast-cereal market. They responded favorably to a request to assume control of Granose Foods, of England, in order to strengthen this company's operations in the United Kingdom, the transfer being effective October 1, 1979.

Loma Linda Foods, managed by the Sanitarium Health Food Company since April 1, has made substantial progress during the past four years and has succeeded in developing some new vegetable-protein foods that have gained wide consumer acceptance. They have also built a stronger market for their soy-milk products.

The food manufacturing and marketing program in the Inter-American Division operating in Jamaica, Mexico, Costa Rica, and Colombia was reorganized in 1977, and as a result of this change and more efficient management all branches are operating profitably. Plans are now being developed for further expansion into other countries in this division.

We entered this quinquennium with the fervent hope of developing processes and products suited to the needs of the poorer classes as we recognize our responsibility in providing palatable, nourishing, and yet inexpensive foods to help meet



M. A. Bediako, Central Ghana Conference president, gave colorful pieces of kente cloth to both the Northern Europe-West Africa Division and the General Conference. Kente cloth is hand woven in strips and sewn together into brilliantly colored pieces of fabric.

## Delegate deletions

Certain delegates whose names appear in the list in Bulletin No. 1, pages 5, 12-15 could not serve. Their names, as indicated below, were deleted by voice of the conference from the list of delegates.

### Regular delegates

#### Euro-Africa Division

Bulgarian Church  
Emil B. Dimitrov  
Franco-Belgian Union  
Andre Garsin  
Indian Ocean Union  
N. Seenven  
Romanian Union  
Alexandru C. Delea

#### Far Eastern Division

Central Philippine Union  
Fred Hossillos  
Dalinacio Y. Javellana  
Elietzer L. Lucrida  
Mrs. Coraminda P. Lumibao  
Eduardo F. Palma  
East Indonesia Union  
Wien A. Dien  
Eneas P. Djimesha  
Leyana K. Djimesha  
Dicky Gerungan  
Alez Haryona  
Mrs. Roos Kiroyan  
Bemy C. Manarinsong  
Jan Manueke  
Mrs. Marlene I. Mewengkang  
Mrs. Juliana Umboh  
Korean Union  
Jong Yul Kim  
Doo Hei Nam  
Yu Sung Yang  
North Philippine Union  
Noemi M. Abarquez  
Samuel C. Ada  
Alfredo T. Aristorenas  
Virgilio M. Banaag

Eutiquio N. Dican  
Traciana A. Galang  
Edward E. Marifosque  
Diony H. Mopera  
South Philippine Union  
Josue L. Balacuit  
Mrs. Estrella T. Micabalo  
Mrs. Lagrimas L. Tan  
Sererino G. Tanghal  
Southeast Asia Union  
David Chung Ket Shun  
West Indonesia Union  
Chappy Jusuf

#### Inter-American Division

Cuba  
Arturo Broche  
Raul Cruz  
Pedro De Armas  
Evaristo Gonzalez  
Rafael Rodriguez  
Hector Torres

#### Northern Europe-West Africa Division

West Africa Union  
Alex Clerk  
Elbertha G. Knott  
Paul Nsiah  
Mrs. Daisy Wright

#### South American Division

Chile Union  
Jorge E. Lezana  
Inca Union  
Blas Antero  
Natalio Cuellar

#### Southern Asia Division

Central India Union  
Mahavir P. Agarwal

#### Trans-Africa Division

Central African Union  
Moses Mwenya  
Zaire Union  
James Namoomba

the tremendous nutritional needs of many Third World countries. God's messenger, Ellen G. White, says, "It is the Lord's design that the poorest people in every place shall be supplied with inexpensive, healthful foods."—*Health Food Ministry*, p. 25. We therefore believe that the Lord led us in the development of a new process, subsequently patented and assigned for the worldwide use of World Foods Service, for manufacturing soy milk of excellent quality with a minimum of processing and packaging costs. This process is now being used in a new factory that recently began production in Cairo, Egypt. A similar factory soon will begin production in Medellin, Colombia.

Another aspect of the health-food program of the church is the operation of retail health-food stores and vegetarian restaurants in South America, Australasia, and Europe. A total of 41 million customers were served in 89 retail stores during this quinquennium. The restaurants in Brazil particularly have proved to be successful centers of Christian influence, necessitating the appointment of a full-time chaplain to care for the growing interests among clients.

While the world is planning for its business to go on forever and the most elaborate and long-term projects are taking shape, the great objective of the Seventh-day Adventist Church is to finish its work *quickly*. To that end the goals, objectives, and total activities of World Foods Service are dedicated. □

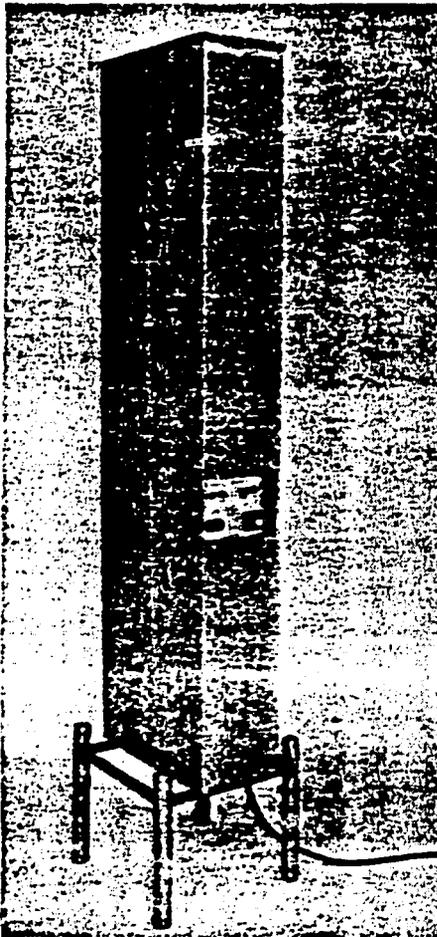


# WORLD FOODS SERVICE

GENERAL CONFERENCE OF SEVENTH-DAY ADVENTISTS

6840 Eastern Avenue, N.W., Washington, D.C. 20012

Phone (202) 723-0800



MICROWAVE COOKERS

All models are a vertical type oven for cooking soybeans before they are broken or ground to inactivate the enzyme that causes them to develop an off flavor, or what is sometimes termed a painty flavor.

From the Microwave Cooked soybeans an innumerable variety of products can be developed. These models were engineered for processing soybeans for soy beverages, soy milk, soy flours and soy paste or soy cremes.

With soybeans that have been cooked by these Microwave Cookers a soy beverage or soy milk can be produced that suspends in the liquid with a pleasant mouth feel and taste.

Models GC 10 A and GC 12 A cook 200 grams per minute, or 12 kilos per hour, which will be enough to produce 300 liters of milk per hour.

Models GC 11 A and GC 13 A cook 1000 grams per minute, or 60 kilos per hour, which will be enough to produce 1500 liters of milk per hour.

Model	GC 10 A	700 watts	60 cycles	110 volts
Model	GC 12 A	700 watts	50 cycles	220 volts
Model	GC 11 A	2500 watts	50 cycles	220 volts
Model	GC 13 A	2500 watts	60 cycles	220 volts

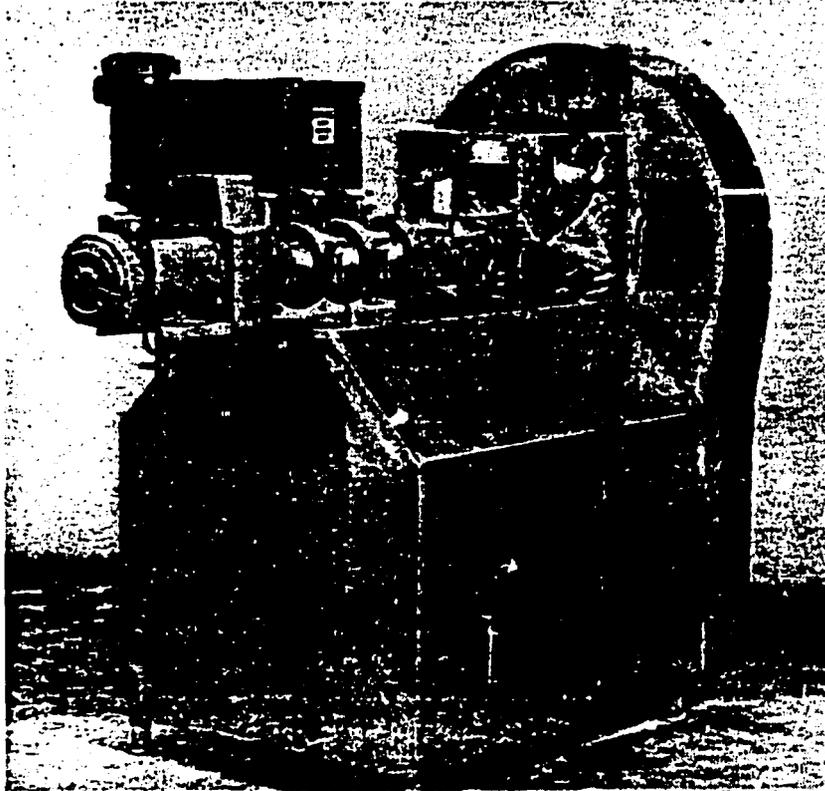


# WORLD FOODS SERVICE

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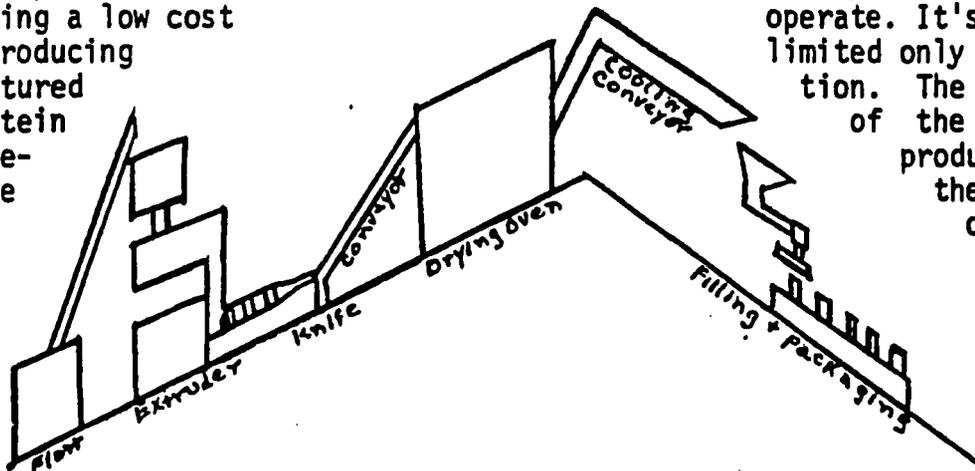
Phone (202) 723-0800



WORLD FOODS SERVICE EXTRUDER

The World Foods Service Extruder has been developed for those plants requiring a low cost machine for producing cereals, textured vegetable protein products, pre-cooked legume and cereal grain products, and snack foods.

This extruder is highly functional, is easily installed and easy to operate. It's versatility is limited only by the imagination. The form and shape of the desired final product depends on the shape and size of the die and the speed of the cut off unit at the expelling end of the extruder.



FOOD COMPANIES

Austrian Food Company  
(Estakost GmbH)  
Waehringerstrasse 57, 1090 Vienna, Austria

Finn-Nutana Food Company  
(Finn-Nutana Oy)  
Uudenmaantie 50, 20720 Turku 72, Finland

British Health Food Factory  
(Granose Foods, Limited)  
Stanborough Park, Watford, Herts., England

German Health Food Factory  
(DE-VAU-GE Gesundheitswerk GmbH)  
Luener Rennbahn 18  
2120 Lueneburg  
Federal Republic of Germany

Danish Food Factory  
(Nutana)  
4632 Bjaeverskov, Denmark

Inter-American Division Food Company  
Head Office: 760 Ponce de Leon Boulevard  
Coral Gables, Florida 33134, USA

Division Health Food Company  
Head Office  
Estrada De Itapeperica Da Sera, Km.22  
Via Santo Amaro, Sao Paulo, SP Brazil

Alimentos Colpac.  
Km. 13 Carretera Novojoa-Huatabampo  
Navojoa, Sonora, Mexico

Videira Plant  
Videira, Santa Catarina, Brazil

Industrias COVAC S.A.  
Alajuela, Costa Rica

Argentina Branch  
(Alimentos Granix)  
Avenida San Martin 4625  
Florida, Buenos Aires, Argentina

Productos Icolpan  
Carrera 84 NO 33 AA-1  
Medellin, Colombia

Chile Branch  
(Alimentos Saludables Superbom)

Westico Foods Ltd.  
Mandeville, Jamaica, W.I.

Chillan Plant  
"Mariposas," via Chillan, Chile

Japan Food Factory  
(San-iku Foods)  
Sodegaura-machi, Kimitsu-gun  
Chiba-ken 299-02, Japan

Uruguay Branch  
(Productos Frutigran)  
Ruta 5, Km. 34, Progreso, Uruguay

Korean Food Factory  
320 Panjeong-ri, Jiksan-myun Chunwon-gun  
Choongchungnam-do, Korea

Esdakost Food Company  
(AB Esdakost)  
762 00 Rimbo, Sweden

Loma Linda Foods  
Head Office  
11503 Pierce Street  
Riverside, California 92505

Auckland Factory  
108 Pah Road, Royal Oak  
Auckland, New Zealand

Mount Vernon Plant  
P.O. Box 388  
Mount Vernon, OHIO 43050

Christchurch Factory  
55-64 Harewood Road  
Christchurch 5, New Zealand

National True Foods (PTY) Limited  
P.O. Box 558  
Heidelberg 2400, Transvaal, South Africa

Palmerston North Factory  
Walkers Road, Longburn  
New Zealand

Norwegian Health Food Company  
(Dagens Kost A/S)  
Lillehammer, Norway

Phag Food Factory  
(Fabrique de produits dietetiques S.a.r.l.)  
1196 Gland, Switzerland

Pur-Aliment Food Factory  
15, rue Leon Blum, 92113 Clichy-Cedex, France

Sanitarium Health Food Company  
Head Office (Australia and New Zealand)  
148 Fox Valley Road, Wahroonga  
N.S.W. 2076, Australia

Plant Development Division  
Cooranbong, N.S.W. 2265, Australia

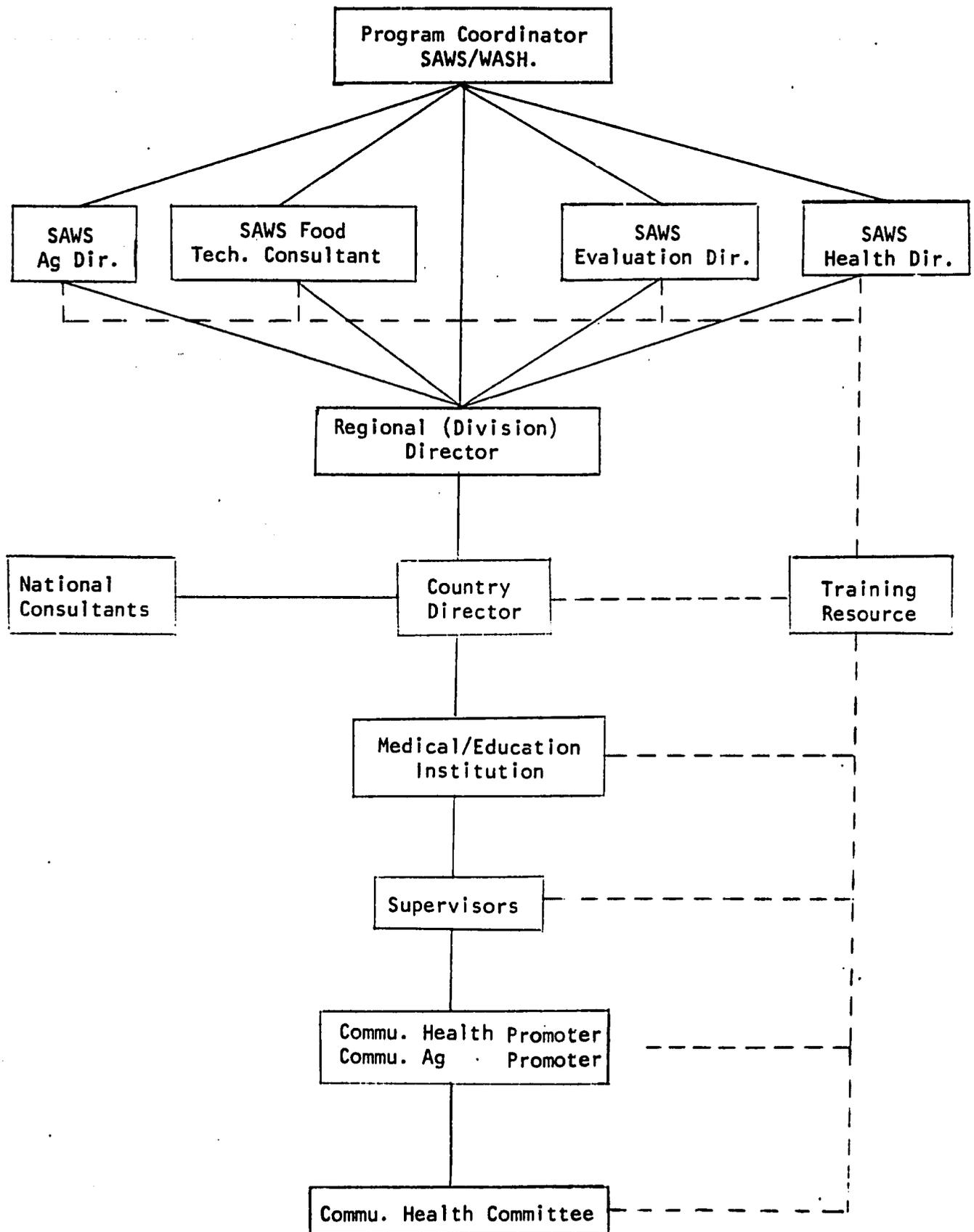
Carmel Factory  
Glenisla Road  
Carmel. W.A. 6076, Australia

Cooranbong Factory  
Cooranbong, N.S.W. 2265 Australia

Warburton Factory  
113-123 Main Street, Warburton  
Victoria 3799, Australia

MANAGEMENT MODULE

MATCHING GRANT PROGRAM



JOB DESCRIPTION

POSITION TITLE: Assistant Director for Planning and Evaluation

SALARY GRADE:

DEFINITION : Technical position responsible for all evaluation work.

ORGANIZATIONAL RELATIONSHIPS:

REPORTS TO: Executive Director

SUPERVISES: Evaluation Research Assistants

SPECIFIC JOB DUTIES AND RESPONSIBILITIES:

- (1) Design and conduct evaluation of Central Office and projects' performance.
- (2) Design and conduct evaluation of special activities, i.e., Participant Training, Annual Conference of Program Advisors, etc.
- (3) Monitor Central Office and projects' operations to provide basis for evaluation.
- (4) Initiate and conduct studies of managerial and operational problems.
- (5) Participate in the formulation of work plans and strategies to ensure attainment of organizational objectives.
- (6) Monitor and assist field projects in developing evaluation capacity.
- (7) Monitor and assist field projects in implementing the Management Information System.
- (8) Conduct field visits for evaluation and/or review of projects' operations.
- (9) Provide input in the development of SAWS projects.
- (10) Assist in Pre-Service Training and Participant Training programs.
- (11) Prepare semi-annual reports on Central Office and field projects.

**JOB RATING SPECIFICATIONS**  
(Clerical, Technical, Supervisory)

COUNTRY SAWS - WASHINGTON  
DEPT. Evaluation  
SALARY GRADE \_\_\_\_\_

Job Title Assistant Director for Planning & Evaluation

FACTORS	SUBSTANTIATING DATA
EDUCATION	Must possess a background of combined formal and non-formal training in the planning, implementation, and evaluation of development strategies in Third World Countries; background should include training in inter-disciplinary approach to development problems; a relevant Master's Degree is required.
EXPERIENCE AND/OR SPECIAL TRAINING	Extensive knowledge of and familiarity with the socio-economic and political factors in developing countries and the interplay of these factors; 3 or more years of relevant experience required.
COMPLEXITY OF DUTIES	Duties are highly complex due to the need to study and research on impact of internal and external factors on SAWS performance and attainment of objectives. Duties also require proven capacity to effectively interact with people from within and outside of SAWS.
SUPERVISION RECEIVED	Must be highly self-disciplined and able to work with minimum supervision.
DECISIONS	Major decisions concern the timing and strategies of evaluation; major output consists of studies, reports, and recommendations which must be
CONTACTS WITH OTHERS	concise, firm, and supported by facts and figures. Must possess effective interpersonal and communication skills due the required high level of interaction with people from within and outside of SAWS.
CONFIDENTIAL DATA	Unless otherwise specified/ordered by the Executive Director, all studies, reports, data are accessible to SAWS employees.
MENTAL OR VISUAL DEMAND	High level creativity, commitment to organizational objectives and great sense of responsibility are required due to the work involved.
WORKING CONDITIONS	Professional working conditions conducive to creative thinking.
FOR SUPERVISORY POSITION ONLY	
CHARACTER OF SUPERVISION	Supervision of Evaluation Research Assistants is for the purpose of obtaining adequate, timely, and quality assistance in the fulfillment of Evaluation Officer's duties.
SCOPE OF SUPERVISION	Must ensure that Evaluation Research Assistants complies with SAWS' rules and regulations, and that s/he effectively fulfills the required duties:
ADDITIONAL REMARKS	

**POSITION TITLE:** Assistant Director for Health and Nutrition

**DEFINITION :** Administrative position responsible for health and nutrition programs of SAWS

**SALARY :**

**ORGANIZATIONAL RELATIONSHIPS:**

**REPORTS TO:** Executive Director

**SPECIFIC JOB DUTIES AND RESPONSIBILITIES**

- (1) Assisting the Director of SAWS and the other associates in carrying out the Matching Grant Program in target countries.
- (2) Serve as back-stop officer for the country directors of the Matching Grant Program standing ready to:
  - a. Assist SAWS field staff in the procurement of supplies.
  - b. Assist SAWS field in developing well-organized, useful, comprehensive resource material in public health, nutrition, population, maternal child health, and other related areas.
  - c. Develop an inventory of materials available from around the world that could have applicability in target countries.
  - d. Development of a liaison with various information exchange agencies around the world, i.e. 1 DRC, Health Info Network, TALC, etc.
  - e. Develop a plan for needed educational materials within all the SAWS project activities (including the actual production of materials on-site if deemed economically efficient). Otherwise, planning for contract production of materials with appropriate contractor, i.e. EMC, Educational Materials Center, LLUSH.
- (3) Assist the country director in developing training curriculums for each level of the project. These include curriculums to train the country health and nutrition trainers to train health promoters, and to train the health promoters to conduct health education programs.
- (4) Conduct health education and nutrition seminars for health promoters in target countries while on field trips.
- (5) Monitor the Matching Grant Program to assist country directors in the:
  - a. Adherence to the budget.
  - b. Adherence to implementation plan.
  - c. Compliance with procedure requirements.
  - d. Achievement of planned targets.
- (6) Assist the Director of SAWS and the other associates in carrying out other health and nutrition programs of SAWS.
- (7) Other duties as may be assigned or defined as the project unfolds.

LOCATION: Washington, D.C.

DEPT. : SAWS

## JOB RATING SPECIFICATIONS

SALARY

GRADE : \_\_\_\_\_

Job Title: Assistant Director for Health and NutritionTraining/Experience Requirements:

This individual should have a graduate degree in public health (MPH) with a specialty preferably in health services administration, nutrition or health education (or the equivalent) emphasizing community nutrition education for developing countries. Previous experience in conducting nutrition surveys, food supplemental feeding, teaching, developing training materials, conducting seminars, cooking schools, planning and administration, personnel management is preferred.

This person should know how to develop various types of training aids and media (flip charts, puppets, filmstrips, radio spots, posters, pamphlets, drama, songs, parables, overheads, models, etc.) This person should know how to estimate production costs and time constraints for making new materials, and should be acquainted with the means of researching/tracing down already existing materials.

Training and preferably experience in the organization and management of rural health services. Administrative planning abilities are required.

Broad understanding of social, economic, political, technological problems of rural developments in developing countries is needed. Previous experience in developing countries is highly desirable.

Language training/ability in Spanish and French is useful.

Ability to work amiably and efficiently in a cross-cultural environment where one has to deal with both highly trained professionals in government and foreign agencies as well as with rural peasants is required.

Willingness to travel overseas is expected. Ingenuity and willingness to learn new skills as needed is required.

Spontaneity, creativity, educational effectiveness, enthusiasm are highly valued traits.

**JOB DESCRIPTION**

**POSITION TITLE:** Assistant Director for Agriculture

**DEFINITION :** Administrative position responsible for agricultural programs of SAWS

**SALARY :**

**ORGANIZATIONAL RELATIONSHIPS**

**REPORTS TO:** Executive Director

- (1) Assisting the Director of SAWS and the other associates in carrying out the agriculture portion of the Matching Grant Program.
- (2) Serve as back-stop officer for the country agriculture directors of the Matching Grant Program standing ready to:
  - a. Assist SAWS staff in the procurement of supplies.
  - b. Assist SAWS field staff in developing well-organized, useful, comprehensive resource material in agricultural development, and other related areas.
  - c. Develop an inventory of materials available from around the world that could have applicability in target countries.
  - d. Develop a liaison with various research centers and other centers of agriculture development information.
  - e. Develop a plan for needed educational materials within all the SAWS project activities (including the actual production of materials on-site if considered economically efficient). Arranging for contract production of materials with appropriate contractors.
- (3) Assist the country director in developing training curriculums for each level of the project. This includes curriculums to train the country agriculture trainers to train extension workers, and to train extension workers to train local target farmers.
- (4) Conduct agriculture production, agro-business development, and education seminars while in the target countries.
- (5) Monitor the agriculture components of the Matching Grant Program to assist the Director in the:
  - a. Adherence to the budget.
  - b. Adherence to implementation plan.
  - c. Compliance with procedure requirements.
  - d. Achievement of planned targets.
- (6) Participate in the public functions of the Matching Grant Program.
- (7) Other duties may be assigned or defined as the project unfolds.

LOCATION: Washington, D.C.

DEPT. : SAWS

SALARY  
GRADE : \_\_\_\_\_

JOB RATING SPECIFICATIONS

Job Title: Assistant Director for Agriculture

Training/Experience Requirements:

This person should have a graduate degree in agriculture or a closely related field. Training and/or experience in administration and education would be very useful. Experience should include agriculture development preferably in third world countries. Any international experience would be valuable. This person must understand the significance of the unique needs of food producers in developing countries. Most of the work will be with non-mechanized, labor intensive, small scale farming, and the person will need to be able to develop programs on this level. An understanding of marketing, co-op development and small agribusiness development would be useful.

Willingness to travel and live for extended time in rural areas is necessary. As much as 1/3 time may be spent traveling and some of this may be under rough circumstances.

This person should know how to develop various types of training aids and media. Some examples of the types of material: flip charts, puppets, posters, film-strips, radio programs, pamphlets, overhead transparencies, models, etc. This person should know how to estimate production costs and time constraints for making new materials, and should be acquainted with the means of researching/tracing down already existing materials.

Broad understanding of social, economic, political, and technological problems of rural development in developing countries is needed. The ability to work amiably and efficiently in a cross-cultural environment where one has to deal with both highly trained professionals in government and foreign agencies, as well as with rural peasants is required.

A good command of the English language for speaking and writing is required. The ability to speak and/or learn a second language is helpful.

Ingenuity and willingness to learn new skills such as appropriate technology, nutrition, food processing and preparation is necessary. Spontaneity, creativity educational effectiveness, enthusiasm and dedication to the task are highly valued traits.



# SEVENTH-DAY ADVENTIST WORLD SERVICE

WORLD HEADQUARTERS: 6840 EASTERN AVENUE, NW, WASHINGTON, D.C. 20012 U.S.A.  
TELEPHONE: (202) 723-0800 CABLE: ADVENTIST, WASHINGTON TELEX: 89-580

OFFICE OF THE  
DEPUTY EXECUTIVE DIRECTOR

March 9, 1981

Thomas H. Fox, Director  
Office of Private & Voluntary Cooperation  
Bureau for Private & Development Cooperation  
AID  
Washington, D.C. 20523

Dear Mr. Fox:

We regret the delay in providing answers to the questions you asked about our Matching Grant proposal, but many of them could not be answered accurately until our 1980 financial statement was prepared, so we decided to wait until this information was available.

We have extracted twenty-five questions from your letters. We have incorporated some of the answers in this revised version of the proposal. The others will be answered in this letter.

1) Provide additional information to substantiate SAWS' track record in small group agro-business enterprise development. Indicate more completely SAWS' experience and knowledge in this particular area.

See pages 20-24 of revised proposal.

2) Include approach SAWS has previously used and how this experience serves as a solid point of departure for expanding the agro-business activities under MG program.

Requests for small agro-businesses always originate in the field -- sometimes from a community group, at other times from an institution. Consultants are made available to the requesting party and the necessary steps are taken to set up the business. The same procedure will be used under the MG except that seed money for planning will be available, and consultants will be more readily available.

3) Indicate approximate radius of areas that will be effectively served by development of small agro-business operations.

The product of these small businesses serve the entire country in which they operate. If more than one plant is established in a country they coordinate their production so as not to be in competition with each other.

4) Describe how expected activities will be institutionalized in each country after projects are completed.

Small businesses, sponsored by SAWS, are incorporated and managed by local organizations. Sometimes, as in the case of the Inter-American Food Company described on page 22, several companies are brought together under one central management to provide technical and financial advise.

5) Verify SAWS' track record in health and nutrition sector beyond model of Tanzania.

See SAWS Philippines Experience, pages 14-18.

6-10) Why has the Tanzania program been outstanding?

Has there been an intensive evaluation of it?

What is the participation level of the beneficiaries in rural health activities?

After an 18-year involvement in Tanzania's health program, SAWS has a reservoir of personnel experienced and knowledgeable in health education that we would like to hear more about.

Describe how beneficiaries have developed expertise, contacts, organizational relationships, and practical skills over the years.

See pages 12 and 13.

11,12) Adequately verify whether SAWS can make the match because of the lack of audited financial data.

Submit supplemental financial information on the source of funds that would be used to make the match.

Fifty percent of the SAWS match will be provided by SAWS/Washington and the other 50% will be provided by the regional organizations.

SAWS match for the first year has been set aside. See under "Investments" on 1980 Balance Sheet (page 81).

SAWS has unrestricted reserve funds in the treasury of the parent organization, the General Conference of Seventh-day Adventists, in excess of the match for the three-years program. SAWS/Washington guarantees the match for the entire program. See page 76.

SAWS will provide any further verification of funding capability necessary.

13) What composes "Other SAWS Programs?"

See footnotes to "Summary", page 74.

14) Where are the OPG, ocean freight and ASHA funds in the budget? What are the funding periods for each source?

See "Summary", page 74 and footnotes.

15) Please provide footnotes or a description as to how you arrived at the figures in the "Other A.I.D." column of the summary budget.

See "Aid Grants", page 80.

16) A stated component of your proposed MG activities is to establish a comprehensive management information system (MIS) to evaluate the projects. How is the MIS going to enhance planning and evaluation in regard to any yearly and/or multi-year planning strategies, and annual implementation plans?

The MIS will enhance planning and evaluation in regard to the yearly and multi-yearly planning strategies in that evaluation will be an integral part of the program. As stated under Evaluation (pages 36 and 37) and in the indicators of the Outputs in the Logical Framework, community workers at every level will be trained in MIS procedures. Information will be collected on an ongoing basis. This information will be used to evaluate strategies all the time, and when yearly planning and implementation strategy sessions are held, this information will be the basis of decision making.

17) How much does SAWS expect the MIS to cost?

The two items in the budget for evaluation are the salary and allowances of the Director for Evaluation and the cost of compiling the information. (\$ 105,000 plus annual increments.) Computer data processing will be available to us through the parent organization.

18) What have the case studies previously used in evaluations taught SAWS about development, and how can lessons learned be integrated into the MIS?

Case studies taught us:

- a. To rely more on local input. If a program seems feasible to the local leaders it can probably succeed. If it can be "sold" to the leaders it can probably be sold to the people.
- b. The success of a program does not increase in proportion to the input of funds. There is even a point at which more funds can become counterproductive.
- c. A country Director with solid administrative experience is more valuable to the success of a program than an inexperienced professional in the field of the proposed program.

Experiences learned in previous development programs will be integrated into the MIS by our efforts to direct our questionnaires to the segment of the population whose opinion is most valuable, by our search for solutions to problems other than the input of more money, and by the training and upgrading of good program leaders.

19) Will case studies be discarded if the MIS is implemented?

Case studies will not be discarded when the MIS is implemented. We expect to have the staff to use them more frequently.

20) As a part of the MIS, does SAWS have an evaluation format that will be used in the field for reporting purposes in conjunction with its evaluation system?

Yes. The format is constantly under revision and will no doubt be revised further by the new Evaluation Director.

21) What role do the Beneficiaries have in regard to the MIS?

Beneficiaries are taught how to keep records of progress made in the programs in which they participate so that the information needed for the MIS is available when needed.

22) We suggest you revise your logical framework and evaluation plans.

The logical framework and evaluation plans have been revised.

23) Also, we suggest SAWS hypothesize what it wants to learn from these activities from the present perspective.

Lessons to be learned:

- a. Whether an integrated health and agricultural program in which the target population is actively involved in the practical sense is more effective in eliciting maximum community participation and support.
- b. Whether involving the entire family, including school and non-school children, in health intervention programs is more effective in producing desired health behavior changes in target populations than programs involving only certain members of the family, e.g., mothers only.
- c. Whether a system of collecting, analyzing, storing and retrieving basic information on major causes of illness, births and deaths, population movement (annual in and out migration in target areas), economic activities, etc. can be developed and established at the grass root level, and whether such a system can be carried out on an ongoing basis by the local communities.

Some of the Developmental Questions to be Answered:

- a. What is the optimal staffing of community based and community supported health programs? For example, the optimal community health worker and population ratio, or the ideal number of families per community health or agricultural extension worker?
- b. Can school and non-school children be utilized in collecting, analyzing and reporting basic vital data to appropriate government institutions?
- c. Is involving the whole family in intervention programs cost-effective?
- d. What immediate impact would an integrated program as delivered by SAWS have on target areas?
- e. What impact would program activities have on utilization of existing curative services? For example, would utilization of curative facilities decline or increase as result of program activities?

24) In addition, SAWS might well restate in the text or in a separate response to these technical questions what it wants to implement in the agro-business and health and nutrition program activities and describe the process.

What SAWS wants to start is a crusade to increase the life expectancy of the people in the developing countries of the world, but more importantly to improve the quality of the life of these peoples. SAWS is convinced that poor health is often responsible for low productivity and low performance, and if developing countries will make the social, educational and economic progress they should, the health problem must be seriously and boldly addressed.

SAWS is interested in agro-business mainly as it relates to a need to provide economical nutritious foods for the population. The financial impact of these businesses on the community is secondary to their nutritional importance. We know that they must be financially viable in order to survive, therefore SAWS will see that they become financially strong.

We recognize that the community must "feel" a need for these programs, therefore SAWS will begin at the "grass root" level and work to make the changes in the health and wellbeing of the target population that most of them do not now know they need.

25) Should the number of countries and centers to be included under the MG be reduced to a more reasonable figure than the proposed 83 centers in 15 countries? Also, it would be very helpful to know the selection criteria for determining which countries and centers are to be served.

SAWS feels that the number of countries included in this MG proposal is in keeping with its capability. In fact, the number we proposed has been increased from fifteen to sixteen, even though the number of centers has been reduced from 110, in the original proposal, to 82.

If SAWS were beginning work in the proposed countries for the first time, there would be grounds for questioning the advisability of our undertaking, but the MG country in which we have the least operating experience is Burundi in East Africa, and we have been operating there for fifty-six years. Indeed, the average length of time Seventh-day Adventists have worked in the proposed MG countries is about 75 years.

The difference, therefore, between SAWS and the average PVO is that we have a long history of development in these countries. For example, if Save the Children or Care were to undertake a health education program in Nepal, they would have to begin from the point of meeting the relevant government officials and then doing a needs assessment. If SAWS were to propose one, and we will at some future date, we would begin from 20 years of involvement in health care programs in Nepal through our Scheer Memorial Hospital in Katmandu.

As stated earlier, health reform is at the heart of Adventist philosophy. Our concern for the health and wellbeing of the communities in which we operate is well known and the results of our health teaching on the lives of people from the South Pacific to Southern California are well documented.

We grant that this work in developing countries has not had the formal structure required for modern health evaluation, but nevertheless, there is a nucleus of indigenous people in all these countries who have experienced better health through health education and who are active supporters of the principles espoused in modern health education. This reservoir of natives, from professionals to peasants, stand ready to help SAWS do in this MG program what we have always done in a small informal way -- going into the community with the message of better health. There will be no shortage of health conscious, nutritionally informed persons to be trained as "health promoters" in MG countries.

Adventists have a formidable infrastructure in all the MG countries. This support system from the church organization and the health care or educational institutions will greatly facilitate the MG program. In each case, SAWS has or is employing a country Director to administer the program who has the training and administrative experience to guarantee its success. These directors will in all cases be supported by a retinue of health professionals from the health care or educational institutions in the country.

Normally, a country program like the LLU/Tanzania MCH program for example, is one that reaches the entire country. This is not the case with this MG program. This proposal is designed to reach a limited number of communities in the environs of a small number of institutions in the proposed country. For instance, 8 proposed countries will operate from fewer than five centers. Four countries will work from 8 to 10 centers, but we already have a strong infrastructure of health education in these countries. Our hypothesis is that we can make the communities around our health care and educational facilities the most health-conscious and good-health motivated people in the entire country and through them carry the message of good health to all the people of the country.

SAWS has the support of LLU and the International Health Department of the World Headquarters of Seventh-day Adventists in this undertaking. The professional consultants from these institutions, the regional offices, the professionals in country organizations, and the thousands of people in each country committed to the dissemination of better health principles, guarantee the success of each country program. The proposal is to organize one or two model MG programs in each country during the first year of the program, then duplicate it in the other centers during the second year. We believe our proposal of 16 countries can and will succeed.

Finally, SAWS selected the sixteen countries from among the 65 countries in which we have a medical outreach, because all the institutions in these countries have been doing something about community health education. Even the institutions in the six countries we list as "new countries" have a record of community health outreach.

If there is any further information that we can provide please  
don't hesitate to call on us.

Respectfully,

A handwritten signature in cursive script, reading "Milton E. Nebblett", is written over a solid horizontal line.

Milton E. Nebblett  
Deputy Executive Director

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