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CHILD SURVIVAL PROJECT:

HEALTH EDUCATION THROUGH THE HOME LEAGUES

SALVATION ARMY, KENYA

FINAL EVALUATION

A Report Prepared By PRITECH Consultant:
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Child Survival Project:
Health Education Through the Home Leagues
Salvation Army, Kenya

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EXECUTIVE SUMMARY

The Project:

In 1985 The Salvation Army and SAWSO, with USAID support, began a 3-year program which tested a new concept aimed at improving health education outreach for mothers and children in the developing world. This program, Health Education through the Home Leagues (HL), utilizes Salvation Army women's groups as the foundation for a child health promotive health education campaign. Basic mother-oriented and mother-implemented child health and survival services such as growth monitoring and nutrition education, oral rehydration solution preparation, immunization motivation and child spacing information and supplies distribution take place through the vehicle of preexisting women's clubs. Projects were developed initially in Kenya and Haiti to pilot test the program.

The Project in Kenya has been centered in the Machakos area, with 20 Home Leagues participating in the initial Project activities. A Project Coordinator was identified. She developed and initiated a competency-based training program for the HL Leaders of the 20 participating corps, with the assistance of the Health Educator from SAWSO and support of the staff at the Salvation Army Territorial Headquarters in Nairobi. The five week-long sessions focused on skills needed for promotional and health education activities related to child survival in the communities. The HL Leaders, in turn, have provided health education sessions at the HL meetings and thus have trained HL members in child survival, some of whom have become certified as HL Health Educators. The HL Leaders and Health Educators have been actively involved in an on-going outreach program which includes home visiting, continuing health education sessions at the HL meetings, monthly Child Health Sessions, including growth monitoring, and a variety of community projects.

Project Achievements and Effects

The Project plan specifies four major objectives:

1. Register (75% of the) target population in project areas.
2. Train (40) HL Leaders and (200) Members in all GOBI-F strategies.
3. Educate (75% of the) community women on GOBI-F practices.
4. Deliver limited basic preventive child health services to (75% of the) children under five in the target population, with focus on at risk children.

The target of training 40 HL Leaders and 200 HL members (Objective 1), was vastly exceeded, as 47 Leaders and 432 members had been trained and certified by the end of Year 3, with many additional members fully-trained but awaiting certification.

The targets specified for the other project objectives, however, were unrealistic, considering the staffing and resources of a project which so strongly relied on volunteer labor of community women. Registration (Objective 1), as evidenced by the percentage of children under 5 in growth monitoring registers and percentage of homes visited regularly, covers under 10% of the target population.

The percentage of community women receiving education on GOBI-F practices (Objective 3), if measured by the percentage of homes visited regularly, is approximately 7% (2,000 homes). However, the Project has recorded over 11,000 "points of contact" with women through HL health education sessions. Unfortunately early Project data collection systems only asked for how many women attended each session, without distinguishing between new and return attendees.

Some statistics concerning basic preventive child health services are available (e.g. number of children registered for growth monitoring since 2/88 (4,524), number of weighings (9,041), number of children under 5 referred for immunization (2,258)). It was impossible to calculate the percentage of at risk children receiving services (Objective 4), as the total number of children at risk in the target population was not identified, due to difficulties with the initial survey. The volume of activity, however, indicates the Project was very productive, especially considering its voluntary nature.

The Child Survival Project has had very positive effects at the family, community, and organizational levels. The plan to integrate child survival into the Salvation Army's strong network of women's Home Leagues proved a very wise one, as the structure needed for promotional and health education activities was thus already in place. There are 8,000 Home Leagues and 400,000 members world wide, and thus great potential for expansion, if Army leadership desires.

An overwhelming majority of the HL Leaders, members and community mothers reported that the Project has had a definite impact on their families' own health. This grassroots mother-to-mother program has also provided those involved with a greater sense of control over their own lives and those of their children. Women of the community reported that they could see a definite decrease in the number of seriously dehydrated children, the frequency of measles outbreaks, and problems due to too closely-spaced families since the Project began actively working on these problems.

The Project appears to fit in well with the goals of the Army's social ministry. The addition of health education sessions to the Home League meetings has increased interest and attendance, and Project-related home visits have provided an opportunity for HL Leaders to assist families they may not have reached through their regular visiting program. There have been many requests for child survival programming from other Corps within Kenya and elsewhere, but Salvation Army leadership in the East Africa Territory wants to be sure that program strategies are fully developed and necessary technical support available before expanding.

It appears that in some ways the USAID Child Survival Initiative was too high-powered, too rushed and too output focused for The Salvation Army. Reporting requirements were more demanding than normally expected for Army programs, and the funding somewhat higher than is customary. The Project contributed positively to the Army's and SAWSO's abilities to design and implement high quality community-based health education programming. The challenge that remains is to use this pilot experience to develop a project model that is appropriate and sustainable within the normal Army system.

Conclusions:

Training, health education and curriculum development. The technical quality of both training and health education activities within the Project has been excellent. The Project Coordinator is a skilled trainer who knows the child survival content area well and has used participatory training methods quite successfully in her sessions. Each training session has been documented, but a detailed written curriculum has not yet been developed with simple but complete session plans.

Certification. The certification of HL members' knowledge and skills in GOBI-F is a well-executed component of the project, but there is currently a large backlog of members awaiting testing, since up until now it has all been done by the Project Coordinator.

ORT, Immunization, family planning, and breastfeeding. The training of a large number of HL members and mothers to understand the causes and preventation of diarrheal disease and how to prepare and administer sugar salt solution (SSS) has provided the communities with an important resource. Laboratory analysis during the evaluation showed that preparation of the sugar-salt solution by mothers was very accurate. Counselling and referral activities related to immunization and family planning have been very successful. Breastfeeding education has also been helpful.

Growth monitoring and nutrition. About half of the 20 Corps hold weighing sessions once a month. It is a labor-intensive process. A large percentage of at risk children have been identified in some communities, but the HL Leaders and Health Educators are frustrated when they are unable to help poorer families that lack the resources even for inexpensive nutritious meals.

The "at risk" concept. The "at risk" concept has been strongly promoted by the Project, but at risk follow-up needs improvement in some Corps.

Record-keeping. Record-keeping has been a very difficult process for the project. Even after extensive work to improve this component, it needs considerable strengthening.

Supervision and motivation. The quality of supervision appears to be quite high, although some Corps have received infrequent visits, due to the pressures of other priorities on limited staff. The supervisory checklists have been quite helpful. Motivation is of key importance in a "voluntary" Project, and staff members have been sensitive to the importance of using a variety of techniques to encourage the HL and community mothers they work with.

Expanding the project. Salvation Army, Project, Ministry, USAID, and community respondents unanimously recommended that the Project be continued and expanded to new areas.

Development of a sustainable program model. The program model will have to be simplified and reduced in scope, if it is to function successfully in the future, supported solely by normal Salvation Army resources.

Recommendations:

Curriculum development. A concerted effort should be made in the next few months to develop a detailed written curriculum for training HL Leaders, including simple but comprehensive session plans. The curriculum should include modules focused on community development skills, training of trainers, "at-risk" identification and follow-up strategies, record-keeping, and supervision, as well as the traditional GOBI-F topics. Development of the curriculum is critical for the successful expansion of the Project, both within Kenya and to other Salvation Army countries.

Flip charts and other training materials. The remaining flip chart units definitely should be produced, as their use would help maintain the technical accuracy of educational activities, as the Project expands. Development of other materials should also be considered, if the need arises.

Refresher courses. Refresher courses should continue to be scheduled once or twice a year. The possibility of one- to two-day seminars for smaller groups of HL Leaders should be considered.

Certification. Responsibility for some of the certification workload should be delegated to the Field Assistant or several of the HL Leaders, so HL members awaiting testing can be certified more quickly.

ORT, family planning, immunization, and breastfeeding. Promotional, counselling and referral activities related to ORT, family planning, immunization, and breastfeeding should continue. The Project should actively involve males in family planning education and counselling programs.

Growth monitoring. The role that growth monitoring will play in the future should be explored more thoroughly before a final decision is reached. Alternative approaches might place less stress on labor-intensive weighing activities and more emphasis on development of strategies for assisting nutritionally-deficient families.

At risk follow-up. As a program model for replication is further developed, serious attention should be paid to tightening the system for identification and follow-up of children at risk. Records need revision, with more room for noting follow-up plans and results.

Revision of the record-keeping system. In the next few months a concerted effort should be made to eliminate the substantial problems still remaining in the record-keeping system, eventually finalizing a simple system that will meet the minimal needs of the Project. The experience of other agencies should be studied during the development process. Strengthening of the record-keeping system is essential, if the Project is to be adequately managed and evaluated in the future.

Supervision and motivation. If the level of supervision and technical support is decreased substantially in the future, the program is unlikely to be successful. Thus, care should be taken to build adequate personnel time for supervision into future programs. Strategies for maintaining motivation in the future should be identified. They might include refresher courses, additional teaching materials, limiting work required of HL members, encouragement during supervision visits, prizes for work well done, and organization of income-generating activities.

Future project development. The Project should be continued and expanded to new areas, if Salvation Army leaders decide this is appropriate. The Project should be simplified and improved before it is replicated in new areas. Work could proceed to develop a written curriculum, simplify and improve the record-keeping system, strengthen at risk follow-up, and develop additional teaching materials. Strategies for coordinating child survival activities

with the successful Army rural development program should be explored. When the health education through the Home League model is finalized, a set of simple but complete step-by-step guidelines for replication of the Project in additional Corps should be developed.

Management issues needing resolution. Issues that need to be resolved during the development process include determination of what minimal level of THQ and health technical supervision is necessary to maintain program quality, what transportation support is necessary, whether weighing should be continued or an alternative nutrition strategy developed, and how HL Leaders transferred out of project areas will be supported in child survival work.

Additional technical support. The training capacity will need to be expanded as the Project grows. Development of a full-time training center could be considered, possibly with the current Project Coordinator in charge. In addition to proposed strengthening of THQ project administrative capacity/personnel, an additional health professional could be based at Territorial Headquarters to provide the technical support and administrative coordination needed for an expanded operation.

Child Survival Project:
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I. BACKGROUND

In 1985 The Salvation Army, The Salvation Army World Service Organization (SAWSO) and the U.S. Agency for International Development (A.I.D.) collaborated to begin a three-year program testing a new concept aimed at improving health education outreach for mothers and children in the developing world. This program, Health Education through the Home Leagues, utilizes Salvation Army women's groups as the foundation for a child health promotive health education campaign.

Basic mother-oriented and mother-implemented child health and survival services such as growth monitoring and nutrition education, oral rehydration solution preparation, immunization motivation and child spacing information and supplies distribution take place through the vehicle of preexisting women's clubs.

The Salvation Army's Work in Maternal and Child Health Care

As part of its ongoing social service work, The Salvation Army has long been involved in health work in support of mothers and children in the developing world. Traditionally, Salvation Army maternal and child health (MCH) services have been predominantly curative in nature. Hospitals and clinics have been the basic infrastructure through which this maternal and child health care has been delivered.

In the early 1980's, however, The Salvation Army's health service orientation began to gradually expand to incorporate the emerging doctrine of primary health care and community health outreach.

In Africa (Zambia, Zaire, Zimbabwe and Ghana), Asia (Bangladesh, Pakistan, India), Far East/Pacific (Papua New Guinea and Indonesia), The Salvation Army began programs aimed at increasing the scope and outreach of its preventive/promotive MCH efforts. These programs relied primarily on the training and utilization of village health workers (VHWs).

In Pakistan and Bangladesh, for example, Salvation Army clinical health facilities serve as the core for village health worker training and basic maternal and child health service delivery in communities surrounding the base clinics. Salaried village health workers conduct discussion groups with mothers and make home visits to provide basic health information. Salvation Army clinics serve as back up facilities to supplement immunization, well baby, and family planning services provided by VHWs at the primary level.

Methods, duration and content of VHW training have varied according to country specific needs, as have VHW duties and responsibilities and their initial selection criteria. A variety of supervision, compensation and motivation techniques have been employed over the years.

In all of the above mentioned countries, use of VHWs has considerably improved the ability of The Salvation Army's MCH services to reach those most in need, traditionally non-attenders at clinic based programs.

In Washington, The Salvation Army World Service Office (SAWSO) has had a role in assisting the health outreach efforts of the Army around the world since 1977. This takes the form of technical assistance in health program design, implementation and management, and location of appropriate funding mechanisms. Significant expansion and redirection of health services toward a more community-oriented preventive primary health care approach has been accomplished through the collaboration of The Salvation Army, SAWSO and the United States Agency for International Development (A.I.D.) over the past decade.

The Child Survival Revolution

In the early 1980's, a new movement to improve child health and development began to take shape, known as the Child Survival Revolution. This `revolution' promoted several basic yet essential child health promotive activities - growth monitoring and nutrition education, oral rehydration therapy, breastfeeding, immunization and family planning, well known worldwide by the acronym GOBI-F.

In the recently released publication, State of the Worlds Children 1987, UNICEF, the most vocal supporter of the GOBI-F principles, presents an eloquent argument in support of the Child Survival movement, and extends the challenge to the development world to do all that is possible to assist in this quiet revolution.

The UNICEF document provides a listing of core health knowledge, basic facts about child health which would enable families themselves to take steps to preserve and improve the health of their own children and the children in their communities. UNICEF suggests `mobilizing every possible organized resource' to get this core health knowledge out of clinics and hospitals and into the community.

Since 1985, A.I.D. has incorporated Child Survival programming into its ongoing child health supportive activities, working with governments of developing countries, private voluntary organizations (PVOs), and international health and development institutions such as UNICEF and the World Health Organization.

A.I.D. Child Survival programming prioritizes select interventions within the overall GOBI-F framework, specifically immunization and ORT. Child spacing and nutritional promotion are also supported. Special emphasis is placed on `target countries', which have been selected according to A.I.D. criteria, including high infant mortality rates.

A primary focus of the Child Survival projects which A.I.D. chooses to support is a commitment to utilizing state of the art approaches to implementing the five main GOBI-F interventions. Use of the at-risk focus, targeting those children in age groups and circumstances most likely to be saved through participation in project activities, is a priority. Dissemination of information on how to best achieve project success through use of state of the art methodologies in areas such as health worker training, delivering immunization services or undertaking baseline community health assessments and surveys is a major thrust of A.I.D.'s technical support to Child Survival programming.

The Salvation Army, which had officially endorsed the UNICEF policy in 1980, recognized an as yet under-utilized resource within their infrastructure which might be employed to assist in the global effort for Child Survival.

In 1985, The Salvation Army, SAWSO and USAID signed a collaborative agreement to develop and field test the concept that The Salvation

Army's women's organization, known as Home Leagues, could provide the foundation for the training of mothers in simple child health promotive activities and dissemination of this information into surrounding communities. Projects were developed to pilot this idea in Kenya and Haiti.

The Home League Health Education Concept

Throughout the existence of The Salvation Army, women have played an important role in both evangelical and social service affairs. Presently, the highest administrative office in The Salvation Army is held by a woman, General Eva Burrows.

For over a century, women's organizations with regular weekly meetings for worship and community service have been an integral part of the work of The Salvation Army. There are currently more than eight thousand women's groups, known as Home Leagues, in over ninety countries, with a total membership of approximately three hundred and fifty thousand women.

This network of women's groups has a fourfold purpose - worship, fellowship, education and service - and has engaged women worldwide in local projects and programs to improve the welfare of members of the community.

The potential of the Home League to provide a solid foundation on which to build a health education program to improve child health has been recognized for several years by international leaders of The Salvation Army. In several countries where The Salvation Army has preexisting health activities, such as Pakistan, small projects have used the Home League to promote maternal and child health through funding mechanisms other than the A.I.D. Child Survival initiative.

Home League Structure

The overall activities of the Home League are administered from The Salvation Army International Headquarters in London. In each territory (a grouping of 1 or more countries) throughout the world in which Salvation Army works, Home League responsibility rests with the President of Women's Affairs and the territorial Home League Secretary, usually wives of Salvation Army officers in charge of the region.

These women oversee the Home League activities in their area, which are directly managed at the next administrative level by divisional home league leaders. In each division there are several smaller groups known as corps, with Home Leagues usually led by the wives of the pastor for each corps. Each corps Home League also has a Home League Secretary, a local community member who regularly attends the meetings. Each Home League may have from twenty five to several hundred members enrolled.

Training for Home League Health Education

In a recent international gathering to discuss new approaches to improved reproductive health and child survival, a three point strategy was outlined - "the discovery of new knowledge, learning how to apply that knowledge in practical settings, and disseminating and replicating that knowledge and its applications throughout the society "(Bell 1987). The Salvation Army Health Education through the Home League program seems to address all three of these critical points.

The approach to home league health education currently in progress in Kenya and Haiti use a common strategy for training women at all levels of women's group activity mentioned above.

The first level of training involves an overall orientation to the principles of child survival and the child health promotive strategies involved in Home League Health Education. As most of the regional women leaders at this level do not have a health technical background, this orientation focuses on basic GOBI-F concepts. It also includes topics on organization, implementation and management of, as well as monitoring and evaluation of Home League Health education activities. This introduction enables regional women's group leaders to better understand the program and training objectives and allows more effective support of the Home League Health Education program from the regional administrative level. Many leaders at this level have chosen to attend the full Home League Leaders health training described below, in addition to the orientation.

The second level of training involves the Home League Leaders (usually the wife of the corps officer, and the Home League Secretary). In addition, another member is chosen by the group to participate in the training, to assure continuity in the community. This member is usually someone who has demonstrated outstanding commitment to Home League activities in her area.

The three representatives from each HL are then brought together for the GOBI-F training sessions. As twenty Home Leagues were chosen in the pilot projects in Kenya and Haiti, each leaders training group has at least sixty participants. To allow for more effective training, the groups were divided into two training cycles.

A six-session course has been designed, with a week for general orientation to program objectives and techniques of baseline community health survey, and a week for each content area (growth monitoring, nutrition and breastfeeding, oral rehydration therapy, immunization promotion, and family spacing. At least a month is allowed between weekly training sessions to provide sufficient time for HL leaders to return to their villages and practice teaching the skills they have learned.

In addition to the GOBI-F training course, HL leaders receive a week-long training of trainers course (TOT) which concentrates on communication techniques, teaching skills and development of simple teaching materials.

The third level of training takes place at the Home League meetings themselves. Trained leaders devote one of the weekly sessions each month to a health education talk with Home League members. Community women who are not regular home league members are also encouraged to attend.

Members who are particularly interested in the Home League Health Education concept are invited to receive additional instruction from the trained home league leaders, and when they have demonstrated competence in all five interventions become certified as Home League Health Educators (HLHE).

Home Visits

Home visiting has been identified as one of the most effective means of child survival outreach, and has been found to increase significantly women's participation in services such as immunization and growth monitoring (Faruquee and Johnson 1982).

One of the most important roles of the HLHE is home visiting. This allows an individualized, woman-to-woman transfer of health education messages in the home, where other family members may benefit as well. It is therefore considered as the fourth level of training which takes place as part of project activities. HLHEs are encouraged to visit from five to ten homes nearby their own on a regular basis. During these visits, the condition of children under five is assessed, mothers are encouraged to attend immunization or child health sessions at the nearest health center, a health topic is discussed, and child spacing motivation and education takes place when appropriate.

At-risk mothers and children are identified at these visits, and the HLHE brings any problems detected in the households she covers to the HL leaders at the next meeting.

The project design also includes a limited child health service delivery mechanism in Home Leagues which have the organizational capability to manage such sessions. Home League Child Health Sessions (HLCHS) are held monthly, and growth monitoring, nutrition education and ORS preparation take place. In some locations, Home Leagues work with local health facilities to arrange immunization sessions, and family planning supplies and referrals are available.

Because of the vastness of the international Home League network, with over 350,000 members worldwide, successful pilot strategies for Home League Health Education can be widely replicated with minimal local adaptation of materials, methods and program and training content.

The basic home league health education concept, in summary, focuses on training at four levels - orientation for national or territorial women's group leaders, six-week training sessions for local Home League leaders, training for home league members (HLHEs) at weekly HL meetings, and home health visits to mothers. The women's group meetings, home visits, and limited basic child health service delivery sessions at monthly intervals provide multiple opportunities for women to provide child health promotive information which is appropriate in level, orientation, presentation and content, for mothers who are targeted to receive it.

II. PROJECT ACHIEVEMENTS AND EFFECTS

Achievement of Project Objectives

The Project plan specifies four major objectives:

1. Register the target population in project areas.
2. Train HL Leaders and members in all GOBI-F strategies.
3. Educate community women in GOBI-F strategies.
4. Deliver limited basic preventive child health services to children under five in the target population, with focus on at-risk children.

Each of these objective is examined in turn below. The stated targets and strategies used to obtain the objective are first presented. Then

data available for measuring achievement of the objective is summarized and targets and achievements are compared. The section on each objective concludes with a discussion and suggestions for the future.

As will be discussed in detail later, the format for reporting project activities was revised part way through the Project, as initial forms didn't distinguish adequately between new and return contacts. Data collection using the new forms began in February 1988, and thus some of the figure below only include activities after this date. Totals, in these cases, are unfortunately much lower than they would be if data from the entire project period could have been included.

Objective 1: Register target population in project areas

Stated targets: Year 1: 10% Year 2: 50% Year 3: 75%

Strategies used: Design and implement baseline surveys.

Register children under five through Home League Health Educator (HLHE) home visits.

Available data:

Total population in target area:	170,445
No. of children under 5:	52,700
No. of women 15-49 years of age:	35,000
No. of households:	28,296
No. of Child Health Cards distributed by HLLs	2,504
No. homes visited reg. by HLHEs (approx. 400 HLHEs x 5 homes):	2,000
No. of children in GM registers (from 2/88 through 9/88):	4,524

Comparison of targets and achievements:

	Target	Achievement
% children under 5 with Child Health Cards distributed by project	75%	4.7%
% children under 5 in GM registers (from 2/88 through 9/88):	35% (?)	8.6%
% homes visited regularly (registered):	75%	7.1%

Discussion:

The project approach to registration was revised as the staff gradually determined what level of activity was feasible and appropriate for a health education project using an existing network such as the Salvation Army Home Leagues. Initially project staff hoped that HL Leaders would register as much of the target population as possible through the baseline survey and follow-up home visits to at-risk households.

This level of registration activity proved much too ambitious considering the often great distances between households and the limited time HL Leaders, although dedicated, could devote to this work. Mass registration would have potentially identified an at-risk population much larger than could realistically be handled with available volunteers.

Eventually it was decided that the most appropriate and feasible strategy would be for HL Leaders and Health Educators to distribute Child Health Cards (and, as of February 1988, to fill out family cards) during the course of their regular home visits and weighing sessions. As HL Health Educators visit on average 5 homes per week, revisiting many of these homes a number of times, it can be estimated conservatively that at least 2,000 homes are visited regularly. **The percentage of children and households "registered" in these ways is much lower than the original target, but is more realistic, considering project resources.**

Data problems:

Several problems with the data available for measuring achievement of Objective I targets became evident during the evaluation:

- The number of Child Health Cards distributed is not an accurate indicator of households visited or registered, if "registered" means enrolled in the HL child survival program. Many households visited may have already obtained Child Health Cards for their children through other sources such as MOH clinics, but may still participate in HL child survival activities. **The evaluation team felt it was likely that HL Health Educators had distributed a majority of their Child Health Cards to newborns and children under age one who are not likely to have visited clinics yet. If so, the Project focuses appropriately on encouraging mothers to obtain immunizations for those children at greatest risk.**

Suggestions for the future:

Project planners should consider revising Objective I so it more closely reflects what the Project plans and can realistically achieve. It may be that the Project should focus on "monitoring" the health of a certain number of children, rather than registering a certain percentage of children. If so, the Objective could be rephrased as:

> "HL Leaders and Health Educators will monitor mothers and children under five in "x" number of households in the project area by the end of Year "x".

The number of households to be targeted should be chosen after estimating the number of households HL volunteers can realistically follow. What is meant by "monitoring" mothers and children under five should also be clearly defined.

Objective 2: Train Home League Leaders and members in all GOBI-F strategies

Stated targets: 40 HL Leaders and 200 HL members

Year 1: 0% Year 2: 50% Year 3: 100%

Strategies used: Develop a two-tiered GOBI-F training plan.
Hold training sessions for HL Leaders.
Hold training sessions for HL members at Home League sessions.

Available data:

No. of HL Leaders trained by end of Year 3:	47
No. of HL members trained by end of Year 3:	432

Comparison of targets and achievements:		Target	Achievement
	% of 40 HL Leaders trained by end of Year 3:	100%	117%
	% of 200 HL members trained by end of Year 3:	100%	216%

Discussion:

The Project more than met its targets for Objective II. The Project targeted two HL Leaders in each of the 20 Corps to receive the 6 weeks of training on GOBI-F strategies. Three leaders were designated for training in some Corps and 47 Leaders completed the training given by the Project Coordinator. The target number of HL members to receive training and certification in all 5 GOBI-F strategies through sessions given by HL Leaders after HL meetings was 200. Thus the number of HL members trained by the end of Year 3 (432) is particularly impressive. This figure represents only those members trained in all five GOBI-F strategies and certified. As there is a large backlog of HL members waiting to be certified, this number under-represents the true number trained.

Training of HL members is the most important step necessary for expanding the program's outreach and impact, as each new certified Health Educator expands the number of home visits, growth monitoring, and other services a Home League can provide. Thus, the fact that the Project trained more than twice the HL members expected, is a good indicator of "project health". Providing quality training for this number of HL members is not easy. The great success on this component of the Project was due, in large part, to the level of effort expended (and at the expense of the achievement of other Project activities such as child health service delivery, curriculum documentation, record-keeping, supervision, etc.) It is important to remember that these training results will not be replicable in new project areas without a similar level of effort and complete documentation of the curriculum used by the current Project Coordinator.

Suggestions for the future:

The Project should probably continue to word this Objective in a similar fashion in the future. As mentioned later in the report, Project staff found that it was wise to train an additional lay HL Leader in those Corps in which the HL Secretary was older, possibly illiterate, and unable to fully participate in the program. Also, training more than one lay HL Leader helps assure sufficient leadership for child survival activities if the Corps Officer (and therefore his wife) is transferred. Thus it would seem wise to continue to target three HL Leaders for training in each Corp in new project areas. A rephrased Objective II could read:

> "The Project Coordinator will train three HL Leaders per corps and the HL Leaders will train "x" HL members in the project area in all GOBI-F strategies by the end of Year "x"."

Objective 3: Educate community women on GOBI-F practices

Stated targets: Year 1: 0% Year 2: 20% Year 3: 75%

Strategies: Deliver GOBI-F health education messages in the homes thrcugh HL Health Educator home visits.

Provide health education at HL Child Health Sessions.

Available data:

No. of households:	28,296
No. of women 15-49 year of age:	35,000
No. homes visited regularly by HLHEs (approx. 400 HLHEs x 5 homes):	2,000
No. of home visits made:	5,967
No. of women trained at one or more HL Health Education sessions (between 2/88 and 9/88):	1,160
No. of "points of contact" with women thru HL Health Education sessions:	11,951
No. of ORS spoons distributed to women in the community (after training):	1,130

Comparison of targets and achievements:

	Target	Achievement
% of homes visited regularly:	75%	7.1%
% of women receiving some GOBI-F training (between 2/8 and 9/88):	35% (?)	3.3%

Discussion:

Although the percentage of the target achieved looks quite inadequate, there is much evidence that the women who were reached, although much smaller in number than anticipated, were well instructed and, in most cases, trained in much more than one GOBI-F intervention. Objective III has much the same problem as Objective I in being overly-ambitious, most likely because Project planners were unable to accurately estimate the number of women the Project could realistically reach through health education. As will be discussed below, accurate data on number of women receiving health education is missing for much of the Project period. The fact that there were at least 11,951 "points of contact" with women through HL health education sessions and 5,967 home visits (although it was impossible to distinguish whether each of the contacts was new or return until after 2/88) indicates that the volume of education was quite high.

The original strategies mentioned providing health education at HL Child Health Sessions. The evaluation team felt it was easier and more appropriate to measure health education at the HL Health Education Sessions and so used these figures.

Data problems:

Data problems are also similar to those for Objective I:

- The project has data on number of home visits but not on number of homes visited at least once. It is important to

know the number of homes receiving health education at least once, to know the scope of Project activities related to education in the homes. Data on how many times each home is visited and given health education would provide useful information on the intensity of Project activities of this type.

- The project also has data on "points of contact" with women through HL Health Education sessions, but no information on number of women trained at one or more HL Health Education sessions for the full three years. The change in the data collection system made in early 1988 addressed this problem, so this type of information should be available in the future.

Suggestions for the future:

Project planners should consider revising Objective III so it more realistically reflects what the Project is capable of doing. Objective III could be rephrased as follows:

> "HL Leaders and Health Educators will provide "x" community women in the project area with adequate knowledge and skills for at least 3 (or 4) of the 5 GOBI-F practices by the end of Year "x"."

Strategies should clearly state where the women will receive this education (e.g. during home visits, HL Health Education Sessions, and/or HL Child Health Sessions). The record-keeping system should provide information on "new and return" visits and how many women receive various amounts of education on GOBI-F practices. This was attempted during the final project year, but problems persist in separating out data.

Objective 4: Deliver limited basic preventive child health services to children under five in the target population, with focus on at-risk children.

Stated targets: Year 1: 0% Year 2: 20% Year 3: 75%

Strategies: Organize HL Child Health Sessions for growth monitoring and distribution of ORS and family planning supplies.

Identify at-risk under fives through HLHE home visits. Motivate mothers to bring at-risk children to HL Child Health Sessions or refer if necessary.

Available data:

Services:

No. of children in GM registers (from 2/88 thru 9/88):	4,524
No. of weighings at GM sessions:	9,041

Supplies:

No. of ORS spoons distributed to the community:	1,130
No. of ORS spoons purchased by the Project:	4,000
No. of condoms distributed:	7,124
No. of foaming tablets distributed:	2,380
No. of Child Health Cards distributed:	1,130

Referrals:

No. of children identified as severely malnourished and referred:	1,968
No. of children under 5 referred for immunization:	2,258
No. of pregnant women referred for tetanus toxoid:	1,947
No. of women referred for tubal ligations:	128

Comparison of targets and achievements:

Unfortunately it is impossible to compare targets and achievements for this Objective. The current version of the Objective stresses a focus on at-risk children. No reliable, consistent data, however, has been compiled concerning the numbers of children at-risk for various reasons in the target population. Available data simply indicates a certain volume of activity related to delivery of preventive child (and maternal) health services. It is unrealistic to encourage personnel in a Project of this type to collect baseline data on number of children and women at-risk, as it would require a level of effort that would be unreasonable for a voluntary project and detract from important educational and service related activities.

Discussion:

Although there is no data on the numbers of children at-risk in the overall population, the data available (although not entirely reliable) indicate that a large number of children needing nutritional assistance and immunization and of women needing family planning assistance and tetanus toxoid immunizations were successfully detected and referred by HL Leaders and health educators. When compared to the overall target population the percentages may appear insignificant, but the number of services, referrals, and supplies distributed indicate quite strong achievement in some areas.

Data problems:

Unfortunately data from the initial survey that would have provided information on the number of children at-risk was never processed, so a clear estimate of target achievement through use of before/after KAP data is not possible. Examination of Project records shows substantial inconsistencies in the information on services that was collected. The evaluation team used the most conservative estimates when there were conflicting figures. Thus the volume of Project activity in these some cases is likely to be understated.

Suggestions for the future:

Since the level of effort that would be necessary to gather information concerning the numbers of children and women at-risk in the overall population would be a misuse of limited Project resources, objectives should be rephrased to focus on goals for which information is more easily available. At least two separate objectives might be developed, as the Project focuses on provision of services for both children and women. For example:

"HL Leaders and Health Educators will provide selected preventive services, counselling and referrals related to immunization, growth monitoring, nutrition, and ORT for children under five in at least "X" households in the Project area by the end of Year "X"."

"HL Leaders and Health Educators should provide selected family planning services, and motivation education and referral for prenatal care at least "X" women of child-bearing age in the Project area by the end of Year "X"."

Strategies should clearly state what types of services, counselling, motivation education and referrals should be provided for each of the GOBI-F interventions.

The use of a revised family health card should be helpful in keeping track of necessary data for measuring these objectives. (See discussion in the record-keeping section of this report).

Project Effects

In addition to focusing on quantitative results, the evaluation team received a great deal of feedback concerning qualitative effects of the Project through interviews, focus groups and observations. These results are summarized below.

Effects of the Project at the Family Level

An overwhelming majority of the HL Leaders, members, and community mothers reported that the HL Child Survival Project had had a definite impact on their own families. For example:

- When their own children had diarrhea the women interviewed reported that they now knew what to do right away due to their ORT training. Diarrhea is a recurring and worrisome problem for most of the mothers questioned, and they were very relieved to have found a reliable means of preventing dehydration.

- A surprising number of mothers, from higher level Salvation Army officials on down, reported that they had not clearly understood the importance of balanced diets, especially for weaning age children before the Project began. Many had been feeding their own children meals skewed towards an excessive amount of carbohydrates, with few meats, vegetables or fruits. They were especially grateful to receive instruction concerning how to prepare nutritious and yet inexpensive weaning food recipes, such as beans and corn and "super ujii" (a fortified corn porridge).

  Approximately two-thirds of the mothers interviewed reported that their own children or their grandchildren were better nourished. Many mothers had begun their own vegetable gardens and were glad of the financial and nutritional relief they provided.

- Many women beneficiaries and even some of the fathers interviewed reported that the Project's family planning instruction provided was very practical and had provided them with the motivation and ability to space their families. A few grandmothers with many children lamented

receiving this knowledge too late, but were actively proselytizing so their daughters and daughters-in-law would limit their own families.

- Many women expressed real enthusiasm for the Project and a deep satisfaction with the greater sense of control the program had given them over their own lives and those of their children.

Effects of the Project at the Community Level

In focus groups mothers made some memorable observations that illustrate, in anecdotal form, the effects of the Project at the community level:

- One woman reported that her house was on the road to the dispensary. Day after day, she said, she used to see mothers hurrying along toward the clinic with very sick babies, dehydrated from bouts of chronic diarrhea. But since the project had begun this stream of mothers had gradually slowed, until now only a few came by each month.

- Several HL Leaders said that soon after they received their ORT training they had been inundated with requests from village women to prepare the sugar-salt solution for their children. Now, however, many HL Health Educators were certified and there were a number of homes in the community where mothers knew they could go for expert ORT assistance. It was much more feasible to get timely help from a neighbor with preventive rehydration for a child with diarrhea than to travel to a clinic or hospital for assistance with dehydration later in the course of the illness.

- In one mothers focus group a women stood up to testify to the great effect family planning education had had on her community. "Before," she said, "I used to go to the fields and see young mothers coming along with one child in their bellies, another led by hand, and a third on their backs. 'What work will they get done in their shambas?', I thought. Now I see these young mothers still coming, pregnant and with a child walking beside them, but the child on the back is missing!" The focus group leader, surprised that effects such as this would be noticed so soon, asked if the mother meant that this was what would happen in the future. "No", the mother (and her neighbors) said emphatically, "we see this change now!".

- Project staff reported that measles outbreaks had been a chronic problem in several of the outlying Corps (Kavyuni, Masokani, Kilome and Ukalani) where villagers were poorer and hygiene rudimentary. In the last several years the incidence of measles had decreased dramatically, with no outbreaks reported to the Ministry of Health from these distant Project sites. Staff felt this change had been due to concerted efforts through the Home Leagues to increase immunization coverage.

One potential community effect not yet widely reported is an increased understanding of how community members can band together, identify critical problems, and jointly work to resolve them. A few respondents mentioned the possibility of starting income-generating or self-help groups. Experience from other parts of Kenya (as well as other developing countries) indicates

that a concerted effort to foster community development activities in the future could have an important effect on the ability of community groups to solve health and development problems themselves.

Effects of the Project on The Salvation Army

The Salvation Army has been concerned for the health of the people since it began its Ministry in Kenya. Until recently, however, work in the health field has focused on providing support for children already physically handicapped or blinded. The Army runs schools for blind children, schools for physically handicapped, vocational training workshops for both blind and handicapped, a home for "street children", homes for orphans, and a shelter for elderly destitutes.

Salvation Army officials at Territorial Headquarters are excited about the Child Survival Project because it offers an opportunity to prevent death and poor health rather than simply deal with the consequences. Care for one handicapped or blinded child in the Army's institutions costs more per year than an average Kenyan family earns in the same period. Care for the handicapped is necessary, but well-designed preventive health programs are much more cost-effective.

The Child Survival Project fits in well with the Army's social ministry. In the past few years the Salvation Army in East Africa has also organized a number of rural development projects, including 4-K, Family Life, and Women's Groups for Income Generation. Army officials hope that eventually the child survival and rural development projects can be closely coordinated. Currently the Child Survival Project is unable to offer solutions for the nutritional difficulties some of the poorer families face. The agricultural projects may provide some useful assistance with this problem.

Interviews with a wide range of Salvation Army officials, from Territorial and Divisional level personnel to Corps officers and ordinary Home League members, gave a good sense of the Army's view of the Project. In summary:

- All Army personnel the team interviewed were very enthusiastic about the Child Survival Project. No one in the field suggested that the Project detracted from other aspects of the Army's ministry, although it was at times quite demanding.

- Corps officers and HL Leaders reported that the addition of health education sessions to the HL meetings had increased interest and attendance at the Home Leagues.

- HL Leaders suggested that the Child Survival Project home visiting program offered them an opportunity to visit not only Salvation Army church members, but the community at large. Thus the HL Leaders get to know and serve families they would not have been able to reach through their regular visiting program.

- The Corps officers (husbands of HL Leaders) often participated very enthusiastically in the site visits conducted by the evaluation team. Several mentioned that in the future it would be important to inform the men about Child Survival Project goals and activities as early as

possible. They reported that some husbands had initially been concerned that their wives were devoting so much time to the Project, but that once they had understood what it was all about they had become fully supportive.

- There have been many requests from Corps out of the Machakos area that want to start child survival activities in their own Home Leagues. Territorial Headquarters, so far, has asked them to wait, as it wants to be sure program strategies are fully developed and necessary support is available before expanding.

The perspective of SAWSO is important to consider also. Views presented in the SAWSO questionnaires are summarized below:

- The Child Survival Project is strong because it capitalizes on the existing and very solid Salvation Army Home League structure. There are 8,000 Home Leagues and 400,000 members world wide, and thus great potential for an expanded effort.

- Experience with the Project and the role played by the SAWSO Health Educator greatly increased SAWSO's capability to develop and support technically high quality health programs, improving the knowledge of other staff members, and strengthening SAWSO's portfolio in this area. It also improved SAWSO's and Salvation Army's stature and acceptance by the PVO and international health community.

- One aspect of the Army structure that somewhat weakened the Project was an absence of strong health project management skills in the field, and lack of a strong organizational tradition of an open approach to information sharing, decision-making and problem-solving on the part of some Army leadership.

- In some ways the Child Survival Initiative was too high powered, too rushed, and too output-focused for the Army. A.I.D. reporting requirements were excessive, in some cases, and guidelines were at times late and confusing. To some extent the Project was viewed as intrusive, tending to drag the field along with it before it was ready. But, on the other hand, without the pressure, some state of the art technical aspects of child survival might not have gotten on the Army's agenda. In the future, projects such as child survival shouldn't be "donor driven". It is better to proceed at a somewhat slower pace and develop a project model that is appropriate and sustainable with normal Army resources. Child survival programming can make a very important contribution to the Army's social ministry.

III. PROJECT PROCESS: HOW THE PROJECT WORKS

The Evolution of Project Design

The initial "Child Survival Proposal" prepared by SAWSO listed three major goals for the Project:

Goal #1: Train 16,500 women in the four point GOBI program for child survival and achieve a 70% adoption rate on GOBI practices.

Goal #2: Reduce mortality due to dehydration by 25% among target population.

Goal #3: Increase immunization coverage of children under five and pregnant women through a strong health promotion effort.

Although the Project was officially approved to start in July of 1985, planning did not begin in Kenya until October of that year. By February of 1986 several major changes had been made in Project design and had been reviewed and approved by the MOH and the USAID Mission in Kenya and A.I.D. in Washington:

- The original proposal stated that the project sites would be in the Western region of Kenya, where the infant mortality rate is highest. Salvation Army leadership later decided to initiate the Project in Machakos district, which also has many areas of high infant mortality and is much closer (1 1/2 hours versus 6 to 8 hours), making pilot project management much easier. The Project could potentially be expanded later to the Western region of Kenya after any initial problems had been worked through.

- The overall size and scope of the Project was reevaluated. It was determined that only Tier 1 indicators would be reported on and no attempt would be made to measure impact on infant mortality rate.

- The total group of HL Leaders to be trained was divided into two smaller groups to allow more manageable sessions. This required that two training cycles be built into the schedule. Several additional lay HL Leaders were added to the training groups to compensate for weaknesses in literacy and training abilities of some HL Leaders.

- The number of HL members to fully participate in the training program was reduced from 30 per Home League to 10, and home visits per HL Health Educator to 20 per month.

- Immunization motivation was continued as a major aspect of the program, but it was decided that women would be encouraged to attend the closest preexisting MOH immunization service, rather than arranging that the MOH or The Salvation Army directly would provide immunization at specially-organized HL sessions.

- The decision was made to teach use of both ORS packets and home mix ORS (sugar-salt solution), for early rehydration of children with diarrhea but home mix would be emphasized, as it seemed the most practical, affordable, sustainable approach at the time.

The three initial Project goals were changed to four Project objectives:

Objective #1: Register target population in project areas.

Objective #2: Train Home League Leaders and members in all GOBI-F strategies.

Objective #3: Educate community women on GOBI-F practices.

Objective #4: Deliver limited basic preventive child health services to children under five in the target population, with focus on at-risk children.

The changes in project design which substantially reduced targets and stated objectives away from service delivery appear to have been very appropriate, considering field realities. In hindsight it appears that even the targets proposed for the objectives above were too ambitious, and that the data-gathering required to properly measure their attainment was beyond the capability of the Project. This issue and proposed changes in Project objectives for the future are discussed thoroughly in the earlier section on "Project Achievements and Effects", and in the "Record-keeping" section below.

Staffing and Inter-Organizational Relationships

The Child Survival Project in Kenya has been based on the concept that "members of the Salvation Army women's organization, known as Home League (HL), can be trained to actively participate in improving the health of their children and the children in their communities."[1] The Home Leagues are organized by the Corps Officers' wives in each of the local Corps.

The Project area includes 17 Corps in the Machakos Division and 3 Corps in the nearby Kangundo Division. A Project Coordinator is employed to direct the Project. She is a nurse midwife with long experience in health education, training, and community health work. She and her staff, which include a Field Assistant, Office Assistant, and Driver, are based in a Project Office in Machakos. From there they organize and conduct training activities, deliver supplies and supervise Home League Leaders in the participating Corps.

In each of the 20 Corps in the current Project area two to three Home League Leaders have been trained to carry out Project activities. They include the wife of the Corps Officer, the Home League Secretary (a lay member) and, in some cases, one other HL member. They coordinate and supervise all Project activities at the Corps level. Specific tasks include giving health education sessions at Home League meetings, training HL Health Educators through these sessions, and organizing and supervising HL Child Health Sessions and home visits conducted by the Health Educators.

The drop out rate among HL Leaders and Health Educators has been nil. The Salvation Army policy of transferring Corps Officers to new posts, usually every two years, has caused significant turnover in personnel recently, though the normal staff turnover was postponed in the project areas during the first two years of the project due to the efforts of the then Chief Secretary.

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[1]/ From "Country Status Report: Kenya", October 17, 1986.

Eleven HL leaders were transferred out of Machakos to other parts of Kenya in December 1988. Three officers were transferred within Machakos Division, but to Corps where project activities were not taking place. This was a consideration in scheduling the final evaluation in November. Leaders at the higher Territorial level Army structure have been transferred mid project, and this has also affected the project.

The Project must, in future, plan for training for new arrivals when such changes occur.

The Territorial Headquarters for Salvation Army for East Africa is in Nairobi. The wife of the Territorial Commander is the President of Women's Affairs. The wife of the Chief Secretary serves as the Territorial Home League Secretary. These two women supervise Child Survival Project personnel at the Divisional and Corps levels.

Project personnel are supported and supervised by Army personnel at both the Divisional and Territorial levels. The wife of the Divisional Commander serves as President of the Home League at the Divisional level. She helps supervise the Home Leagues Leaders (HL Leaders) and plays a key role in the Project, working with the Project Coordinator on day to day Project activities and encouraging and supporting the HL Leaders in their work.

From the earliest stages the Project as been extremely fortunate to have had a succession of individuals serving in these supervisory posts at the Territorial and Divisional levels who have been very supportive of the Project and have worked untiringly to encourage and motivate the Home League women in their work. Their wise leadership and rapport with both Project staff and local women has been an essential ingredient in Project success.

The Health Educator at Salvation Army World Service Organization (SAWSO) Washington has served as a key technical advisor for the Project. Although based in Washington and responsible for primary oversight of technical health aspects of Child Survival Projects in four countries, she has spent more than six months during the three year life of the project providing technical assistance in Kenya. Her technical advice in areas such as development of the overall curriculum design, health education materials development, the at-risk approach, refinement of supervision and growth-monitoring strategies, and revision of the record-keeping system have been extremely helpful.

The SAWSO Project Officer for Africa participated in initial planning and organization activities, served on the mid-term evaluation team, and provides general administrative support from SAWSO.

A Project Organization Chart has been attached as Appendix D. It shows the relationships between the various types of personnel and community participants in the program and summarizes their roles, as well.

Training and Health Education

Training has taken place at three levels within the Child Survival Project in Kenya.

The first level of training involved a general orientation for Salvation Army women serving as Territorial and Divisional leaders for the Home League structure. As most of these women leaders did not have a technical health background the orientation focused heavily on basic GOBI-F concepts and the at-risk approach to child survival. In addition, time was spent on issues related to planning, implementation,

management and evaluation of the HL health education and promotion activities.

Also at the project leader level, the SAWSO Health Educator assisted in orientation of the Kenyan national Project Coordinator to recent advances in technical areas of project implementation and curriculum design, and in overall concepts of Child Survival programming from the A.I.D. perspective.

This orientation took place during a series of technical assistance visits made by the SAWSO Health Educator during the first project year. It included some formal presentations and a number of meetings during which all involved worked together to set up the technical and administrative systems needed to support the Project. Several new leaders came on board at the territorial level toward the end of the Project, and a systematic effort was made to orient them as well. The full support among women's organization leaders at Territorial and Divisional levels which has been essential to the success of the Project was reinforced by this intensive collaboration, input and involvement between SAWSO and field personnel.

The second level of training involved a series of training sessions for Home League Leaders. Leaders from 20 Corps within the Machakos Project area were trained in GOBI-F, as well as a few leaders from other Home Leagues within Kenya (Embu, Thika, Narok, Mombasa). As mentioned earlier, it was decided that training should take place in two cycles. All the Leaders met for the first session in May of 1986, which provided a general orientation to program objectives and reviewed techniques for conducting the baseline community health survey. The Leaders then participated in the health survey, an intense task requiring 3 weeks of work.

The first group of Leaders from ten Corps then participated in five more week-long sessions, each several weeks apart, which ended in November, 1986. The second group was trained from March through October, 1987 in five similar sessions. The sessions were held in Machakos and led by the Project Coordinator, who called upon outside facilitators from the Ministry of Health and other organizations from time to time.

The general outline and training objectives for the six week HL Leader training curriculum were designed by the SAWSO Health Educator in Washington, after an orientation visit to Kenya, reflecting state of the art approaches to training in each GOBI-F intervention, and utilizing information thought to be appropriate to the level of trainee and tasks to be performed as part of project activities.

The Project Coordinator is a skilled trainer with particularly good rapport with rural women. She is herself from the project area. According to the curriculum outline, she prepared thoroughly for the sessions, employing participatory/adult type learning methods as much as possible. Training methods, for example, included role plays, stories, songs, group discussions, and demonstrations. Training covered topics such as:

Community Diagnosis
Community Survey Techniques
Health Education Techniques
Home Visit Techniques
Child Health Cards
The At-Risk Concept
Breastfeeding and Nutrition
Growth Monitoring and Promotion
Oral Rehydration Therapy (ORT)
Immunization
Child Spacing

An analysis of training content indicates that some essential topics were either missing or received less emphasis than needed. Clearer discussion is needed of the at-risk concept and its practical application and the fundamentals of record-keeping and data use for project planning. Sessions should be added on community development techniques and income generation strategies that could be used within the Project.

Pre- and post-tests were administered at each session and evaluation forms completed. A training summary report was sent to the SAWSO Health Educator following each session. It includes a training schedule, objectives, and general description of the content and activities that took place. (See Appendix F for a list of training reports.)

Since a high quality written curriculum was not available when the Project began, the demands on the Project Coordinator's time for training session development were much greater and the need for outside technical assistance more pronounced. **A detailed written curriculum with formal session plans, a complete description of all content needed for each topic and a full presentation of all exercises and handouts needed, has not yet been developed.** The training reports required by SAWSO, though time consuming to create initially, should be very helpful as curriculum development gets underway. Development of a clear and practical written curriculum is an <u>essential</u> prerequisite for Project replication, as overwise it will be impossible to insure that the quality of training remains high in the future.

Other problems experienced during the training sessions included great difficulty in obtaining appropriate training materials, variability in the quality of training facilitator presentations, and the fact that training documentation demanded a week of the coordinator's time following each session. The second cycle was much easier because of the preparatory work and experience during the first cycle. In general, participant feedback indicates that the training was high in technical quality, practical, and well-targeted to the level and needs of the HL Leaders.

<u>The third level of training takes place at the Home League meetings themselves</u>. Trained HL Leaders devote the program of least one of the weekly meetings each month to a health education session at the corps hall for Home League members. Other League business comes first, and then all women who would like to may stay for the health education session. The presentation may last from 15 minutes to an hour, usually covering part of one of the GOBI-F topics. Many of the HL Leaders have become quite skilled in using participatory techniques such as role plays, group discussion, songs, stories and demonstrations themselves.

A one week refresher Training of Trainers (TOT) course given in May 1988 for the Leaders significantly improved their confidence and skill in preparing and conducting the sessions. Now some Leaders even make their own lesson plans for the sessions they give.

Each Corps has received a box filled with supplies to use in its activities. It includes a number of teaching aids such as family planning flip charts, flannel graphs from TALC on several topics, posters, and equipment for demonstrations.

A flip chart on ORT, featuring well-tested photos taken in the Project area and Swahili text on the back of each photo, was developed by the SAWSO Health Educator, a graphic design consultant based in the U.S., and the Project Coordinator in Machakos, and distributed to each Corps. The ORT unit of the flipchart is one of a complete set designed to cover all units of the instructional material at the corps (village) level.

It took approximately 12 person weeks of time to develop the ORT unit, with substantial funding input from grant monies and external A.I.D. technical assistance sources.

Feed-back from a number of sources, including the Project Coordinator, HL Leaders and Members, Ministry of Health personnel, and other donors indicates that the flip chart is well-designed and serves a very definite educational need. It allows trainers to give technically-correct and yet simple lessons using realistic photos which review the alternatives and steps essential to the rehydration process. Development of the flip chart unit was time-consuming and technically-demanding, requiring substantial additional external technical expertise, and was not inexpensive. According to reports from the field, however, it was well worth the effort.

The certification process.

Members who are interested in participating actively in the Child Survival Project receive additional instruction from the HL Leaders and, when they are ready, are tested and certified by the Project Coordinator in each of the GOBI-F strategies. The members, who are then termed "Home League Health Educators" (HLHE's), receive a child survival visiting bag, a badge, and a different colored ribbon for each of the GOBI-F subject areas they satisfactorily complete.

The questions posed during the certification process are comprehensive. Required demonstrations required emphasize the importance of practical skills. Group questioning takes some of the apprehension out of the test situation and provides an opportunity for reinforcing the knowledge of both candidates and listeners. HL Leaders apparently seldom request that their members be tested before they are thoroughly prepared. Thus certification serves as a means of providing public recognition and reinforcing competence and does not often seem to be needed as a tool for weeding out weak candidates.

The certification process, including the thorough preparation of the candidates and the testing itself, appears to be a very important means for insuring the quality of training at the local level, where it is farther removed from the control or influence of Project leaders. Thus the certification process, although it requires additional technical expertise and staff time, appears to be an essential component for program success.

432 members have been fully certified as Health Educators now, which is quite impressive. Unfortunately there is still quite a large backlog of members awaiting certification since, up until now, all testing has been done by the Project Coordinator, who has many other responsibilities as well. HL Leaders have preferred that the Coordinator perform the certifications, both because she is the respected leader of the program and is skilled at testing, and because HL Leaders have felt uncomfortable testing other women in their own corps who, in many cases, are also their friends and neighbors.

Health Promotion Activities

Child Survival interventions promoted in the project include oral rehydration therapy, growth monitoring and promotion, breastfeeding, nutrition/weaning education, and immunization, as well as child spacing and basic antenatal care.

Oral rehydration therapy.

Use of ORT for rehydration is promoted, both during health education sessions and home visits, along with use of home available fluids. Originally the Project had planned to stress use of ORS packets, but current pro-packet MOH policy was not fully formulated at the time when implementation decisions were being made (1985), and packets were said to be difficult to obtain in the project area. (This apparently is still the case, according to focus group discussions held as part of the pretesting of the ORT flipchart, where women could not recognize photos of any type of ORS packet).

The program teaches use of ORS packets, home-available fluids, and sugar-salt solution. Use of sugar-salt solution is emphasized as it currently is more available and affordable than packets.

Plastic double-sided measuring spoons produced by TALC were ordered and are used, along with the locally very common 1/2 litre "KIMBO can", to measure ingredients. Observations and chemical analysis during this evaluation indicate that trained women prepare the sugar-salt solution with a high degree of accuracy.[2]

As a small aside, although the Project's recommended practice of washing the arms way up to the elbows before beginning preparation of the solution might be discontinued if water is extremely scarce (as it vero often is in the project area), it appears to give the procedure an added scientific mystique which may help it compete with the unfortunate but prevalent use of various anti-diarrheal drugs.

The ORT component is one of the most successful aspects of the Project. Its success is probably due in great part to the comprehensive approach taken during training, which focused on the full spectrum of diarrheal disease prevention and control. The women trained demonstrate a truly thorough knowledge of signs and symptoms, causes, preventive measures, all aspects of treatment approaches (from home available liquids to sugar-salt solution preparation), and make the solution correctly. The evaluation team member from Salvation Army, Kinshasa, observed that the women were better trained in ORT than many of her nurses in Zaire.

Growth monitoring and promotion.

Weighing and counselling. Originally, HL leaders were trained in use of the armband to measure mid upper arm circumference (MUAC), as an overall guideline to recognition of children needing nutritional attention during home visits and referral to HL child health sessions. It appears that, over time, emphasis has shifted away from use of armbands, toward referring all children under five to HLCHSs.

Approximately half the 20 Corps currently hold growth monitoring or weighing sessions (Child Health Sessions) once a month. Originally some enthusiastic Corps held sessions weekly, but this was far too demanding and from a technical standpoint unnecessarily frequent for accepted standards of growth monitoring.

At each weighing session the HL Leaders and HL Health Educators work together on various tasks such as calling and preparing the children for weighing, placing the children in the scales, reading and calling out the weights, recording the information in the Child Health Cards, counselling the mother individually, and, in some sessions, giving group nutrition lessons to the waiting mothers as well. Technical quality

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[2]/ See Appendix I for details.

and organization of the monitoring was good in the session the evaluation team visited (Kanzalu, where there are over 50 HLHE's trained!) but apparently varies substantially from Corps to Corps. In the weighing session observed there were some plotting errors and less than optimal emphasis on nutrition education, and, reportedly, difficulties are greater in some of the weaker Corps.

In some Corps there appears to be a considerable gap between the number of at-risk children identified during weighing and the number that can be successfully assisted, once identified. A large percentage of the HL Leaders indicated that they were unable to provide practical help for the very poor families with malnourished children, as the families couldn't afford even inexpensive nutritious foods. This inability to provide material assistance to many of the children at-risk is one of the greatest frustrations faced by Project volunteers.

The growth monitoring component of the Project has been one of the most time-consuming, involving long hours of work for those Corps actively involved. Even with the intensive training and supervision surrounding the GMP portion of the Project, only half of the Corps, as mentioned above, are weighing children on a regular basis. One of the most controversial issues, when planning the future of the Project, is whether weighing should be continued.

Nutrition education. Nutrition education has been stressed in the Project as an approach to assisting children identified as being at-risk nutritionally both during the weighing sessions and during home visits. The Project Coordinator, with the assistance of the SAWSO Health Educator, worked to perfect the approach to nutrition education training, focusing on use of nutritious recipes involving inexpensive local foods. Many women, during the evaluation team's interviews and focus groups, observed that Project efforts in this area had helped them to realize the value to knowing how to more appropriately use available foods.

Food supplementation. The possibility of providing a food supplement for nutritionally at-risk children was discussed at some length. Project technical advisors were reluctant to have the Project become involved in this type of activity but finally agreed that it be tried on an experimental basis in one Corps (Ukalani). Funding was obtained from an outside source for the food that was distributed, and the women worked tirelessly to make it a success. After several months, however, the food supplies ran out, and leaders realized that this type of activity would be difficult to sustain and, in many ways, detracted from efforts to assist needy families in becoming self-sufficient.

Vegetable gardens. Both community and home vegetable gardens have been very successfully promoted by the Project. At one time seeds were distributed to all HL Leaders for use in HL community gardens, but the current Army policy is to provide seeds only to very needy families, so as to encourage self-sufficiency as much as possible. Each Home League has established a garden near the Corps. Some of the produce is used to assist poorer families with malnourished children. Approximately 400 home gardens have been developed due to Project efforts, and have been helpful in improving the nutritional quality of many families' diets.

Immunization.

Children needing some or all of their immunizations are identified during home visits and weighing sessions and referred to the nearest MOH immunization services. Originally the Project planned that special immunization sessions would be held as part of the HLs' own Child Health sessions. This proved too labor-intensive and logistically demanding,

although one Corps (Kavyuni) continues to successfully facilitate MOH immunization sessions, using the project vehicle to transport MOH personnel and supplies to the remote village on a monthly basis.

The issue of how best to promote immunization has been a difficult one. The Project found it was frustrating to create a demand for immunization services during health education sessions and home visits and to then have to rely on the Ministry of Health for delivery, since immunization sites were often far from the Corps and sessions not always reliable. Kavyuni's experience in holding immunization sessions at the Corps itself, with the assistance of the MOH immunization teams, indicates that the level of effort and resources required is probably too demanding for most Corps.

Child Spacing and Prenatal Counselling.

Child spacing motivation is provided during home visits. Supplies of condoms and foaming tablets have been obtained from various government and non-governmental sources and are distributed free of charge to families that request them. Tubal ligations have been popular in some areas, and HL Leaders refer and sometimes accompany women who wish them performed. Enthusiasm for this component of the Project is quite high in many Corps, most likely because of the great need for child spacing for economic and health reasons, and the sensitivity with which Project personnel approach the subject. Although the supply of contraceptive has not been a problem in Kenya, it could be difficult in some countries. Thus logistical considerations should be examined closely when planning this activity in the future.

There has been a lot of internal controversy as to the role and limitations of lay women as distributors of family planning supplies, including even simple condoms and foaming tablets. The SAWSO health educator recommended that the Project prohibit direct provision of pills, though Kenyan policy was recently liberalized to allow this community-based distribution. Given the Project's record-keeping difficulties overall and the special requirements of supply continuity and distinction between new and continuing users, it was considered too much for an effort of this type. Mandaeleo ya Wanawake and other women's community-based distribution (CBD) projects in Kenya concentrate exclusively on family planning related training. Only at the expense of some of the Project's other strong interventions could the quality of family planning training required for a full-scale CBD family planning effort be achieved.

Pregnant women are encouraged actively during home visits and education sessions to eat an appropriate diet, attend MOH antenatal clinics and receive tetanus toxoid immunizations, if needed. Although the official focus of the program is on child survival, the importance of mothers' health needs is recognized and addressed. There is not a separate prenatal counselling component to the program. Instead, it is interwoven into other components of the program, such as child spacing, nutrition education, and immunization.

The at-risk approach.

The Project has, from the beginning, recognized the importance of targeting and serving at-risk populations with it's promotional and service activities. At-risk criteria devised, and taught to all HL leaders and members, include:

High Risk Child	High Risk Mother
Episode of diarrhea past 2 weeks	Previous young child death in family
Age under one	Previous low birth weight baby
Birth weight less than 2.5 kg.	Child in household under age one
Malnourished siblings	High parity (more than 5)
Birth less than 2 yrs. after previous delivery	Single parent
Twins	Pregnant
5th or higher in birth order	

At-risk detection takes place through the HL Health Educator home visits and at the growth monitoring sessions described below. The focus on at-risk groups is a important aspect of Project design. As will be discussed later in the report, the initial record-keeping system did not easily allow for systematic identification, targeting and follow-up of at-risk groups. Changes made at the beginning of this year were in the right direction, but further work is needed to completely develop an effective but simple at-risk strategy and record-keeping system. The goal of The Salvation Army is to simplify the at-risk emphasis in tune with overall program scale-down, without losing the overall impact this approach has had. Project staff, with the help of technical experts, will need to seriously consider whether and how this can be accomplished. It may be that use of criteria for identifying women and children at-risk should be continued, but that requiring individual tracking of each case would be too much to ask.

Home visiting.

Home visiting has been identified as a key aspect of child survival outreach, and is an essential part of the current program. HL Leaders and Health Educators spend from a few hours to several days a week making home visits, both to families in the area surrounding their own homes and, in some cases, to families farther away that have been identified as at-risk for various reasons. Some Home Leagues have official "home visiting days". In the early months of the program many Health Educators visited up to 10 or 15 homes a week. This proved very demanding, and now the suggested target is 5 homes per week per HL Health Educator. This level of volunteer effort appears much more sustainable over the long run.

Tasks often completed during the home visits include:

- Introducing the program
- Enquiring about progress of mother and child
- Checking child health cards
- Referring for immunizations
- Checking child's growth curve
- Asking about feeding problems
- Giving nutritional advice
- Giving family planning advice and supplies
- Referring pregnant women for prenatal care and tetanus toxoid
- Teaching and preparing sugar-salt solution for rehydration
- Encouraging attendance at HL health education and weighing sessions

Supervision and Motivation

As mentioned earlier, the President of Women's Affairs and Secretary of the Home Leagues provide supervision and support for Project staff from the Territorial level. They have played essential roles in Project planning and administration throughout the life of the project. Occasional visits to training sessions and Corps project sites have kept these leaders informed of field achievements and problems, and provided critical opportunities to supervise and, probably most important, motivate and encourage the women of the Project.

The two Divisional HL Secretaries who supervise project work in their areas were fully trained in GOBI-F with the Home League Leaders from their Divisions. This gave them the detailed knowledge and skill necessary to lead "their women" in Project activities. The Divisional HL Secretary in Machakos often works on Project activities on a daily basis. Her dedication and wisdom serve to inspire those who work with her.

The Project Coordinator and Field Assistant (who joined the project staff in 3/88) provide supervision for the HL Leaders, visiting each Corps from one to four times per year. Although even more frequent visits would be desirable, long distances to some posts, at times unpredictable road conditions, and other competing tasks (such as training and record-keeping) make it almost impossible to increase supervisory support.

Supervisory visits are focused on observing Project activities, discussing problems and developing solutions, offering technical guidance, and encouraging and motivating the women in their work. The supervisory checklists devised by the SAWSO Health Educator have apparently been quite useful in serving as a reminder of essential supervisory tasks, while reducing record-keeping and standardizing its format. While HL Leaders are generally quite satisfied with the quality of guidance they receive, almost all would like more frequent visits.

HL Leaders, in turn, supervise the HL Health Educators they have trained. They organize and coordinate the work of the Health Educators on tasks such as home visiting and staffing of the Child Health Sessions. The quality of supervision they provide depends, to a great extent, on each Leader's skill and motivation.

Motivation is essential in a Project that depends almost entirely on volunteers. The Salvation Army Officers and their wives receive a small salary but nothing extra for their child survival-related activities. Lay HL Leaders and HL members perform their teaching, growth monitoring and home visiting duties without compensation, for the good of their families, the Church, and the community. Project staff have been well aware of critical importance of motivation and have used a variety of mechanisms to encourage those working at the village level. Of key importance have been have been well-designed training activities and refresher seminars, training materials, and supervision; awarding badges, bags, and ORS spoons; and arranging visits from Salvation Army THQ and SAWSO staff.

Many of the HL Leaders and Health Educators have asked that some type of fund be made available to reimburse them for transportation costs and money spent for lunch while visiting homes and conducting weighing sessions. Recently 60 KSH per month (approx. $4 US) was allotted for each Corps for bread and tea and soap to clean uniforms. Dissatisfaction related to issues such as compensation appear to be much less evident than during earlier evaluation and field visits. It may be due to arrangements such as the 60 KSH fund or to the fact that HL Health Educators' work loads were reduced.

Questions persist as to the institution of even these seemingly small monetary incentives in an essentially voluntary effort, mostly for reasons related to sustainability.

As HL Leaders and Members work longer in the program over time, new strategies will have to be devised to maintain motivation and enthusiasm.

Project Schedule and Time Frame

The "Calendar of Events" developed by the SAWSO HE and project staff during the 1/88 annual project review, provided in Appendix E, provides a useful summary of major project activities through 1988, as well as listing some of the training sessions scheduled to take place in 1989.

Examination of the calendar indicates that while the Project officially began in August of 1985, the Project Coordinator and other project staff were not hired until March of 1986. Much of the first year's activities were concerned with finalization of project planning and the organizational and administrative tasks of the start-up phase. This involved detailed discussions and working sessions with the SAWSO Health Educator in Kenya with the then Chief Secretary and his wife, and with the Medical Advisor at Salvation Army International Headquarters (IHQ) in London.

As discussed earlier, after all HL Leaders of the 20 Corps participated in the introductory training session and worked to complete the baseline survey, the rest of the training was completed in two cycles. Leaders from 10 Home Leagues began their second week-long training session in June, 1986 and completed their final (6th) week of training that November. The mid-project evaluation took place in January of 1987. The Leaders from the second set of 10 Home Leagues started their second session in March, 1987 and completed training in October, 1987.

Most of the Project staff's energy was concentrated on training until the two training cycles were completed. Home visiting began at the first group of 10 Corps after their second training session in June of 1986 and HL Leaders began providing health education at the HL meetings, presenting new GOBI-F interventions as they learned them. The second group began home visits in March of 1987. Home Leagues initially held growth monitoring (Child Health) sessions on a weekly basis, but in June of 1987 this activity was reduced to once a month.

In 1988 the Project Coordinator, having completed the training sessions and with the addition of a field assistant, was freer to concentrate on tasks other than training. Work included supervision of the health education and promotional activities at the various Corps, certification of HL Health Educators, organization and completion of two refresher training sessions and a training of trainer (TOT) session, and improvement of strategies for record-keeping and targeting high risk groups. The final evaluation was completed in November, 1988. Project activities are now scheduled to continue under a no-cost extension until July 1989. Currently plans are being developed for future project activities, and a proposal may be submitted to the USAID Mission in Nairobi for local OPG funding.

The timing of Project activities was quite different than that originally projected in the Detailed Implementation Plan (D.I.P.). HL Leader training was originally scheduled to be completed in September of 1986, whereas due to the additional time needed to complete two full cycles, the final session for the second group was not until October, 1987 (more than a year later). Seven refresher courses were originally scheduled for 1987-88, while eventually only two refresher courses were held in this period.

These changes in timing of training were appropriate, considering the need to complete detailed project planning in the field in the start-up phase, to divide the Leaders from the 20 Corps into two more manageable groups and the decision to allow approximately six weeks between training sessions to provide ample opportunity for practice in the actual village level setting. If the original proposal either had been

developed in the field or with much closer communication with the field, the planning period in the early months of the Project might have been shortened.

In hindsight, it might have been better to limit initial project activities to 10 Corps rather than 20, considering staff and resources. If only one training cycle had been needed and the Corps to be supervised had been fewer, Project staff would have had a much more reasonable work load and more time to devote to project activities other than training. This was in fact suggested to field staff, but as all twenty Corps had already been notified about coming project activities, was not implemented for administrative reasons.

Thus the size and scope of child survival activities undertaken during the first funding period was extremely over-ambitious, considering inherent staffing and organizational constraints. Project staff coped amazingly well, but the level of effort required thus far for Project success at current levels may well be too high to be sustained over the long term.

Data Gathering and Record-keeping

The baseline survey. As an initial step in the implementation of the Project, a baseline community survey was planned. This began in Washington, with consultation between the SAWSO Health Educator and a PRITECH consultant, who designed a basic 60-question instrument to elicit KAP data in each of the five areas of project intervention. This was then contracted to a local Kenyan demographer, who was to translate the instrument, train HL Leaders in its use, supervise the survey in the project areas, and analyze the results.

The approximately 100 questions on the revised instrument were divided into sections on the knowledge, attitudes and practices of community women in the areas of growth and nutrition, ORT, breastfeeding, immunization and family planning. The field work was carried out by the HL Leaders themselves, under the supervision of the Kenyan demographer. Her preliminary analysis of one percent of the four hundred households surveyed was included in the 1986 Annual Report. The early report highlighted areas in which health education appeared to be needed. For example, in the one percent sample of the women interviewed:

- 34% did not know where to take their children for immunization
- 23% didn't breastfeed their last child
- 14% fed their children only once a day, 17% twice a day
- 26% had never taken their children to a clinic to be weighed
- 41% had children with diarrhea at least 2-3 times in the preceding two weeks
- 53% did not want any more children but 46% did not know any method of family planning

Training content was subsequently modified to stress the areas of educational need reflected above. Unfortunately the professional hired for the survey failed to provide the HL women with adequate supervision during the data-gathering process. In addition, she never fully analyzed the data nor produced the final survey report, despite repeated attempts by SAWSO, PRITECH and USAID mission staff in Kenya to obtain it.

This was a real source of disappointment to the HL Leaders who had donated several weeks of hard work, and to all levels of project staff who were, as a result, without valuable and much needed baseline KAP and demographic data for project target groups.

The raw data was finally obtained, but it was eventually decided that because of inconsistencies in the data due to poor field supervision, it would not be cost-effective to analyze it. In retrospect the instrument was somewhat lengthy for a Project of this scope, but no one could have predicted the technical assistance problems in advance.

Monitoring and record-keeping systems. The record-keeping system designed by the Project attempted to reflect A.I.D.'s current information requirements at the Tier 1 level. The system is described below.

HL Health Educators are asked to report their home visit activities, by number and type, to HL Leaders at weekly HL meetings. The information is recorded on a form which is collected from leaders on supervisory visits and compiled by the Project Coordinator and her assistants on a monthly basis. The data is then recorded on a monthly report form and sent, along with information specific to the Coordinator's own activities, to Territorial Headquarters and SAWSO.

In addition, each HL Leader has kept two record books, one for information from the growth monitoring sessions and one for HL health education sessions attendance and agendas. While HL Leader training was still in progress, Leaders reported at each session, which facilitated comparison of performance, analysis of results, problem sharing and group solution development. The Leaders then relayed the information back to HL members in their own home areas. In reality, some significant gaps are present in the system.

Since the Project was different than many of the service delivery-oriented child survival projects, mainly motivational and educational, data on several indicators other than those required of Tier 1 projects were scheduled to be collected. They included:

No. home visits
No. child health sessions held
No. curriculum modules developed
No. Child Health Cards given
No. supervisory visits
No. attendees at HL sessions
No. children weighed and gaining
No. children ident. as at-risk
No. children referred to clinics
No. family pl. supplies distributed
No. ORS supplies distributed
No. children referred for immunizations
No. women referred for tubals
No pregnant women referred for antenatal care

A detailed reporting form for Tier 1 indicators (see the October 1986 Kenya Annual Report, Appendix IX) was developed by SAWSO. Project staff, especially at the HL level, found it very difficult to collect the volume of data required, which minimized time that could be spent on actual project activities. Many of the home visits were made by women who were functionally illiterate and therefore could not accurately record large amounts of data. Even among trained HL Leaders, data recording has proved problematic. In addition, A.I.D. reporting requirements continued to change, as the Project progressed, and this caused additional difficulties.

Revisions in the record-keeping system. During the SAWSO Health Educator's technical assistance visit in early 1988 a concerted effort was made to simplify and improve the record-keeping system. Corps level record books were collected for review and project staff asked to compile and present updated project data since August, 1987. The system, which used two large log books at each Corps, was found to have several design errors and inconsistencies, including:

1) undue repetition of identification data, with the same names and identification data often entered again and gain, with no way to consolidate information,
2) different numbering systems in weighing and at-risk books,
3) listing only initial weight in the weighing book, making follow-up of weight progression impossible,
4) necessity to hand-enter column headings each page, each month,
5) incomplete count and follow-up of at-risk children per session, and
6) lack of division of attendees into new and return visits.[3]

A family card was developed to replace the log books, based on a design developed for a Salvation Army Child Survival project in Bangladesh, and modified for use in the Kenyan setting. Eventually pilot use of the card was agreed to by Project staff, after debate of the pros and cons.

The card contains identification and health status information on women and children in the entire family, therefore integrating the child with the household of which he or she is a part. The card remains at the Corps as a permanent but mobile record of each family participating in HL health education activities. It can be taken on home visits, updated, and then returned to the corps where data can be tallied for the monthly reporting. It allows development of a system for flagging households requiring follow up, referrals or resupply.

Analysis of the card shows that although it is a substantial improvement over the old system, some additional improvements are still needed. One current drawback to the card is that it has insufficient space for recording information on follow-up of at-risk women or children.[4] Further work is needed to determine whether the HL health educators currently can easily and accurately fill out the cards, to tighten the set of instructions used with the cards, and to examine further how data will be used at Corps level and reported upward, before the family card system is finalized.

The form for monthly reports from Home League leaders was also revised so that less data was required and could be recorded more easily. In addition, categories were changed so that Project staff could clearly indicate "new" and "return" attendees at health education sessions, visits to particular homes, and "at-risk" children.[5] This is a very important change which should allow much more accurate reporting and statistics in the future. Data gathering changes have meant, however, that similar data is not available over the life of the Project to facilitate presentation of overall project performance.

The evaluation team found that record-keeping was still one of the most difficult tasks for Project personnel. Although the above changes have been made, there still appears to be substantial problems with data collection and collation, and a lack of clarity as to what data is really needed for Project management and how it will be used. As planning for the future gets underway, expert assistance will definitely be needed to examine this component of the Project. It will be important to determine what The Salvation Army itself needs to know to assess and manage its own Project, as compared to additional donor data

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[3]/ from SAWSO Health Educator's Field Trip Report for January 18 - February 27, 1988, page 16.

[4]/ See Appendix 6 of above trip report.

[5]/ See Appendix 4 of above trip report.

requirements, and how the record-keeping system can be further streamlined so the level of effort it demands is not excessive. It may be that a week-long workshop should be planned in the future to assist staff in understanding basic concepts of record-keeping and data use. (Workshops of this type were built into two of the other Salvation Army child survival projects.)

Collaboration with Other Organizations

District MOH staff collaborated closely on many aspects of the Project, including participating in training of HL Leaders, periodic visiting of HL activities (while making rounds for district work), and assisting in pretesting the technical health messages contained in the ORT flip chart. In turn, the Project Coordinator has participated in district training activities when possible. The Project transports MOH immunization teams to one project site on a monthly basis, and regularly refers community members needing immunizations, birth control pills, tubal ligations, or nutritional or medical assistance to the government clinics. In addition, HL Leaders, in some areas, have given health education lessons in government health facilities. Project and Ministry staff communicate, as necessary, concerning changing government policies related to child health and survival.

The USAID Mission has been well-informed concerning the Project and very supportive, but would appreciate receiving periodic reports and visits on a more regular basis.

Collaboration with other organizations has been much less intense, but useful. The Breastfeeding Information Group (B.I.G) assisted with breastfeeding sessions during the first training cycle. Family Planning International Assistance (FPIA) provided 75 family planning flip charts and contraceptive supplies. UNICEF provided growth monitoring and nutrition education materials (such as copies for each HL Leader of the excellent Kenyan national GMP training materials as well as 20 copies of the newly developed nutrition education flash cards). These materials are particularly difficult to obtain in sufficient quantity without the direct assistance of UNICEF staff, despite supposed availability through routine MOH channels. AMREF supplied valuable technical advice on their project activities in an adjacent area as well as feedback on the initial project design. CORAT sponsored a workshop for VHW training projects in Kenya which project staff attended and much appreciated.

Contacts made were limited to some extent by time and distance but, when made, in many cases proved quite helpful.

IV. PROJECT INPUTS

People

Important actors in the Kenya Child Survival Project include:

- The Project Coordinator and her staff, including a Field Assistant (since 2/88), secretary and driver.
- Home League Leaders, Health Educators and members of the Home Leagues of the 20 Corps involved in the current project, as well as community mothers who attend Health Education and Child Health sessions, and who benefit from home visits.
- The wife of the Territorial Commander who serves as President of Women's Affairs, the wife of the Chief Secretary who acts as Territorial Home League Secretary, the Assistant THLS and the wives of the Divisional Commanders who serve as Divisional Home League Secretaries, all of whom offer support and supervision for those under them.
- The SAWSO Health Educator and Project Officer for Africa, who provide technical and administrative support, both from Washington and during extended field visits.

The roles and relationships of the various staff and volunteers involved in the Project have been described in the earlier discussion on "Staffing and Inter-Organizational Relationships".

The field assistant, as mentioned above, was only added in early 1988. The Project Coordinator was working alone before that, faced with a workload that was excessive for one person. If a properly qualified field assistant had been available to the Coordinator throughout the Project, significantly more might have been accomplished.

Finances

The A.I.D. budget for the Kenya Child Survival Project (initially scheduled for three years) was $196,158. The Salvation Army contributes, as required, matching inputs amounting to approximately 25% of the budget, in the form of salaries at THQ for supervisory staff and the Project vehicle. The Project actually spent only $167,087 of the A.I.D. budget from August 1985 through July 1988. Thus there is a variance of plus $29,071. The printout showing the field budget, actuals, and variance is in Appendix G. Differences in the budget and actual expenditures were major only in the few areas:

- Professional fees (for consultant services) came from the home (SAWSO) part of the budget, rather than the field, as originally planned.
- Travel and per diem expenses, under which all training related expenses are drawn, were almost $22,000 less than originally planned, and salaries $4,000 less. Postage and shipping, equipment, and medical supplies were each between $1,000 and $2,000 less.
- Only professional fees, office expenses and supplies, other project supplies, and conventions, conferences and training costs were slightly more than budgeted.

The Project was able to obtain outside money for several of its activities, including funds from PRITECH for the initial survey and production of the ORT flip chart. All child survival projects were asked to set aside four percent of the budget for evaluation, and this project complied with that recommendation. As A.I.D. kindly offered to fund the final evaluation, monies set aside for this purpose can now be diverted to other project needs.

The Salvation Army has decided to extend the Project in Kenya through July 1989 by means of a no cost extension. Project expenses will be paid from the amounts still available from the Kenya budget, as well as from unexpended funds from others SAWSO sponsored Child survival projects which ended this year.

Both SAWSO and Territorial Headquarters have the budget and actuals on computer. The detailed yearly budgets are made with the Project Coordinator's participation. The financial Officer at Territorial Headquarters sends a certain amount of imprest to Machakos for field expenses, which is replenished when depleted.

There have been some difficulties in overall financial management. Staff familiarity with monies expended and balances available and interim planning between scheduled budget discussions was less than optimal. Thus some further training in the financial area would be helpful.

The Project appears to be very cost effective, both from the USAID Mission's and SAWSO's point of view. Many PVO child survival projects doing similar work cost about $30,000 per year more. In most cases however, these other PVO child survival projects apparently keep more complete service delivery data, make more extensive use of internationally qualified expatriate technical staff, and provide more direct service delivery.

From the Army point of view, the Project costs somewhat more than its usual type of operation. Personnel and consultant costs are higher than customary, and many Salvation Army programs do not have their own vehicles. There will be an effort to reduce some of these costs in the future, so that future program activities will be sustainable with Army resources.

Logistics

Even with the purchase of a project specific vehicle, transportation is a major challenge to the Project. The Project Coordinator and her staff make supervision visits and deliver supplies (foaming tablets and condoms, ORT spoons, salt and sugar for SSS preparation, office and record-keeping supplies, new teaching materials, etc.) in the Project vehicle. The terrain is quite hilly and many of the roads are treacherous, especially in the rainy season. The farthest Corps can take up to six hours to reach from Machakos town by public transport. (Two of the photos from the evaluation visit (Appendix K) show road conditions encountered in visits to just a few of the nearest Project sites.)

HL Leaders and Health Educators face even greater challenges when they do home visiting. Most have no access to private cars, and yet the farthest homesteads in their Corps areas may be a number of kilometers from the Officer's house. Much of the home visiting is done after walking long distances. For longer visits transport by bus is sometimes possible, if the home visitor can afford it. The women of the Home League and the community, in turn, often walk long distances to attend health education and child health sessions. Many of the HL Leaders that

participated in the evaluation focus groups had to start walking before dawn for the mid-morning meetings!

Time Inputs

Training-related activities were some of the most time-consuming for Project personnel, especially in the first two years of the program. Twelve separate week-long training sessions were organized and taught by the Project Coordinator during that time period, as well as several refresher courses. The Coordinator found that effort required for this activity greatly limited the time she had for other duties, and yet it was the activity most important to laying the foundations for Project success. Record-keeping tasks were also demanding, and, at times, postponed, due to other priorities.

Technical Assistance

SAWSO has had the major responsibility both for providing direct technical assistance and for arranging additional technical assistance for the Project. The technical advice provided by the SAWSO Health Educator appears to have been a critical factor in Project success. She was able to provide the field staff with crucial, state-of-the-art information concerning child survival strategies when needed, working closely with Salvation Army and field staff periodically during program planning and implementation. She spent more time assisting the Kenyan child survival project than any of the other three projects (approximately 6 months over 7 separate visits, as well as substantial support while working at the SAWSO Office in Washington D.C.). Though not originally planned in SAWSO's overall child survival framework, the emphasis placed on the Kenyan project was felt by project officers at SAWSO to have been appropriate, considering the need for assistance in Kenya and the great potential for success and replicability.

Technical assistance provided externally included:

- 3 weeks for the training of trainers (TOT) course
- 3 weeks in Kenya and 3 weeks in Washington D.C. for a graphic designer for the flipcharts
- 4 weeks for baseline survey design
- 1 week translation/pretesting support for the SAWSO Health Educator in Kenya for the ORT flipchart module

The consultant hired to conduct the two one-week Training of Trainer (TOT) refresher sessions for the HL Leaders in June 1988 was reported to have given an excellent course. It would have been useful to have had the TOT sessions at the beginning of the HL Leader training. This timing could be considered in the future.

The graphic design specialist who provided technical assistance for the development of the ORT flip chart also contributed effectively. On the other hand, the professional hired to assist with the initial baseline survey was a great disappointment, as she failed to adequately supervise the field work and never delivered a final analysis or report of the survey data collected.

Respondents also suggested that the fact that the original proposal for the project was developed by SAWSO rather than in the field posed difficulties. While technical assistance from SAWSO in areas such as proposal and project development is appreciated, field personnel feel strongly that initial project plans should always come from the field.

Additional technical assistance would have been helpful in determining what service statistics and record-keeping system would have been most appropriate and in developing a more complete written curriculum.

Both SAWSO and field staff found that much more time than originally expected had to be invested in briefing and supervision of consultants, if they were to be effective. It was essential to identify technically-qualified professionals who were also sensitive and sympathetic to the Army's philosophy and could relate well to both high-level staff and village women.

Although there is some resistance to using technical assistance, it is important to consider that the more technical assistance is used in the near future to develop a high quality curriculum and set of health education materials, the less assistance will be required over the long-term.

Materials and Supplies

A library of between 50 and 100 recent technical books on topics related to all five project interventions, as well as to curriculum design, at-risk approach and community assessment were identified and supplied by SAWSO for the Project Office in Machakos. This was one of the major financial and technical inputs outside of training. It was requested several times that the books, curricula, training guides, slides and films be cataloged by the Project secretary, but this has not yet been done. Good management of this resource should be a priority in the future, if it is to be well-maintained and used.

Training materials used in the Project have included child health and nutrition promotive flannel graphs (from TALC), flannel boards, flip charts, flash cards, and posters. Most of the materials had to be ordered from organizations such as TALC (Teaching Aids at Low Cost) in London while others were gathered from various groups active locally in Kenya (such as the Ministry of Health, UNICEF, FPIA, and BIG in Nairobi.) The Project Coordinator found that significantly more effort than originally expected had to be expended to obtain the materials needed for the Program, and in many cases materials adequate in quality and quantity were unavailable regardless of level of effort.

A well-designed and very useful photo flip chart on ORT was designed and pre-tested by the SAWSO Health Educator, with the assistance of a graphics designer and PRITECH support. Seven additional flip chart units have been planned, but have not yet been produced. Several posters were also made. No other training materials have been developed specifically for Project use. The Project staff suggest that additional training materials related to growth monitoring and weaning would be helpful.

The principal supplies purchased for use in the Project have included Salter scales (two for each 20 Corps), home visiting bags, badges, condoms, foaming tablets, plastic sugar-salt measuring spoons produced by TALC), sugar and salt for ORT, Child Health Cards (the Kenya national Child Health Card, the production of which is funded by UNICEF, but unavailable to the project in sufficient quantity for its purposes), family health cards (designed and produced by project and SAWSO staff), and record books and reporting forms. Salter scales were not available in Kenya and the Project had time-consuming problems getting those ordered from abroad through customs. Problems were also encountered in getting the ORT spoons out of customs.

The Project had difficulty in obtaining enough Child Health Cards. 2000 cards were initially obtained from the MOH, but the Project eventually had to print 4,000 itself. Family planning supplies have been relatively easy to obtain thus far. At one point it was extremely difficult to obtain additional badges with the Project logo on them (originally produced by SAWSO in the U.S.) when the supply ran out. Obtaining and replenishing what may seem simple supplies can be a major effort, as anyone involved in similar projects knows.

In the future, a local cloth bearing a joint HL/CS logo may be produced, and a camera and slide projector are scheduled lanned to be obtained.

A Project-specific vehicle was purchased with Salvation Army matching monies, rather than A.I.D. funds. The vehicle was critical to the mobility and autonomy of the Coordinator. Although purchase of the vehicle was controversial from the Army standpoint, it was essential for Project success.

Non-Monetary Costs

The Project has had a number of "hidden" or non- monetary costs, in particular for the Project staff and volunteers working in the field. If it were not for the enthusiasm, dedication, and commitment of the Project staff and Divisional and Corps level women working overtime on child survival, the Project would never have been such a success. The women working at the Corps and community level are all volunteers. They have encountered and absorbed many hidden costs, including money needed for lunch while doing Project work, transportation expenses, time spent away from family and household responsibilities, and missed opportunities to earn money through alternative activities.

Concern was voiced about these hidden costs as the Project entered the service delivery stage. Army administrators have been adamant in not allowing any direct monetary compensation for work performed, as they rightly feel this would jeopardize the voluntary nature and spirit of the Project, and produce a program not easily sustained in the future. On the other hand, they, as well as Project staff, have been sensitive to the importance of motivating the volunteers in a variety of ways. As mentioned above, project spirit is currently high, and there have been very few dropouts.

V. CONCLUSIONS

Training, Health Education and Curriculum Development

- Quality of the training. The technical quality of both training and health education activities within the Project has been excellent. The Project Coordinator is a skilled trainer who knows the child survival content area well, understands adult learning and uses participatory training methods, and commands the respect of those she trains. The HL Leaders appreciated greatly the quality of the training they received. It improved their own confidence and skills as trainers and they, in turn, were able to give well-designed health education lessons during the Home League sessions.

  Thus far training has not emphasized skills important for community development, such as how to conduct a well-designed community assessment, encourage group and community problem-solving, and organize income-generating projects.

- Lack of a well-developed written curriculum. A detailed written curriculum has not yet been developed, either for the HL Leaders' GOBI-F training or for the HL Health Education sessions. Formal session plans for use in training HL Leaders are essential, particularly if the program is to be replicated in new areas. Simple lessons plans for the HL Health Education sessions would also serve as useful guides and help maintain the technical quality of lessons given at the HL meetings.

- Training materials. Several types of training materials have been particularly useful for the HL Leaders in their health education activities. A flip chart on Oral Rehydration Therapy, featuring well-tested photos taken in the Project area and Swahili text on the back of each photo, was developed during the final project year and distributed to each Corps. Feedback indicates that it is well-designed and fulfills a very definite educational need. Flannelgraphs supplied through TALC in London, as well as a variety of posters, have also been helpful teaching aids for the HL Leaders.

  The time and effort exerted in locating training materials, particularly early in the Project, was substantial. In the end, it was necessary to either import or design many of the materials. The fact that the Project staff spent the energy necessary to obtain the necessary materials was a very important factor contributing to training success.

- The certification process. The certification of HL Members' knowledge and skills related to the GOBI-F interventions is an important and well-executed component of the Project. Questions asked are comprehensive and demonstration of appropriate skills is required. The candidates are tested as a group, which seems appropriate as it is less frightening to the women and reinforces the knowledge, both of the candidates and the women who are listening.

  There is currently a backlog of HL Members awaiting certification. This backlog has slowed program progress in some Corps, as members await certification for tasks they have been ready to perform for some time.

- Refresher courses. Refresher education sessions given for HL Leaders approximately every six months have served to encourage these workers in their child survival activities, as well as upgraded their skills on selected topics. The Training of Trainers Course given in June 1988 was reported to be extremely valuable in providing HL Leaders with additional skill and confidence in the use of adult participation training techniques.

Health Promotion Activities

Overall, evaluation of the success of project activities by standard assessment of project data was limited by lack of such data at the time the evaluation was conducted. However, several conclusions can be drawn, based primarily on informant and beneficiary interviews and basic project service delivery information.

- Oral rehydration therapy. HL Leaders and Health Educators are giving a very important service to mothers by providing counselling and practice in nutritional and fluid replacement in management of diarrheal disease in young children, as well as its prevention, preparing the sugar-salt solution when appropriate. The comprehensive approach adopted by the Project was excellent, with training emphasizing the causes of diarrheal disease, ways to prevent it, and a range of practical techniques for nutritional and fluid replacement, focusing first on home available fluids.

  The procedure taught for preparing the sugar salt solution, using the green plastic double-sided measuring spoon produced by TALC, appears to work well. Observations, as well as chemical analysis conducted as part of the evaluation[6] indicate that HL Leaders and members trained to prepare the solution do it very accurately compared to results reported in the literature from other projects.

- Growth monitoring and promotion. Only about half of the 20 Corps involved in the current child survival project hold growth monitoring or weighing sessions (Child Health Sessions) once a month. The amount of work required to hold monthly weighing sessions is great, but Corps actively involved feel it is an important service they can provide. A large percentage of at-risk children are identified in some cases. (One Corps reported an at-risk level as high as 44%, but it was not clear exactly what criteria were used.) Unfortunately HL Leaders indicate that they are often unable to provide achievable advice or material assistance to many of the poorer families who cannot even afford inexpensive nutritious foods. In some Corps the effort necessary for accurate growth monitoring may not be cost-effective, considering the inability to assist many of the children identified.

- Immunization. Timely identification and referral of children needing immunization has served a critical need in the Project area. It is likely that a great percentage of the children identified are infants who have not yet attended clinics for other reasons. If so, the Project is focusing on an important high-risk group. In one Corps (Kavyuni) immunization sessions are held as part of the regular HL Child Health Sessions, but the effort this requires is beyond what is possible for most Corps.

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[6]/ See Appendix I for details.

- Child spacing. Child spacing education, counselling, and provision of limited family planning services (distribution of condoms and foaming tablets and referral for tubal ligations) have been almost surprisingly well-received, given prevailing negative attitudes toward family planning throughout Kenya in the past decade. The enthusiasm of HL members for this aspect of the program seems to be due to two factors: 1) the need for child spacing in the current situation of scarcity of resources at the family level is becoming more evident to beneficiaries through project-sponsored child spacing education, and 2) the design and delivery of child spacing education and counselling provided by the program are practical and culturally-sensitive, addressing common fears related to contraceptive use and the important health benefits of birth spacing.

- The "at-risk" concept. The at-risk concept has been an integral part of Project design and has been important to it's successful use of a limited amount of woman-time and energy to most effectively address overwhelming problems of maternal and child health in the project area. Use of the family card to consolidate information on all family members seems to be a good concept, although it needs some revision. Currently it has too little space for recording information on at-risk members and follow-up provided to serve as an effective follow-up tool. Further development of the at-risk concept may be too sophisticated an approach, without a lot of additional technical input. Use of the criteria for identifying children and women in the at-risk category definitely should be continued, but it may be too much to ask the HL women to take responsibility for tracking each at-risk individual identified.

Management and Support

- Supervision: The quality of project supervision appears to be satisfactory to HL Leaders, despite limitations on supervision quantity imposed by time constraints. HL Leaders are generally quite satisfied with the type of guidance they receive, although some have expressed a desire for more contact. In a scaled-down program it may not be possible to maintain the current level of supervision. A very important issue is what effect this may have on program quality.

- Record-keeping. Record-keeping has been a difficult process for the project. Even after extensive work to improve this component of the program, it needs considerable strengthening. Unfortunately, much of the data that would have demonstrated project achievements was not available due to record-keeping problems. Gathering, recording, and reporting data can be a time-consuming and exacting process, and has been a burden for the Project Coordinator, whose expertise is strongest in other areas.

  A concerted effort has been made to improve the system, with the assistance of the SAWSO Health Educator, and real progress has been made. Many of the difficulties have not been solved, however. It is important that key territorial and Project staff receive additional training in this field and that great stress be placed on design of a simple and useful record-keeping system for the future.

- Motivation. **Motivation is of key importance in a project that depends on voluntary work.** Project personnel have been well aware of the importance of motivation and have encouraged the HL Leaders and Members working in the project through providing well-designed training activities and refresher seminars, training materials, and supervision; awarding badges, bags, and ORS spoons; and arranging visits from Salvation Army and SAWSO staff.

- Technical assistance. **Technical assistance has been critical to project success thus far and will be needed in the future.** Certain technical inputs in the past three years were particularly helpful to the project, while others were less than successful for varying reasons.

  The technical assistance provided by the SAWSO Health Educator appears to have been a critical factor in increasing the technical quality and overall success of the Project.

  The technical assistance given by the consultant hired to conduct the Training of Trainer refresher course was also judged to have been particularly effective.

  On the other hand, the assistance for the initial baseline survey was poor, as the professional hired failed to provide adequate supervision during the data-gathering process and, unfortunately, never fully analyzed the results nor delivered a final report.

Sustaining and Replicating the Project -- Suggestions for the Future

- Expanding the Project, while decreasing Corps level activities to a sustainable level. **Salvation Army, Project, Ministry of Health, USAID Mission, and community respondents unanimously recommended that the Project be continued and expanded to new areas in Kenya.** Army staff interviewed also felt strongly that Child Survival programming could very usefully be introduced into Home Leagues in other countries if the decision were made at higher levels to undertake this type of programming.

  It would be easy to be carried away with enthusiasm for the Project, seeing what it can do currently, and recommend that it do even more in the future. The evaluation team had to continually remind itself that the level of activity in Machakos was possible only with a full-time Project Coordinator, extensive technical assistance by the SAWSO Health Educator and outside consultants, a project-specific vehicle, and very hard work by the former and current Chief Secretary and his wife and other Army officials. The program model will have to be simplified and reduced in scope, if it is to function successfully in the future.

  Final decisions concerning the scope and direction of future project activities will, of course, be made by the Army. The evaluation team can only make suggestions, based on analysis of the data gathered during evaluation field work. Hopefully some of these ideas may be useful as the Army staff finalizes it's own plans for Project development.

VI. RECOMMENDATIONS

Training, Health Education and Curriculum Development

- **Maintaining the quality of project technical direction. It is essential that the quality of health training expertise that has carried the Project thus far be maintained, and, if possible, some new skills added as additional Project staff is selected.** Qualities such as an ability to connect with village women and teach in a creative way on their level and yet transmit technically-correct information are very essential, and have been a very important contribution of the Project Coordinator. Additional technical expertise is needed in such areas as record-keeping, at-risk assessment techniques, and curriculum documentation. As the staffing pattern for the future is determined, the importance of these skills should be kept in mind.

- **Development of a detailed curriculum. A concerted effort should be made in the next six to twelve months to develop a detailed written curriculum for the training of HL Leaders.** The curriculum should include simple but comprehensive session plans with learning objectives, guidelines concerning the content to be presented, alternative teaching methods (with an emphasis on participatory methods), suggestions concerning time requirements, and any exercises or other handouts necessary.

  Content should cover the GOBI-F material presented in the past, as well as sessions focused on 1) training skills such as those presented in the "TOT" refresher course, 2) skills required for tasks such as identification and follow-up of at-risk children, record-keeping, and supervision, and 3) community development skills such as community assessment, group problem-solving, and organization of income-generating activities.

  Later on consideration might be given to development of additional sessions on other health education topics of interest to the Home Leagues. It is important, however, to keep the curriculum simple and not burden trainees with information on too many topics in the beginning.

  It takes considerable skill and time to design a simple and yet comprehensive series of session plans focused at the appropriate level for HL Leaders. Thus it will be important to budget for and identify a skilled curriculum development consultant to work closely with the Project Coordinator and Territorial Headquarters staff on this task. The training reports, which detail what activities were undertaken in past training sessions, should be helpful in guiding the curriculum development process. As the Territory already has computer capability, word processing technology could be used in production of the session plans, so they can later be revised or adapted easily for different needs.

- **Eliminating the certification backlog. Arrangements should be made as quickly as possible to identify additional staff members who can certify at least some of the HL members awaiting testing.** Several of the strongest HL Leaders could serve as certifiers for HL members from other Corps. In addition, or alternatively, the Project Field Assistant could conduct some of the certifications. Whoever is delegated this responsibility should receive thorough briefing by the Project Coordinator. Questions to be asked and skills to be demonstrated, as well as the criteria for judging responses, should be detailed clearly in writing. If at all possible, the project should continue to supply badges, ribbons,

and bags, as receipt of these items serve to encourage the volunteers and act as a visual confirmation of their competence and expertise.

- Production of the remaining flipchart units. **The remaining flip chart units, for which the first set of photos have already been taken, should be produced.** The development and production work should be done in Kenya using local expertise, so as to reduce the price of the remaining units. If possible, the SAWSO Health Educator involved in the production of the ORT unit should serve as a consultant during the development process, to pass on ideas and assure that the same high technical quality is maintained throughout the series.

  Consideration could be given to reducing the size of The Salvation Army logo on the cover or producing an alternative cover for non-Salvationist use, as several other organizations have already expressed an interest in using the existing ORT unit.

- Supply of other teaching materials. **Certain other basic teaching materials, such as the TALC flannelgraphs and selected posters, should be made available, if at all possible, for use in all additional Corps involved in child survival activities.** The hinged flannel boards could be redesigned at a slightly larger size so that they could double as a support stand for the flip charts during training. If a proposal for a new grant or contract is submitted, it could include budget for sets of materials for all Corps, as well as sufficient additional sets for replacement.

  Whenever possible, materials should be produced and obtained in country. This would result in a more reliable source of supply and a decrease in the number of problems related to importation. **A list of all materials, especially library and teaching materials, used in this project should be compiled, to assist in arranging procurement of these supplies in future.**

- Continuing refresher courses. **Refresher courses should continue to be scheduled in the future, at least once, or, if possible, two times per year.** If the logistics and expense of arranging for all HL Leaders to receive refresher training together appears prohibitive, the possibility of training HL Leaders from a few Corps at a time in one or two day seminars at one of the Corps could be considered.

Health Promotion Activities

- Stressing the ORT Component. **The Project should continue to emphasize the early identification of diarrheal disease at the mother level and the use of home available fluids and the sugar-salt solution when appropriate.** Although it is helpful for the program to have alternative recipes for use if the TALC spoons are not available, it seems wisest to continue to use these special spoons, as preparation has proved to be so accurate with their use. The policy of distributing spoons only after proper training serves as an important control on preparation of correctly-balanced mixtures. If use of alternative preparation methods are considered in future, perhaps due to change in MOH ORT policy, solutions prepared under typical conditions should be tested thoroughly to be sure accuracy can be maintained.

  Program planners should think about the minimal level of health technical and training input likely to be needed to maintain high levels of ORT related performance is the project expands.

Program personnel should remain in as close communication with Ministry of Health officials as they have to date concerning policies related to ORT, as well as other child survival interventions, so that strategies can be coordinated and conflicts avoided.

- Alternative strategies for growth monitoring. **The role that growth monitoring should play in the project future should be explored more thoroughly before a final decision is reached.** Many Project leaders and HL Members feel strongly that weighing is a valuable part of the child survival program and, for this reason, it shouldn't be eliminated without serious thought. However, alternative strategies that place less stress on labor-intensive monitoring activities and more emphasis on development of solutions for nutritionally-deficient families should be explored. Alternatives include:

  1) Strictly limiting weighing sessions to children under three, who are most at-risk of nutritional problems.

  2) Weighing only those children previously identified as at-risk on a monthly basis until their nutritional status has demonstrably improved, and reducing weighing for healthy children under age three to once every three months.

  3) Eliminating weighing altogether, or weighing only children who are identified as nutritionally at-risk during home visits through use of MUAC armband measurements.

  4) Strengthening individual nutrition counselling for mothers of children under three. HL Leaders and HL Health Educators can be better trained in nutrition education if less time is devoted to growth monitoring itself.

  5) Emphasizing the addition of nutrition-supportive development activities such as construction of water tanks, planting of vegetable gardens, and organization of income-generating projects that can bring in the money necessary to help families that currently can't afford balanced diets.

- The Project's role in immunization. **The Project should continue to emphasize the critical importance of full immunizations for young children and refer children who have not been immunized to the government services.**

  The Project's focus in the area of detection of under-one-year-olds in need of immunization needs to be strengthened. The project could also continue to actively support and contribute to the immunization work of the Ministry of Health in whatever way possible. However, since a major goal of the Salvation Army is to develop a program model that can be sustained without outside resources, it is unrealistic to consider expanding the set of tasks related to immunization to include regular provision of Corps-sponsored immunization sessions.

- Provision of contraceptives. **Provision of condoms and foaming tablets could be continued.** However, as the model for a scaled-down program appropriate for wide-scale replication is finalized, consideration must be given to whether continuation of the intense levels of training and logistical support necessary for supply and distribution of contraceptives is feasible. If not, the program should focus on effective family planning counselling and referral.

- o **Involving males in child spacing activities. Child spacing education and counselling activities should include strategies for actively involving both male leaders and family members whenever appropriate.** Husbands play an important decision-making role related to child spacing in most families within the culture.

- o **Improving "at-risk" follow-up. As a model program for replication is further developed, serious attention should be paid to simplifying the system for identifying and following up children at-risk.** For example:

  1) A better system for recording information on children at-risk and following up interventions and their results should be developed. If "at-risk registers" continue to be used, a half to a full page should be used for each entry. If necessary, an alphabetized list of current at-risk children should be kept, so that new entries in the registers are not inadvertently made for children already entered.

  2) A plan should be devised for insuring systematic follow-up of each at-risk child whose case is judged to be amenable to HL assistance (rather than referral). HL Leaders and Members should focus more of their weekly home visits on at-risk children, even if they don't live in the area immediately surrounding their homes. (This strategy of focusing some home visits on at-risk children is already followed in some Home Leagues.)

  3) Consideration should be given to revising the Family Health Card so there is more room for notes concerning follow-up and results.

  4) If self-help groups are formed that undertake various income-generating projects, some of their proceeds could be set aside to assist needy families with malnourished or sick children.

  5) More detailed training on how to identify and follow-up at-risk mothers and children and keep simple records should be included in the initial training of HL Leaders, once the system is improved.

Management and Support

- o **Further revision and simplification of the record-keeping system. During the next few months a concerted effort should be made to eliminate the problems still remaining in the record-keeping system, eventually finalizing a simple system that will meet the minimal needs of the Project.** Technical assistance will be needed for this process, either from within or outside the Army.[7]

  Data gathering should be designed so that, first of all, it serves the needs of field staff, assisting them in focusing on tasks that will do most to assist at-risk children and families. Secondarily, it should be of use to Project supervisors and managers within the Army hierarchy.

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[7]/ The evaluation team member from Salvation Army/Zaire has had a number of years experience with development of simple and appropriate record-keeping systems for clinic settings, and could possibly provide valuable guidance.

There has been much experimentation by donor and country organizations with simple record-keeping systems for the various child survival interventions. Experience of other agencies should be studied as the Salvation Army child survival project record-keeping system is finalized.

- Maintaining motivation. **A number of possibilities should be considered for maintaining motivation within the Project in the future.** Strategies might include, for example:
  - continuing to provide short refresher courses
  - providing additional teaching materials
  - continuing to limit the amount of work each HL member is expected to do to help prevent "burn out"
  - continuing to encourage each Corp in its child survival work during periodic supervision visits
  - providing training in how to organize group problem-solving and income-generating activities and possibly using some of the money earned to reimburse HL women for transportation and food costs
  - awarding prizes for HL women or Corps that have done particularly well (i.e. sewing machines that could be used for "income generation", water tanks that would make vegetable gardening more feasible, gardening tools, seeds, chickens to use in starting a small poultry or egg production business).

- Use of Army or local technical assistance. **The Project should continue to use technical assistance in the future.** It should be drawn from available health resources within The Salvation Army itself or locally in Kenya, when possible, so as to minimize the considerable expense of using 'imported' TA and to support the development and utilization of in-country technical expertise. (It should be noted that the Project attempt to use local TA, with negative results, may influence future TA decisions).

  Further technical assistance will most likely be needed, as mentioned earlier, in areas such as curriculum development, record-keeping, finalization of the at-risk approach, and development of the remaining flip chart units. As much of the remaining, relatively costly technical assistance required to strengthen project activities as possible should be completed while outside donor support is still available.

  All future proposals should be developed in the field, with technical input then obtained from SAWSO.

- Maintaining collaboration with other organizations. **The Project should continue to collaborate closely with Ministry personnel and increase contacts with other organizations.** Extra effort should be made to develop new ties with District Ministry personnel as the Project expands to new areas.

Sustaining and Replicating the Project - Suggestions for the Future

- o Suggestions for future project development. The Project should be continued and expanded to new areas if The Salvation Army leaders decid this is appropriate. Army and Project personnel should simplify and improve the Project before it is replicated in new areas. The evaluation data indicates that certain components of the program need definite strengthening first before being reproduced. In addition, the scale of project activities should be studied and adjusted to a level that can be realistically sustained with normal Army resources and administrative back-up.

  Thus it would seem wisest to spend the next one to two years in a concentrated effort to simplify and improve the project, so that it can be expanded to new areas more successfully later. As one Salvation Army administrator said, "If we do 'less' in the next two years, we are likely to be able to do much more in the next ten." If a further grant is requested from A.I.D., it might focus on the activities necessary to refine the program model which would be used in the future, while continuing the program in Machakos and, after appropriate development work, possibly expanding to one further group of 10 to 20 Corps.

- o Specific program components needing further development. Project development activities that could be usefully undertaken in the next one to two years, some of which have been mentioned earlier, are summarized below:

  - Preparation of a solid curriculum for training HL Leaders, including detailed session plans with clear objectives, details concerning training content, exercises and handouts.

  - Review of the current record-keeping and reporting system and development of a simplified, improved system for future use.

  - Review and revision of the system for identification and follow-up of at-risk children.

  - Development of additional teaching materials (i.e. the remaining flip chart units, and perhaps additional posters and flannelgraph units).

  - Finalization of the project model (adjusted to a sustainable level) and then preparation of simple but complete step-by-step guidelines for Project development in additional Corps.

  - Revision of Project objectives and targets so they realistically and accurately reflect program goals for the future.[8]

- o Issues needing resolution. As the program model is finalized issues that must be resolved include:

  - What level of technical direction for the health specific project activities will be required to maintain similar levels of quality to those observed during the evaluation.

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[8]/ Suggestions concerning possible wording of future project objectives are provided in the section on Project Achievements.

- What minimum level of supervision is necessary in order to maintain program quality and provide HL personnel with the necessary support and encouragement.

- What transportation support is necessary for adequate project functioning (i.e. whether a vehicle is necessary for each new project area).

- Whether weighing should be continued in the future, limited to children below certain ages, or discontinued.

- If weighing is discontinued, what other strategies could be used to identify high risk children needing nutrition counselling or referral.

- How HL officers transferred out of child survival project areas will be supervised.

o **Future project design**. The evaluation team suggests that:

- The scaled-down program might concentrate on health education in the Home Leagues, with HL Leaders and Health Educators conducting home visits focused specifically on at-risk families, as a second level of activity. If possible, the child survival Project should collaborate closely with other Salvation Army development projects. HL Leaders could be taught how to encourage community development and income-generating activities. Weighing sessions, distribution of contraceptives, and any immunization-related activities except referral should be included, only if the level of effort they demand can be sustained over time.

- A qualified health professional with health promotion and community-based experience, as well strong managerial and record-keeping skills, could be based at Territorial Headquarters, providing the technical support now given by the SAWSO health educator, as well as the administrative coordination needed for an expanded operation.

- Training capacity be expanded as the Project grows. Eventually a full-time training center could be organized, possibly with the current Project Coordinator in charge of this expanded operation. Divisional Commanders' wives should receive full training, as this greatly strengthens their ability to supervise the HL women under them. Local HL Officers coming into the Machakos area should be trained so that transfers won't weaken the current program. Refresher courses should continue. Men should be integrated into training activities whenever appropriate.

APPENDIX A: EVALUATION METHODOLOGY

Background

Since 1985 Salvation Army has been implementing a three year Child Survival project in four countries: Kenya, Haiti, Pakistan, and Bangladesh. The Initiatives in Kenya and Haiti are much alike, in that they are both based on the concept that members of the Salvation Army women's organization, known as the Home League (HL), can be trained to actively participate in improving the health of their children and the children in their communities.

When final evaluations for the Projects were being planned it was decided that it would be useful to develop the evaluation plans and instruments for both Kenya and Haiti together. SAWSO hoped that a "core document" could be developed that could be used for the evaluations in both countries and serve as a model for future evaluations. The evaluation process involved three stages:

- A three-day meeting in Washington to discuss the evaluation approach and develop an evaluation outline and key questions, followed by further work by the evaluation consultants to draft the evaluation instruments.
- The field work in Kenya, from November 7-18, 1988 (and in Haiti, scheduled for January of 1989).
- Final work on return from Kenya to prepare the final report and revise the evaluation instruments for use in Haiti.

Preparation of the Evaluation Plan and Instruments

Three days of intensive discussions were held at SAWSO in Washington in July, 1988 to develop the evaluation approach and outline. Participants included the consultant for the Kenya evaluation, the consultant for Haiti, and the SAWSO Health Educator, Evaluation Officer, and Project Officer for Africa. A "Final Evaluation Plan" was prepared, which included a series of detailed questions that should be answered by the evaluation. Instruments to be developed, based on the questions, were also identified, and the work to prepare them divided between the two consultants. The team reviewed the PRICOR Thesaurus and decided it would be a useful guide for developing performance assessment instruments. Dr. Dori Storms spent one productive morning with the team, reviewing the evaluation approach and highlight A.I.D. Washington concerns that should be addressed by the evaluation.

In the weeks before the evaluation in Kenya, the evaluation plan was finalized and the instruments prepared. Due to unforeseen health complications, the consultant for Haiti was unable to complete her work, causing some delay in completing the instruments and forwarding them to the field.

The types of instruments prepared included interviews, written questionnaires, observation schedules, schedules for record reviews, & focus group guidelines.

Evaluation Field Work

The evaluation field work in Kenya was conducted by an evaluation team that included four Salvation Army Representatives, the Project Coordinator and Field Assistant, the SAWSO Health Educator, and one external evaluation consultant who served as team leader. One other evaluation consultant helped for two days with data analysis.

There are trade-offs in choosing evaluation strategies that use either external or internal teams. SAWSO and the Army decided on an approach that

combined both. The involvement of an outside consultant as team leader provided an impartial, outside perspective, as well as evaluation expertise. Involvement of Salvation Army and Project staff gave the leaders involved a chance to contribute their first hand knowledge of the Project, learn new evaluation techniques, look critically at the Project achievements and process, and engage in joint problem-solving. Use of a purely external team with high technical expertise might have resulted in more sophisticated data gathering, but would have been inappropriate for a grassroots program. The internal members of the team provided valuable knowledge and insights and, because of their full involvement, will be much more likely to follow through on the recommendations jointly developed.

The SAWSO Health Educator arrived several days earlier than the Team Leader, and worked with Salvation Army and Project staff to plan the schedule and logistics for the field visits. Translation of the evaluation instruments into Swahili also began. The team then met for a one day orientation and training session at Territorial Headquarters in Nairobi before beginning field work. The Team Leader spent one additional day in Nairobi interviewing Army and AID Mission staff. Two days were spent by team members in Machakos, attending HL Leader focus groups, interviewing Project staff, and reviewing Project records. The team divided into two groups to conduct site visits to a sample of the Corps active in the child survival program. Seven Corps in all were visited. A detailed schedule for each day's visits was prepared which showed the location, activities scheduled to take place, persons responsible for each type of data gathering activity planned, and the translator that would accompany the group. This schedule was extremely helpful.

The chart below details the types of individuals, groups, records and situations interviewed or assessed, and types of instruments used in each instance. The number of times each instrument was used is indicated:

Sources of Evaluation Data and Types of Instruments Used

Data source	Interview	Observation	Focus group	Record review
Project Coordinator	X (1)			
Field Assistant	X (1)			
Supervisory records				X (10)
Training curricula				X (7)
HL health ed. session	X (2)	X (5)		
Mothers	X (0)		X (3)	
HL Leaders	X (4)		X (2)	
Husband of HL Leaders	X (3)			
SSS preparation		X & sample (50)		
Home visit	X (3)	X (8)		
Home visit records				X (0)
Community leaders	X (2)			
Certification session	X (1)	X (1)		
HL Child Health session	X (1)	X (1)		X (?)
USAID staff	X (1)			
Salvation Army staff	X (3)			
Financial officer	X (1)			
Financial records				X (1)
Ministry of Health	X (2)			
Other organizations	X (0)			
SAWSO staff	X (4)			

Copies of the Final Evaluation Plan (list of questions) and individual instruments used are available both at SAWSO and Army Territorial Headquarters in Kenya.

The evaluation team found that the work during site visits proceeded somewhat slower than originally estimated. Army protocol is such that some time must be spent for tea and discussion on arrival, for a (very delicious) lunch at mid day, and often for speeches and gift-giving at the end. The evaluation visit, while a means of gathering information for assessment, was also an important opportunity for encouraging and motivating the Home League women involved in the child survival project, and Salvation Army leaders were sensitive to the importance of this aspect of the activity.

Field work indicated that some of the instruments were a bit too lengthy and, in some instances too complex for use in the local communities. In general, however, it was very helpful to have instruments, translated into Swahili, that evaluation team members less familiar with evaluation could follow. Most instruments were used fewer times than originally hoped, but that was due to probably unavoidable realities of the field situation and the internal/external evaluation approach.

The field visits gave the team valuable first-hand exposure to important Project activities, and a chance to listen to the opinions, problems and suggestions of the HL and community women that make the Project work.

After two three-day stays in the field (lodging in Machakos and traveling to different sites each day) the team met together at Headquarters to review the data and develop joint conclusions and recommendations. Each team member had been given responsibility for compiling the information from one set of data, and spent a few minutes presenting the essential points to the rest of the group. Then the group worked together to prepare a summary of its ideas,

considering issues of major importance (i.e. project strengths and achievements, effects on the Salvation Army, training, health promotion, supervision, motivation, record-keeping, technical assistance, suggestions for the future and sustainability). For each category the team identified successes, problem areas, and suggestions for improvement.

The final task of the day was "evaluation of the evaluation". Observations and suggestions made are listed below:

- Receipt of the evaluation questions, instruments and plans one to two months prior to start of the evaluation would have allowed more field input and planning.

- The information collection phase should be longer than two weeks. Two weeks is about maximum for participation of the full team, but selected members could remain in the field for further work. The unexpected unavailability of the extra professional team member identified to assist in technical data collection somewhat hampered the data-collection process.

- Site visits were mostly made to nearer Corps, due to logistical constraints. It would be useful to have had visits to some of the weaker or more distant sites, to fully assess the range of achievement and problems. Possibilities were somewhat limited by the number of vehicles and time constraints.

- Army protocol was time-consuming and somewhat hampered productivity during site visits, but was probably unavoidable, unless the team was totally insensitive.

- The participation of the Salvation Army nurse from Zaire on the team was much appreciated, both for her insights and the fact that she increased the teams acceptability.

- The team appreciated the internal/external approach to the evaluation process, which allowed transfer of skills. Participants learned a lot about the process of program evaluation, much of which they could apply in their future work within the Project.

- The evaluation instruments, with some simplification and revision can be used by Project staff, both for evaluation, and also for Project monitoring and supervision.

Debriefing sessions were held the day after the group meeting, both at Territorial Headquarters and the USAID Mission. Since the Territorial Commander and his wife were on leave that week, special arrangements were made meet with them the following week, while the Team Leader was still in-country.

Preparation of the Evaluation Report and Revision of the Instruments

Several days were spent by the Team Leader on return from Kenya both to revise the instruments for use in the Haiti evaluation and to prepare the first draft of the final report. The draft report will be reviewed by SAWSO, Salvation Army Kenya, Project, and USAID Mission staff, and then finalized. Results will be shared, hopefully, with all involved in the evaluation process, as well as with A.I.D. Washington and Salvation Army International Headquarters in London.

APPENDIX B: CONTACTS

AID Washington
Dr. Doris Storms, Coordinator, PVO Child Survival Support Program

SAWSO
Mr. Dean B. Seiler, Executive Director
Mrs. Joan Robinson, Assistant Executive Director
Ms. K. Mona Moore, Health Educator
Mr. Jim Baird, Evaluation Officer
Mr. David Papworth, Project Officer for Latin America & the Caribbean
Mr. Alex Costas, Project Officer for the Far East & The Pacific
Dr. Rebecca Stiles, Project Officer for Africa
Mr. Tony Tolosa, Accountant
Ms. Grace Taylor, Senior Secretary
Ms. Mary Bryant, Secretary
Dr. Michelle Denize, Consultant

Territorial Headquarters for East Africa, Salvation Army
Colonel Angoya, Territorial Commander
Mrs. Colonel Angoya, President of Women's Affairs
Lt. Colonel Taylor, Chief Secretary
Mrs. Lt. Colonel Taylor, Territorial Home League Secretary
Mrs. Major Wekesa, Assistant Territorial Home League Secretary
Captain Webster, Financial Secretary

USAID Mission, Nairobi
Mrs. Molly Gingeridge, Population & Health Development Officer

Project area, Machakos
Mrs. Major Simiyu, Divisional Home League Secretary in Machakos Division
Mrs. Major Mburu, Divisional Home League Secretary in Kangundo Division
Mrs. Beatrice Mutua, Project Coordinator
Mrs. Rosemary Mutua, Field Assistant
Mrs. Keli, Office Assistant
Mr. Doudi, Driver
Home League Leaders from Ukalani, Mutituni, Masokani, Kavyuni, Kathini, Kilome, Musini, Masii, Mitaboni and Wote Corps during focus groups
Corps Officers, Home League Leaders, Home League Health Educators, mothers, and community leaders during field visits made to Kitie, Kyai, Mweani, Mikono, Mutuyu, Kanzalu, and Kee/Minwatho Corps
Mr. Steven Makesa, translator
Mrs. Ida (?), translator

Machakos Division, Ministry of Health
Mrs. Mativo, District Nutrition Officer
Mr. Siyuki, Health Education Officer

APPENDIX C:

EVALUATION REPORT ON CHILD SURVIVAL PROGRAMME IN KENYA

by Captain J. Decosterd, Medical Secretary, Zaire

QUARTIER GENERAL DE L'ARMEE DU SALUT — KINSHASA

5th January 1989

EVALUATION REPORT ON CHILD SURVIVAL PROGRAMME IN KENYA

Captain J. Decosteni, Medical Secretary, Zaire.

INTRODUCTION

20 years ago medical services of The Salvation Army dispensed treatment that was essentially curative. Installed in their centres medical personnel welcomed patients with kindness and competence, examined them, gave them their treatment, then sent them home until their next visit which would inevitably be very soon. The longer the prescription, the better the treatment, was the concept of patient and nurse. All sorts of injections were available, most of them useless, but proving to the population the serious intentions of the enterprise.....The population appreciate medical services and their reputation is made. There is no reason for changing that.

Yet a new conscience emerges in the minds of medical personnel. Rather than endlessly welcoming the same patients with the same complaints and illnesses, would it not be possible to help them to avoid these illnesses and teach them to conserve good health ? Little by little the idea of preventive medicine crept in with emphasis on women and pre-school age children. Surveyance of growth, oral rehydration, breast feeding, nutrition, vaccinations, family planning, pre-natal care become the essential components of all health programmes. Everyone with more or less difficulty tries to change his way of thinking which is essentially curative. The magic of drugs is no longer the all powerful remedy and the teaching of health and hygiene becomes as important as the treatment.

The medical personnel, however, remain conscious of the fact that knowledge is theirs and that the patient is very dependent on them. A medical training is necessary to acquire the information. The personnel remain in the centre and treat and teach from there on request. But what becomes of the people once they return to their homes? Do they really keep their appointments? Do they take their medicine ? Do they follow advice given?

The idea of really taking the population in hand is born of these questions. The concept of community and promotional medicine is added to the curative and the preventive. Medical personnel

leave the centres to visit homes where they see the true situations and institute a better following up of the patient. From this moment the link is established between the medical service and homes. Consequently, the health of the whole community improves. What a privilege to have such competent personnel and such a medical service.....

This introduction would no doubt be true for all Salvation Army territories with a medical service that has developed over the years and which thus tries to participate in community development of the populations in their care. What does this mean? Is it really necessary to install and develope a medical service in order to be able to ameliorate community health? When the infrastructure and means are lacking, must one be discouraged and believe that in the realm of health there is decidedly nothing to be done?

Is there really nothing one can do? The "Child Survival" programme, in the East Africa territory is an interesting answer to this question; one that is original and worthy of looking into. Having no medical infrastructure, Kenya has chosen to develope a network of information and of health education in the community, through the home leagues.

The principal aim of this programme is to teach and train, through the Home League, women who are capable of sharing the information and the educative messages with the community.

Child growth, oral rehydration, breast feeding, vaccinations, family planning are the chosen subjects for this teaching (CHET-F)

[illegible]

For a professional in health education, the programme may seem, at first, extremely ambitious, that which is not displeasing and encourages the observer to appreciate the different phases. The programme itself is well designed, taking into account local realities and modifying and adapting them according to needs.

There is a "curriculum" and a detailed description of organised sessions for the training of officers and of those responsible for the Home League.

[illegible] whole the training programme is excellent and demanding. It differs very little from a health education

programme for medical personnel.

The training represents a very large investment in terms of time set aside by those responsible for the programme and by the officers and those responsible for Home Leagues who have gone through it. It seems that solid bases have truly been placed allowing a programme to develope rapidly and reaching its objectives.

This effort at the beginning has certainly played a determining role in the quality of teaching dispensed on the level of village Home Leagues and on the level of the knowledge of the women in their respective houses.

TEACHING METHODS

All methods susceptible of arousing and maintaining interest have been used successfully. Discussions, shared ideas, acting in play true life situations, theatrics have brought to life real problems which are not always expressed in formalised courses.

The programme and the curriculum have been adapted to discoveries made during early training days and have been enriched along the way by the material [illegible] these [illegible] being trained. Enthusiasm has certainly been an important contribution to the success of the programme, and the attitude of women officers and their husbands most certainly a determining point.

The process of "certification" for each subject taught gives an attractive and valorising motivation for those who are the object of it. It shows the seriousness of the teaching and of the message to be transmitted.

[illegible]

If the investment of time for training was extremely important at the beginning of the programme, that consecrated to supervision is impressive and is one of the keys to the success of the scheme. Throughout these last two years new teachers have been the objects of intensive care through repeated supervision, and meetings of "certification" and the correctness of teaching and application have been seriously checked.

The content of educational messages remain constant and are not modified significantly coming from the nurse responsible for the programme and reaching the woman in her house through the officer or one responsible for the home league.

Visits to Corps where the programme is used and visits to homes gave us the opportunity of measuring the quality of the teaching done, and this outside of any form of evaluation, but through conversations and short interviews. (in spite of the difficulties associated with translation Swahili-English).

THE IMPACT OF THE PROGRAMME IN THE COMMUNITY

It is difficult to measure objectively the impact of the programme in the community since the indicators of evaluation were not determined at the beginning for reasons outside the control of the initiators.

The inquiry at the beginning could not be completed and so we were deprived of a source of important information. The statistics permit the verification of the objectives of training and the number of women and pre-school age children who have benefitted from the programme.

CHILD DEVELOPMENT; PROLONGED BREAST-FEEDING; NUTRITION

The number of children participating in sessions where they are weighed is important. Malnutrition research has been well done and the follow up of malnourished children well established through a system of home visits. The number of children "at risk" in the villages has diminished. In families visited the mothers reply easily to questions and know the subject (nutrition - prolonged breast-feeding). The attraction of the scales is certain. The number of parents declaring to have created or enlarged a vegetable garden since the beginning of the programme is significative.

ORAL REHYDRATION

Very good teaching is given. The material is local, except for the "Talc" spoon. The general impression is that the children

die less of dehydration and that transfers to hospital are more and more rare. The mothers know how to intervene in cases of diarrhoea or if not to go to the certified health educator for advice. The menfolk confirm this impression.

VACCINATIONS

Vaccination of children is well controlled and every effort is made to encourage mothers to complete those that are missing in a centre possessing the vaccines. The necessity of protecting children is recognised by the families.

FAMILY PLANNING

This is a subject that interests. An old man declared that before the programme was set up, he saw pregnant women, each with a baby on her back and holding a child by the hand, passing his house. Now he he sees pregnant women pass, holding a child by the hand and without the baby on their backs...!..

The immeasurable impact of the programme on the health of the community seems to be undeniable in all the villages we visited and the individual stories we heard witness to a real change in comportment contributing to the amelioration of the health of their populations.

And yet the problems are numerous and it seems that the Machakos division has undertaken a formidable challenge in accentuating education in the absence of medical structures to bring a solution to health problems. There are many questions in the minds of those responsible for the programme:

- What advice may be given when in the presence of a case of malnutrition the principle cause is found to be poverty?

- How does one teach rehydration when there is no water even, let alone sugar and salt?

- How can one talk of vaccinations when the medical infrastructure is inadequate or inexistant and does not permit all mothers to have their babies vaccinated?

- How does one continue to motivate educators when the attraction of the novelty has worn off and when a certain lethargy has set

in?

And the list continues.

Behind the success and the enthusiasm the frustrations and doubts are real and ever present.

CONTINUITY AND REPLICABILITY

Continuity presents a difficulty for all programmes and "Child Survival" is no exception. The Evaluation Board considered this problem. However, I would like to make a brief personal comment on this important aspect as well as on the replicability. It does not seem possible to me to assure the continuity of the high standard of training and supervision of this programme if outside support, offered at present by Mrs.Nona Moore, is withdrawn when the programme is finished.

Local coordination is good but the infrastructure of the programme remains fragile and necessitates constant technical support. Take away one unit in the training and supervision and the quality will diminish and perhaps even that of the evaluation.

As the programme reaches its final stages the fact that it will cease [illegible] should be made evident, to avoid surprise or disappointment when that actually happens. This seems a normal process, above all, in a programme which has aimed at excellence!

To assure the continuity of the programme in the Machakos division its repetition envisaged in other regions could be suggested as follows:-

1. Re-design the programme by simplifying and voluntarily omitting subjects which demand the most investment of time and financial means (e.g. weighing babies : -training, -weighing
- half a day per month for the event.

2. Prepare a simple, precise and complete curriculum to serve as a basis for other territories wanting to apply such a programme. The submission of the curriculum to a group of health professionals could be envisaged and would no doubt be desirable.

The curriculum would consist of:

a) - Retained educational messages

b) - Detailed description of training in the village and in the Corps.
c) - Listing of programme. Strategies to be used.
d) - Description of supervision system envisaged and applicable on a divisional level.
e) - List of system of measures and simple controls to permit constant evaluation.
f) - Simple teaching equipment which is easily reproduced for each subject.

3. - Integrate the programme into Corps work by interesting all sections.

4. - Assure the stability of the programme in the village by contacts with local, political and religious authorities.

5. - Obtain all possible support from health authorities and from private organisations interested in the programme.

6. - Link the programme with other development programmes already existing at TTQ level.

7. - Envisage completion at TTQ in case of wishing to replicate in one or several divisions.

CONCLUSION

The East African territory's answer to the health problems of the Machakos division is an original one, full of imagination and enthusiasm. The results are convincing and cannot be denied. They show in the absence of an organised health service that The Salvation Army is capable of offering valuable help through the infrastructure it already has (Corps - Divisions)

The needs are immense but the human resources, particularly, are still greater. The courage and imagination of the divisional officers, of those responsible for Home Leagues, of the small coordination team have made a success of this programme in spite of its weaknesses and imperfections.

QUARTIER GENERAL DE L'ARMEE DU SALUT – KINSHASA

Annex:

FLIPCHART

The East Africa Territory in collaboration with SAWSO has tried to perfect a flipchart to illustrate one of the educational messages on oral rehydration with sugar-salt solution.

The choice of visual aid for the teaching of health and hygiene represents a particular and real difficulty when it comes to drawings or representations that are more or less abstract and with which people fail to identify themselves.

The flipchart noted in Kenya is interesting. To my knowledge it is the only one using black and white photographs rather than drawings. Teachers of a particular subject are always very happy to have the support of good didactic material. Thus the officers and those responsible for the Home League have welcomed this initiative with great enthusiasm, and they are totally convinced of its usefulness.

For myself, I preferred to question the village women to have an idea of the impact of the educational message accompanied by photos. The women seemed to recognise their houses, their objects and their clothes, and to to feel absolutely concerned in the story that is told to them.

The message is simple and comprehensible. It can be told by one of the women even before she learns the orally transmitted message. She can easily reconstitute the story even if she ignores all the details.

The flipchart box itself is made of good material (costly too) and constitutes a fine gift to the programme.

Are we permitted to dream? If, parallel to a simple and complete curriculum, the programme could have at its disposition a flip chart for each subject, the objectives of continuity and of replicability would be supported significantly.

Perhaps it would be possible, on the spot, to find the means of studying different subjects, of taking the necessary photographs, testing them, then asking a local printer to prepare the charts.

The actual chart is a testimony to governments and other organisations, and The Salvation Army has already been contacted by those who would like to use or possess one. For myself, this represented a certain challenge and food for thought about didactic material to use for health education. It could become the canvas for Zairian, Indian, Brazilian etc. flipcharts,

and thus accompany a reproductible curriculum in other countries.

This is purely a personal report and airs impressions or ideas gathered during evaluation on the field.

It was for me a privilege to be part of this Evaluation Board and the experience of Kenya really represents something unique in the utilisation of existing structures of The Salvation Army to improve health in its different aspects.

To TEAR in Kenya
To the "Child Survival" team
To all the officers
To all the Home league women

I wish CHILD AID EVALUATION to assure the continuity and eventually the extension of an excellent programme.

J. [illegible]
Captain
Medical Secretary

B.P. 8636
KINSHASA 1/ZAIRE

c.c. I.S.Africa
Medical Adviser IHQ
T.C. Zaire
C.S. Zaire
T.C.Kenya

APPENDIX D: PROJECT ORGANIZATION CHART[9]

Personnel		Roles
Salvation Army Kenya	SAWSO Health Educator	Supervise and manage Project
National Home League Leaders		
Divisional Home League Leaders		
Project Coordinator Field Assistant		Lead HL Leaders training Supervise HL Members training Coordinate HLCH Sessions Supervise HLHEs in community
Home League Leaders Home League Secretaries		Train HL Members as HLHEs Lead HL Health Ed. Sessions Lead local HLCH Sessions Supervise HLHEs in community
Home League Members		Attend HL Health Ed. Sessions to become HLHEs Attend/Assist HLHC Sessions Make home visits in community
Community Mothers and Children		Attend HLCH Sessions Participate in home visits Attend HL Health Ed. Sessions

[9]/ Adapted from "Detailed Implementation Plan for Child Survival Initiative in Kenya", Attachment 4.

APPENDIX E: KENYA CHILD SURVIVAL CALENDAR OF EVENTS

KENYA CHILD SURVIVAL CALENDAR OF EVENTS

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
1985						
1986	NN PROJECT PLANNING		NAS, NUTUA BEGINS		1ST CYCLE HL TRAINING N N CONMUNITY SURVEY T-1 VISIT T-1	HOME VISITS BEGINS AT HL's (1ST GROUP)
1987	NIO PROJECT EVALUATION AS JOINS KENYA TEAM		T-2 HOME VISITS/ HL HEALTH SESSIONS BEGIN 2ND GROUP	SINIYU IN LONDON	T-2	NOWIGA/NUTUA IN ZAIRE NAS, SWINFEN DEPARTS
1988	NN TA (- VISIT ->)		HOME LEAGUE SUPERVISION		TOT SEMINAR	SUPERVISION PREPARATION OF ANNUAL REPORT STATISTICS
1989		4TH YEAR EXTENSION FUNDING EXPIRES		?? NEW OFFICER TRAINING BEGINS (1ST SESSION)		? 2ND SESSION

JULY	AUGUST	SEPTENBER	OCTOBER	NOVENBER	DECENBER
			WANAKUTA SWINFEN NOORE/BAIAO	NN DEVELOPS WORKPLAN IN KENYA	
		T-1 AYJ HONE LEAGUE ACTIVITIES BEGIN AT CORPS LEVEL (1ST GROUP) AS/JB SAWSO CHANGE	T-1 ANNUAL REPORT DUE	T-1 1ST TRAINING CONPLETED	
T-2 KAYYUNI NOH INNUNIZATION BEGINS UKALANI FEEDING PROGRAN BEGINS->	SINIYU/NUTUA T-2 ZINBABWE CS CONFERENCE 1ST GROUP REFRESHER COURSE/ NAS. ANGOYA PROMOTED TO GLORY	NUTUA ATTENDS CORAT SEMINAR NAS. WEKESA JOINS NAS. TAYLOR ARRIVES	T-2 2ND HL TRAINING CONPLETED ANNUAL REPORT		
ORIGINAL CS FUNDING SCHEDULED TO END			CONNUNITY SURVEY ANNUAL REPORT N N TA VISIT	FINAL EVALUATION	
	? 3RD SESSION		? 4TH SESSION		

APPENDIX F: LIST OF KEY PROJECT REPORTS AND FORMS

Key Documents and Trip Reports

"Detailed Implementation Plan for Child Survival Initiative in Kenya"
"SAWSO Child Survival Proposal, Child Survival Initiative"
"Field Trip Report, Technical Assistance Visit - Kenya, February 5 - March 5, 1986, Mona Moore, Health Educator"
"Field Trip Report, Technical Assistance Visit to Kenya, May 8 - June 8, 1986, Mona Moore, Health Educator"
"Annual Report, 1986", Beatrice Mutua, Project Coordinator, August 21, 1986"
"The Salvation Army World Service Office Child Survival Grant, October 17, 1986, Part Three: Country Status Report: Kenya"
"Field Trip Report, Technical Assistance Visit - Kenya - CSI, January 5-21, 1987, K. Mona Moore, Health Educator"
"Health Education through the Home Leagues, Child Survival Initiative, Midproject Evaluation, January 1987"
"The Salvation Army World Service Office Child Survival Grant, October 15, 1987, Part Three: Country Status Report: Kenya"
"Child Survival Report for the Last Two Years, 1986 & 1987", Beatrice Mutua, Project Coordinator, January 1988
"Field Trip Report, CSI Technical Assistance - Nairobi Kenya, January 18 - February 27, 1988, Mona Moore, Health Educator"
"The Salvation Army Child Survival Project Machakos - Kenya, from August 1987 to August 1988, Field Report", Beatrice Mutua, Project Coordinator

Training Reports

"Child Survival Project - East Africa Kenya" (Summary and list of training topics, objectives, and content), Beatrice Mutua, Project Coordinator, October 1988
"Community Survey Seminar 25.5.86 - 30.5.86, Report", Beatrice Mutua, Project Coordinator
First training session documents
"Second Training Report - 3.8.86 - 8.8.86", Beatrice Mutua, Project Coordinator
"Third Training : Immunization & Introduction to Nutrition, 7.9.86 - 12.9.68". Beatrice Mutua, Project Coordinator
"Fourth Training Report from 12.10.86 - 17.10.86, Beatrice Mutua, Project Coordinator
"Fifth Training 23.11.86 - 28.11.86", Beatrice Mutua, Project Coordinator
"First Training Course 1987 - From 8.3.87 - 13.4.87", Beatrice Mutua, Project Coordinator
"Second Training Report for the 10 Remaining Corps", 8.3.87 - 13.3.87, Beatrice Mutua, Project Coordinator
"Third Training Course from 28.6.87 - 3.7.87", Beatrice Mutua, Project Coordinator"
"Fourth Training, Growth Monitoring Course 30.8.87 - 4.9.87 at A.B.C. Centre", Beatrice Mutua, Project Coordinator
"Fifth Training Course from 11.10.87 - 16.10.87", Beatrice Mutua, Project Coordinator
"The Sept. 1987 Refresher Course Report for First Group, 6.8.87 - 9.8.87", Beatrice Mutua, Project Coordinator
"A Report on a Two Week Workshop for the Training of Trainers", 22.5.88 - 3.6.88, Beatrice Mutua, Project Coordinator
"Draft Module: Training Trainers and Leaders for Primary Health Care at the Rural Level", Gilberte A. Vansintejan, June 1988.

Project Forms and Checklists

"Baseline Community Health Survey - Machakos District" (Questionnaire)
"Community Survey" (Schedule)
"Child Health Card, Ministry of Health, Kenya"
"Clinic Register for Children Needing Nutrition Follow-up", Nutrition Section, Ministry of Health, Nairobi, Kenya, May 1986

"Afya Ya Jamii At - Risk Categories"
"Suggested Criteria for Awarding Afya Ya Jamii Identification"
"Monthly Reporting Form for the Coordinator"
"Afya Ya Jamii Monthly Report for Home League Leaders"
"Home League Weighing Session, Supervisory Visit Checklist"
"Home League Health Education, Supervisory Visit Checklist"
"Salvation Army Afya Ya Jamii, Family Card"

APPENDIX G: PROJECT BUDGET, ACTUALS AND VARIANCE

CHILD SURVIVAL INITIATIVE
FY 87A KENYA

EXPENSES	Budget FIELD	HOME	TOTAL	Aug 85 to July 88 Actual FIELD	HOME	TOTAL
SALARIES	26,081.00	45,218.00	71,299.00	24,315.89	42,938.47	67,254.36
BENEFITS	474.00	6,783.00	7,257.00	304.80	6,389.06	6,693.86
PROF. FEES	6,350.00		6,350.00	161.96	6,590.56	6,752.52
TRAVEL & PER DIEM	31,753.00	50,004.00	81,757.00	14,678.10	45,316.24	60,014.64
OCCUPANCY	1,980.00		1,980.00	1,381.89	0.00	1,381.89
PUR., XEROX, PRINTING	6,375.00		6,375.00	4,737.33	879.75	5,617.28
TELEX,TELEPHONE	892.00	2,778.00	3,670.00	938.78	2,630.30	3,569.08
POSTAGE, SHIPPING	605.00	2,084.00	2,689.00	777.82	357.93	1,137.75
EQUIPMENT	3,162.00		3,162.00	1,344.00	0.00	1,344.00
OFFICE EXPENSE/SUPPLIES	1,414.00		1,414.00	2,034.32	593.18	2,627.50
CONSTRUCTION SUPPLIES			0.00	0.00	0.00	0.00
MEDICAL SUPPLIES	2,100.00		2,100.00	25.46	0.00	25.46
OTHER PROJECT SUPPLIES	3,125.00		3,125.00	4,697.69	254.00	4,951.69
CONV., CONF.,TRNNG	4,500.00		4,500.00	5,096.96	105.03	5,201.99
FOOD			0.00	0.00	0.00	0.00
LOSS (GAIN) ON EXCHANGE			0.00	515.59	0.00	515.59
TOTAL	89,231.00	106,867.00	196,158.00	61,050.89	106,036.72	167,087.61

VARIANCE FIELD	HOME	TOTAL
1,765.11	2,279.53	4,044.64
167.20	393.94	561.14
6,188.04	(4,550.56)	(362.52)
17,251.60	4,683.76	21,935.36
578.11	0.00	578.11
1,637.67	(879.75)	757.92
(44.78)	147.70	102.92
(332.82)	1,148.07	1,741.25
2,118.00	0.00	2,118.00
(420.32)	(573.18)	(1,215.50)
0.00	0.00	0.00
2,074.54	0.00	2,074.54
(1,572.69)	(254.00)	(1,826.69)
(596.96)	(105.03)	(701.99)
0.00	0.00	0.00
(515.59)	0.00	(515.59)
28,210.11	830.78	29,070.39

APPENDIX H: NOTES FROM MOTHERS' FOCUS GROUPS

As part of the final evaluation of a three year Child Survival project in Kenya, The Salvation Army conducted focus groups among mothers in three of the twenty villages in Machakos district where project activities are taking place.

Several evaluation team members conducted focus groups during the two week evaluation period, using guidelines developed by the team leader. Most of the questions were intended to measure mothers perception of value of program activities, as well as level of participation in the activities. In one instance, the planned focus group questions were combined with another set of questions designed to test mothers knowledge, attitude and practice in key project interventions. Both questionnaires are attached as appendices.

Two of the focus groups were conducted in Swahili directly, the other simultaneously translated from English to Kikamba, a local dialect in the project area. A total of sixty five women participated in the interview sessions. In Mutuyu, one fifth of the participants, themselves mothers, had also been certified by the program as home health visitors. Text taken from notes made by the focus group observer/recorder at each session are included as an appendix of this report.

Results

The mothers interviewed demonstrated a high level of knowledge of program activities. Family planning, treatment of children with diarrhea using sugar salt solution (SSS) and immunization motivation were felt by mothers to be the most effective activities promoted by the project. Several comments were made in support of nutrition education which provided knowledge on child feeding practice, basic elements of a healthy diet, and cost effective ways of planning nutritionally balanced meals for family members. Learning the importance of hygiene in the home was also widely mentioned as a benefit of the project.

Those mothers questioned on knowledge, attitude and practice in each of the five project interventions - growth monitoring and promotion, oral rehydration therapy, breastfeeding and immunization promotion, and child spacing motivation - demonstrated sound understanding of the technical and motivational information promoted by the project. Expectedly, the level of knowledge demonstrated was more pronounced in those mothers who were also certified as home health visitors.

By show of hands, a majority of mothers knew how to prepare SSS themselves, and of those who could not, all knew how to direct community mothers to someone who could. Duration of breastfeeding and benefits of breastfeeding to mother and child as taught in training curriculum were correctly stated by mothers in the focus group. Understanding of the concept of at risk was elicited, and the criteria used by home visitors in at risk identification were listed by those members who are actively home visiting. The meaning of a rising, static and falling growth curve on the child health card were explained by mothers in the group.

The mothers present were asked if they could tell any stories which they felt demonstrated in a personal way the effects which project activities may have had in their community. Several accounts of individual experiences and observations were provided by the women. The mothers repeatedly verified that these were visible effects now being experienced, and not changes which they expected to see in future.

ORT

"Less children are dying of diarrhea in my area now. I know, because my house is on the road to the hospital. Before AFYA YA JAMII we would see many children being carried by their parents to the hospital for treatment. They looked very dry. Now, few children pass. If I do see one, I stop her and tell her how to make SSS, and direct her to the house of a home health visitor for advice."

Child Spacing

"Although I am a grandmother, and am past the age where I can be helped by family planning, I talk with my son and his wife about what I have learned."

"I know we have done something in child spacing. When we started this work, we would see mothers going to the shamba to plant. They would be pregnant, with one child holding their hand, and another on their back. We would feel sorry, and wonder how they would get the work done in the fields. These days, because of what we are teaching women about family planning, there is a change. The women are still going to the shamba pregnant, holding the hand of their small child. But the child which was on their back - that child AFYA YA JAMII has prevented."

"We always used to hear on the radio talk about family planning. Plan your family, plan your family. We would ask, why are we supposed to plan our family, what should we be planning for, how do we do this? So we did nothing. The women are teaching the benefits of a planned family, and what it means in the home if there is a space of three or five years between the children. They are talking with their husbands about these things. And now we are beginning to understand, and we are trying. Now we are planning our families as the government has always been advising us."

APPENDIX I: PRELIMINARY REPORT:

ANALYSIS OF SODIUM CONCENTRATION OF MOTHER-PREPARED ORS IN KENYA

By: K. Mona Moore

As part of a final evaluation of The Salvation Army Child Survival project in Machakos District, Kenya, an analysis of samples of sugar salt solution (SSS) prepared by mothers trained in Oral Rehydration Therapy (ORT) was performed.

The project began in 1986, and as part of a more comprehensive village level training of mothers in child health promotive behaviors, held training sessions in many aspects of community based diarrheal disease control (CDD)

The CDD training for leaders of Salvation Army women's groups (Home Leagues) took place during one week of a six week training period. HL Leaders then train members of their women's groups at weekly meetings. Leaders were taught the causes of diarrheal disease in children, how to recognize signs of dehydration, and how diarrhea causes dehydration in young children. Home treatment of early dehydration caused by DD, relying first on home available fluids, alternatively use of homemade sugar salt solution, and including instruction in preparation and use of ORT packets. is also taught. Recognition and prompt referral of children with severe dehydration is stressed. Nutritional support and rehabilitation of the young child with diarrhea, and prevention of DD through improved household and village hygiene are discussed.

A detailed set of instructions for preparation of SSS has been provided to HL Leaders by the project coordinator (These instructions are attached to this report). A locally available 1/2 litre shortening tin (KIMBO) is the recommended container, filled to an exact mark on the can, in combination with the measuring spoon from TALC described below.

A set of training materials which pictorially reflect messages taught during training was developed by SAWSO and The Salvation Army Kenya, and has been used successfully to support the training which Home League Leaders do when they return to their home areas following their own training course. The ORT flipchart has standardized ORT messages printed on the back of each photo, in Kiswahili, and has been designed to reflect state of the art instructional methods for ORT training at the village level, as well as Kenyan national health policy and international public health guidelines related to ORT.

Methodology

During the two week formal final evaluation period in November 1988, and during the week following the evaluation, forty seven samples of SSS were collected from several of the twenty project sites. A protocol for collection of samples was designed as part of the overall evaluation framework and each member of the team was encouraged to collect samples during evaluation site visits as appropriate. The protocol, as well as the accepted method of preparation of SSS was reviewed with all evaluation participants. The forms provided for record-keeping assigned a random number to the sample collection tube (10 ml), asked for information on the project site where the sample was collected, the date of collection, the "level" of woman who prepared the solution (determined by amount of training or level of contact with the project), the number of times the woman recalled receiving instruction on SSS preparation, and where this training had occurred. The team member who collected the sample was also asked to comment on her observation of the sample preparation. It was emphasized that no coaching should take place during SSS preparation, as this was an opportunity to get an unbiased measure of the effectiveness of project ORT training to date. It was our original intent to collect from 75 to 100 samples, but time constraints and distance

between project sites, as well as an attempt to collect each sample separately and unhurriedly did not allow.

Laboratory Analysis

Both WHO and UNICEF recommend that homemade oral fluids should have sodium and glucose concentrations of 50 -100 mmol/l. The lower limit is considered to be the minimum concentration required to prevent most cases of dehydration and to treat mildly dehydrated children. The upper limit for sodium is felt to be the highest concentration which will not lead to hypernatremia (retention of excessive sodium in the body) which can quickly cause convulsions in young children and lead to death. The presence of glucose in SSS increases the absorption of sodium in the intestine, and therefore enhances the effectiveness of the SSS. There is less chance of problem from variations in glucose level than for sodium.

The project recommends the use of a plastic spoon for preparation of SSS, and supplies these spoons as part of ORT training. The spoon is produced by TALC in London, and has been internationally tested. Preparation of SSS using the TALC spoon is intended to produce a solution containing 77 mmol/l of sodium and 58 mmol/l of glucose.

The Aga Khan hospital in Nairobi performed the chemical analysis of the samples, within a week of collection time. A control sample was prepared by an external evaluation team member for comparison. A Boeringher 4010 serum analyzer was used for analysis of sodium and glucose levels. By error, laboratory personnel were not instructed to hydrolyze the sucrose (contained in the table sugar used to prepare the SSS) into glucose before analysis. This resulted in low levels of pure glucose being reported.

Results

Forty nine samples were analyzed. This included a control sample prepared by an external evaluation team member, and one control sample prepared by lab personnel with KIMBO can, TALC spoon, sugar and salt supplied by the project according to the same protocol used by mothers studied. Control results were 76.7 and 93.6, respectively.

Of 47 samples prepared by mothers, 39 were within the acceptable limits of sodium concentration described above (50 - 100). The eight samples which fell outside of acceptable limits, two were over 100, and therefore potentially dangerous, and six had lower sodium concentrations than those recommended. Lower levels would not be of any danger, but effectiveness of the solution in preventing dehydration would be less than optimal.

These results compare favorably to other studies which have been done of mother prepared SSS. In perhaps the most favorable report in the literature, in Zimbabwe, 84 % of mothers prepared the solution correctly, but the defined range in that study was wider than this one (30 - 100 mmol/l sodium).

In Vellore, India, solutions prepared ranged from 25 - 120 mmol/l, and researchers there considered these ranges acceptable. If these standards are applied to the Machakos results, only 3 /47 samples would be out of range. In Nigeria, 34% of 217 mothers prepared SSS solution correctly. In Bangladesh, BRAC demonstrated a "consistently acceptable range" of sodium concentration, here again defined as 30 - 100 mmol/l. In another study in Nigeria, 60% of 40 mothers prepared SSS accurately, the remainder were all hypertonic.

Discussion

Depending on criteria used to determine acceptability of sodium concentrations

in the 47 samples of SSS analyzed, either 37/47 (%) or 44/47 (%) were prepared correctly. This compares favorably with other published reports in the literature.

Further analysis of the supporting information collected along with the samples (level of education, contact with program ORT training, location and preparation techniques) is currently underway. It is hoped that this additional analysis will provide more detail on factors associated with mixing error, so that the SSS preparation component of the project's ORT training (which appears to be quite effective already) can be further strengthened.

Possible reasons for high levels of acceptability among this sample of mothers trained by the project include: a strong ORT training curriculum delivered by a very skilled local trainer; supported further by specifically designed health education materials; intensive training and regular supervision by the project coordinator; motivated and enthusiastic co - trainers (Home League leaders) who are locally available as sources of SSS preparation information and support; use and supply of the standardized TALC measuring spoon by the project; and choice of a readily available mixing container, among many others.

Special thanks to the mothers who took the time to prepare the solutions for us in their homes, to the evaluation team members who collected the samples in addition to their other evaluation duties, to Mrs. Patel and the lab staff at Aga Khan Hospital in Nairobi for a speedy and reliable sample analysis, and especially to Ms. Rosemary Mutua, Field Assistant, who's detailed and complete sample collection notes will provide data for a much more complete analysis of the projects ORT work than has been presented here.

APPENDIX J: REVIEW OF FAMILY HEALTH CARDS/KENYA CHILD HEALTH CARDS

As part of the final evaluation of the Salvation Army Child Survival project in Machakos district, Kenya, a review of project record cards was undertaken. "Family Health Cards" were developed by project and headquarters staff during the third year of project activities to meet the need for a population based recordkeeping system appropriate to the level of community health worker at the village level.

This card was based on a design suggested during mid project review of another Salvation Army Child Survival project in Bangladesh, and modified to reflect Kenyan national health record systems and project-specific interventions and activities. A copy of the card, in Swahili with English translation, as well as instructions for its use, are attached as an appendix to this report.

Family cards are completed by home health visitors during the home visit, and kept at the central location in each village where weekly meetings take place. A simple system of arrows indicating growth progress, and check marks to record immunizations acquired by each child is used, to make completion of the card by marginally literate women easier.

Methodology

A protocol was designed to systematically review the use and effectiveness of this card, and to compare the data contained on the card with information recorded on the Kenya national child health card (growth chart) for each child. Determination of immunization status and growth velocity for age, appropriateness of nutrition and other advice noted on cards, and detection of at risk status if indicated are included in the record review.

Originally it was intended to complete a record review at a representative sample of the twenty project sites, at growth monitoring and promotion sessions sponsored by the project, as well as home visits. Due to time personnel and transportation constraints encountered during the evaluation process, review was limited to those cards available at a single GMP session. As much as possible, the evaluation aimed to avoid 'creation' of project activities for the benefit of the team, and to observe only those sessions which were regularly scheduled during the two week evaluation period. Since most GMP sessions take place during the last week of the month, only one naturally occurring session was available for review.

At Kanzalu, Kangundo district, weighing sessions had begun in November 1987, exactly one year prior to the evaluation. Kanzalu has the largest number of home health visitors, over fifty, of any of the project sites. Organization of project activities and recordkeeping were noted to be above average in this village. All of the family cards (40) which were available at the session were reviewed to locate those which had an entry for a child between the age of twelve and twenty four months (19). There were twenty cards which met this criteria. Of those twenty, eleven children out of a total 80 were present at the GMP session with their Kenya national child health card. These cards were compared with the entries on the child's family health card. Several cards had more than one child who fell into the age group, and one card contained twins.

Of thirteen children, all but one were completely immunized for age. One child who was old enough to be immunized against measles had not yet received the vaccination, but an appropriate visit date had been entered on the childs card at the last clinic visit. All of the children had been weighed four or more times during the past year.

Name of Child/Family:
Corps:

Date:
Interviewer:

Age of Child in Months:
12 13 14 15 16 17 18 19 20 21 22 23 24 (circle one)

Date of Last entry on Card:

Last visit date appropriate for age?

DPT OPV BCG MEASLES (circle all immunizations listed on card)
1 2 3 1 2 3 Y N Y N

Child Immunized (complete to date for age)? Y N

Number of times child weighed in past year (circle one)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Child weighted 4 times in past year? Y N

Is child's growth status adequate for age? Y N
circle one, if no: 1 2 3

Growth Curve Rising? Y N

Nutrition advice noted on card Y N

Advice noted appropriate for age/nutritional status Y N

If child at risk, noted as such by project staff? Y N

Date of last episode of
Diarrheal illness_____

Treatment used_____

By whom_____ where_____

Outcome_____

Child Breastfed? Y N

Age in Months when
BF stopped _____

Mother used Family
Planning Y N
Method_____

AFYA JAMII FAMILY CARD/KENYA CHILD HEALTH CARD REVIEW

1. At random, chose 25 family cards from HL file with at least one child between age 12-34 months.

2. Visit household, or interview mother with child & card at GMP or HLHE session for each 25 cards chosen.

3. Compare family card (child side) with Kenya Child Health card. Note discrepancies.

4. Review content of child health card, and complete the following questions?

   Age of child in months_____Date of last entry on card_____Last visit date approprite for age Y N

   Is child immunized up to date for age Y N DPT OPV BCG Measles
   1 2 3 1 2 3 Y N Y N

   Child weighed number of times in past year? Y N 1 2 3 4

   Growth Status adequate for age? Y N 1 2 3

   Growth curve rising if poor nutritional status? Y N

   Nutrition advice noted on card? Y N Appropriated for nutritional status? Y N

   If child at risk, identified as such by project staff? Y N

   Date of last episode of diarrheal illness_____

   Treatment_____ By whom_____where_____

   Outcome_____

   Child breastfed? Y N
   Age in months BF stopped_____

   Mother using FP? Y N
   method_____

INSTRUCTIONS GIVEN TO AYJ FAMILY CARDS

A On the side of the mother, the Home League leader
D Are asked to write and fill
D - The name of the Family fully
R - The location where the house stands
E - The serial number of the house/home.
S - The name of the corps and the names of the 2 or 3 Home League leaders operating in that corps.

PERSONAL INFORMATION

The home league leaders are asked to deal with those mothers of child bearing age (15-49 years). The leaders should write the names of all mothers in the home or house. Put a x where the mother has not the following:
-Pregnancy not available
-Has not has TT

-Not breastfeeding
-Not using Family Planning methods
Put a check ( ) where the mother is
-Using Family Planning services
-Indicate date given and amount given and when to resupply
-Show by letters the Health Education given (GOBIF)
-Indicate by check ( ) or x if Family Planning topic has been discussed by the head of family.

THE SIDE WITH A CHILD'S INFORMATION

Children involved - 5yrs.

-Date of birth
-Date of death
-Weight going and at risk
-Child has diarrhoea yes/no
-ORT prepared and given yes/no
-Immunization
BCG, DPT1, DPT3, POLIO 1 POLIO 3
-Health Education given GOBI
-Home visiting date
-If child has not added for 3 months The child is at "RISK"

- When a child is identified as loosing weight the mother is counselled and the problem is ascertained

- The child is home visited or given an appointment to attend a HLHE session for follow up and weight checking

- The child is weighed again after a month if the weight is still not going or staying in the same pace.....mother is given education and counselling is directed to what she is providing in the family pot.

- A home visit is planned again and the mother is educated and assisted in her home. She is given one month appointment to bring her child for weighing.

- The child is weighed a third time and if weight found to be the same or going down the child is transferred to the nearest management. Also the Home League leader transfers this child in at Risk register for future follow ups.

Follow up of Home League members by Home League Leaders.

- Home League members are trained by Home League leaders on GOBI F

- A home visit technique is introduced before GOBI F is taught so that the Home League members know that they have to do home visits for child survival.

- Each home league member is given 5 houses to visit including her own home.

- The home league leader is taken round in the houses being visited by the member to check whether she is doing it correctly. Guidance and correction is done accordingly.

- Home League members are given and watched teach other members and mothers at various forums eg during Home League meetings or during home visiting when they do self help activities.

- Home League members bring reports to the Home League leaders each month of the homes she has visited and the activities she has done.

- Each corps has home visits (planned) each month.

APPENDIX K: PHOTOS FROM EVALUATION VISIT

Celebrating after the first Home League Leaders' focus group

Fording rivers

and climbing hills to the Project sites

Making a home visit to a hilltop family

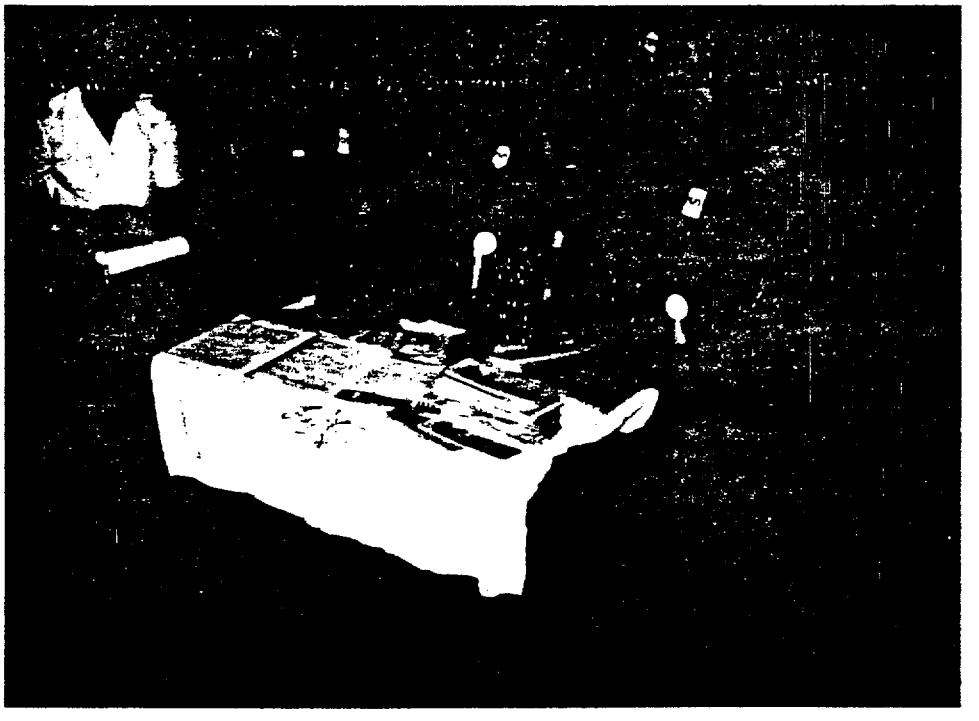
A mother demonstrates preparation
of the sugar-salt solution during a home visit

Another family and just part of its project-inspired vegetable garden

Collecting ORT samples prepared by Home League Health Educators

Singing a song about breastfeeding
at the beginning of a health education session

A nutrition lesson during a health education session



Weighing a baby and recording the results

Demonstrating sugar-salt solution preparation for certification

Home League members answering questions during certification testing

Awarding home visiting bags and badges at the certification ceremony

A delicious meal at the Corps Officer's house after work in the field