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PRIMARY EYE CARE
AND
COMMUNITY BASED REHABILITATION
SRI LANKA
AN ASSESSMENT OF PERFORMANCE
AND IMPACT OF THE PROGRAM

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The views expressed in this report reflect those of the authors and not of NASPAA, Helen Keller International, the Ministry of Health in Sri Lanka nor USAID/Sri Lanka.

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RISEA MAP

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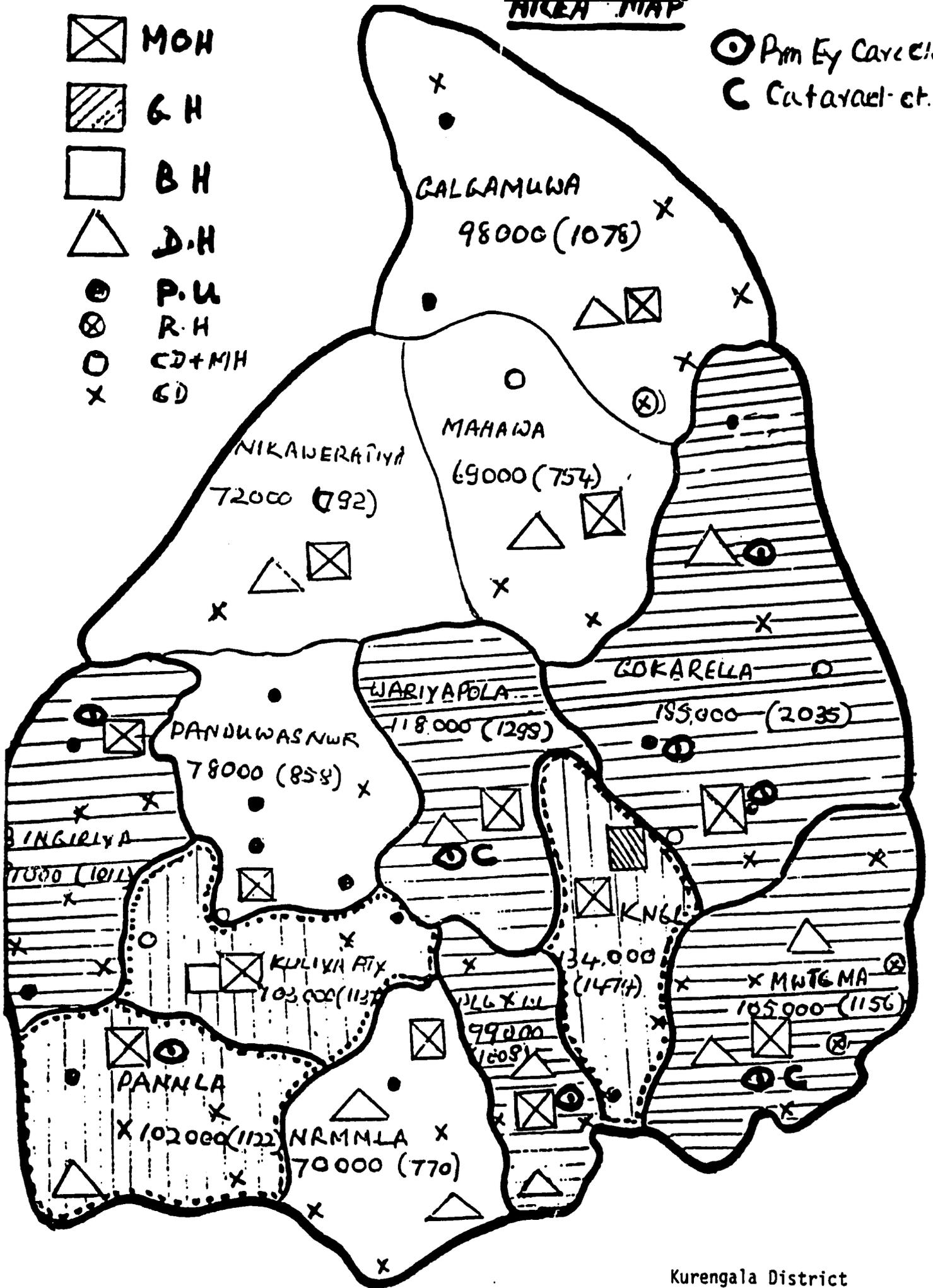
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Kurengala District
1,324,000 (14564)
BP/PEC/CBK PROJECT

EXECUTIVE SUMMARY

The Helen Keiler International technical cooperation project in Primary Eye Care (PEC)/Blindness Prevention (BP), and Community-Based Rehabilitation (CBR) in Sri Lanka started in March, 1983. Funded together with a matching grant program for American PVOs by the U.S. Agency for International Development, HKI works in Sri Lanka under a Project Agreement with the Ministry of Plan Implementation. This first evaluation of the project covers the period March 1983 - June 1987 and was conducted by a National Association of Schools of Public Affairs and Administration (NASPAA) consultant and a public health (FRACS, MPH) ophthalmologist consultant during the period May 25 - June 6, 1987.

The project operates in the central Kurunegala district with a population of 1.3 million. The PEC/BP program functions under the Ministry of Health while the CBR program is implemented by the Sarvodaya Movement, a private Sri Lankan development organization. This assessment deals with each program discretely, as both have different historical backgrounds, institutional goals, and function separately. However both have several key congruent points.

Primary Eye Care/Blindness Prevention

The Primary Eye Care/Blindness Prevention program is providing a low-cost moderately well-functioning demonstration model that is being integrated into the Ministry's Primary Health Care program.

Its strengths are:

- * Good training program for health officials and field workers at all levels, accompanied by manuals and guidelines.
- * Good referral system in which field workers identify and screen eye patients and refer upwards to the appropriate level and in which proper examinations and treatment are carried out.
- * Excellent coordination with Ministry officials; there is clearly a good chance that the Ministry of Health (MOH) will replicate, incorporate, and expand the activities to other districts. The project has assisted MOH to build a delivery system including personnel training, the design of a well-organized referral system, and coordination mechanisms.

Its weaknesses are:

- * A reactive management system which does not sufficiently view the program in systemic terms, so as to determine consequences for actions.

- * A referral system that as yet is not functioning smoothly with some bottlenecks still existing at the primary, secondary, and tertiary levels.
- * Insufficiently standardized eye medical forms that cause inefficiencies in reporting information up through the delivery and referral network.
- * Inadequate availability of cataract surgical services that hampers service delivery and impedes possible impact and coverage, due to uneven distribution of ophthalmologists, lack of bed space, and poor patient response.

Nevertheless, the FEC/BP program overall has much merit and it is likely it can be expanded to other districts with minor revisions. The possibility of replication, with minor changes, is good.

Recommendations are:

- * Establish guidelines for the overall eye care program effort that more carefully spell out an overall management system for action planning based on commonly understood, realistic and achievable objectives.
- * Concentrate on solving problems in the referral system in order to insure that it functions properly at the primary, secondary, and tertiary levels.
- * Establish standardized forms for recording eye health information so that results can be monitored in a systematic fashion at all levels within each district-level program.
- * Continue to work closely with the MOH to urge implementation of several concomitant activities to insure the availability of surgical services. These activities should include: 1) providing trained ophthalmologists at peripheral hospitals; 2) increasing bed spaces at selected hospitals; and 3) providing eye clinics and cataract surgery at peripheral hospitals and clinics.

Community-Based Rehabilitation

The Community-Based Rehabilitation program implemented with Sarvodaya has provided approximately 50 well-trained field workers and supervisors who at present are working with about 150 pre-school, young adult, and elderly Sri Lankan blind rural individuals. These clients are seen in their homes and are provided with specific orientation/mobility and living skill training. In addition about one-third receive assistance in the area of income generation. Some serious constraints affect this well-intentioned project. These will have to be addressed if the

demonstration model is to be sustained and replicated. However, the program functions well internally as a small, pilot effort despite its limited scope, outreach, and possible overall impact.

Its strengths are:

- * An appropriately trained cadre of field workers who are performing well in imparting orientation/mobility and living skills to clients.
- * Good case review of clients to ascertain specific problem areas, support changes, and provide individual instructional objectives.
- * Good initial beginnings for low-level income generation activities in agriculture, cottage industries, and other production areas, for adults enrolled in the program.
- * Good video documentary, although presently still rough cut, for promoting the project in Sri Lanka.

Its weaknesses are:

- * Sarvodaya's inability to make a full institutional commitment to the CBR project due to political and economic changes in Sri Lanka since the program was initiated. HKI staff members are aware of the need to demonstrate program sustainability and replicability and are working to find solutions within Sarvodaya and government agencies.
- * A management system that must more effectively identify recruit, track and follow up clients.
- * A well-intentioned but still not as yet sufficiently well-focused, income generation program that must be improved to include a systemic review of client expectations, and prospects for involvement in remunerative activities.
- * A limited vision of CBR's potential outreach due to the community-based approach and a one-on-one delivery system that considerably constrains the program's coverage and impact.

Recommendations are:

- * Work with Sarvodaya to forge clear action plans for its involvement in the CBR program including how the program might be institutionalized once HKI's work terminates.
- * Review and re-structure the program's management system to insure that specific behavioral objectives are being encouraged in an effective and efficient manner.

- * Initiate several concomitant actions to improve the income generation project component by: 1) systematically reviewing employment opportunities; 2) increasing the capital revolving fund; and 3) supporting the development of worker-run cooperatives.
- * Pursue adaptations of the basic program by experimenting with a series of activities that, for example, place the responsibilities for rehabilitation of the blind on family members and which support that philosophy of self-help action programs. These perhaps could include: 1) training of family members as client trainers, supported by new set of family-oriented training manuals and guidelines; and 2) the development of communication strategies that enhance public awareness of the program and/or change community attitudes and affect behavior of the rural blind.

SUMMARY OF FINDINGS

Potential for Expansion

In four years this HKI demonstration activity has gone some distance toward setting up most key elements in both the PEC/BP and the CBR arenas. The qualitative process-oriented approach used by HKI has meant that this low-key PEC/BP program has the opportunity of being accepted into the Ministry of Health. However, as the program continues there are likely to be constraints and burdens on the system that will become clearer as it expands and becomes more complex. It is important for HKI to review carefully the program's goals and objectives and make systemic changes, since as expansion occurs, some problems already identified may become unmanageable.

In particular the expansion of the CBR program, at present a limited outreach effort, is constrained by significant policy issues. If it is to be expanded these issues will have to be carefully addressed.

Potential for Replication

The PEC/BP program could be replicated in other parts of the country now that start-up and the trial and error period are basically finished. Caution should be exercised about replicating project components in which constraints persist as these are likely to be more complicated once the project expands.

The CBR program cannot be replicated in its present form if the project design remains as originally conceived. In order to establish this activity on a wider basis, the approach being used, particularly the institutional arrangements, will have to be altered.

Impact

PEC/BP is having considerable policy impact throughout Sri Lanka as evidenced by acceptance at the district level, and due to the wide acceptance of HKI as leader of the PEC/BP movement in Sri Lanka; expansion seems likely.

Due to the limitations of Sarvodaya to embrace fully the CBR program beyond the Kurunegala District, CBR has had only minimal impact within this chosen national implementing agency and, as yet, no significant impact on, or acceptance by the government per se. However, several other NGOs, and the World Health Organization (WHO) have shown some interest in adapting some elements of the program in other areas of Sri Lanka.

Future Direction

HKI is respected within Sri Lanka. The agency can continue to play a positive role in fostering both PEC/BP and CBR. HKI should strive to achieve fully its capacity to act in a more catalytical role as a development organization, to continue support for creative programs that will increase quantitative coverage, and to fulfill their investments to assist the rural Sri Lankan citizens.

PREFACE

The Primary Eye Care (PEC)/Blindness Prevention (BP) and Community-Based Rehabilitation (CBR) programs promoted by Helen Keller International (HKI), with the Government of Sri Lanka and one of the country's major non-governmental organizations (NGO), seeks to provide sustained and systemic eye care and blind rehabilitation services to the population of rural Sri Lanka. The efforts are to focus on integrating primary eye care into Sri Lanka's existing health care and social service delivery systems.

This assessment, requested by Helen Keller International, New York, brought outside and independent observers in to analyze the program in Sri Lanka. The evaluation team consisted of a management/training consultant and a public health ophthalmologist. The views are personal and do not represent our respective institutions.

The evaluation team's mandate was to assess the program and to make recommendations concerning how it might be improved in order to provide better services. This document is based on six field days of observations, followed by four days of interviews in Colombo. The methodology used was observation, interviews with project personnel at all levels, document review, independent analysis of data, and extensive conversation with project personnel.

The HKI/Sri Lanka field staff provided excellent field support for this evaluation. The evaluation team is grateful for this assistance, as well as that of Ministry of Health officials and workers and of Sarvodaya Shramadana Movement personnel.

We are particularly in debt to Dr. Kulasiri Kt. De Silva, Deputy Director, General Medical Services, Ministry of Health, Government of Sri Lanka, who served as the host country resource person for the evaluation team, through arrangements made by HKI. His views have been adopted into many of those included in this evaluation document.

This assessment was made in a spirit of collaboration with colleagues who are engaged in a professional effort designed to promote development as the "realization of the human potential.

I. CONTEXTUAL FRAMEWORK OF HEALTH CARE IN SRI LANKA

The Primary Eye Care (PEC)/Blindness Prevention (BP), and Community Based Rehabilitation (CBR) programs in Sri Lanka, with Helen Keller International (HKI) sponsorship and funding, must be viewed within the contextual framework of the Sri Lanka health and eye care situation.

A. Sri Lanka Health Situation

The following health data, derived from Ministry of Health documents, reflect the relative health status of the population in mid-1987:

- * Infant mortality rate is 37.7 out of 1,000;
- * Neo-natal mortality rate 24.2 out of 1,000;
- * Proportion of new births with a birth weight of 2,500 grams is 75%;
- * Crude birth rate is 27.6 out of 1,000;
- * Immunization coverage is 70%;
- * Safe drinking water is 45% in rural areas and 75% in urban areas;
- * Average life expectancy is 70 years.

B. Health Programs in Sri Lanka

The Government of Sri Lanka has what is considered to be a better-than-adequate health care system. They are committed to providing a high standard of health services for its citizens so that all people can lead a socially and economically productive life. The government has been following a primary health care (PHC) approach that includes maternal and child health care (MCH), school health education, family planning, nutrition education, control of communicable and non communicable diseases, an immunization program, a water and sanitation program, occupational health, and rehabilitation.

A nationwide primary health care system is in place which includes village level medical posts, village clinics, peripheral hospitals, general hospitals, and specialized hospitals. Primary health care extends well into the countryside and there is some evidence that rural families have access to health services.

C. Eye Health Situation

For a developing nation, Sri Lanka has a stable set of eye health conditions. Generally, the eye health problems that occur in Sri Lanka are no different than those of most developing countries. Although specific statistics are few, it is possible to draw a general outline of the eye health situation.

Blindness from eye disease in Sri Lanka is due to:

- * Cataract
- * Corneal opacity-specific causes are injuries and infections
- * Lid and conjunctival infections
- * Refractive errors

The most common blindness-causing injuries are:

- * Lime burns
- * Firecracker explosions
- * Trauma from knives and other objects
- * Foreign bodies

There is a high prevalence of cataract in rural areas, mainly due to lack of surgical services, and secondarily to other factors such as ultraviolet light and nutritional deficiencies. Prevalence of cataract is increasing as the life expectancy of the population increases.

In the population at large, over 50% of all cataracts and corneal opacities are not treated in any way. The vast majority of rural and urban people do not seek western medical care for eye problems. Of those who seek care, only 25% seek western care in rural areas and about 50% do so in the urban areas. (HKI/Sri Lanka, "Annual Report," p.4.)

In rural areas, the situation can be summarized as follows:

Among 100 rural people with eye problems:

- * 42 people with an eye problem will either seek no treatment or use a home remedy;
- * 31 people will see a local "quack" or traditional healer;
- * 27 people will seek western medical care.

The situation in rural areas, therefore, is a general acceptance by rural people of poor vision, infections, home remedies, and cataracts as part of the normal way of living. This attitude must be viewed within the context of a culture of poverty of the rural poor in Sri Lanka. Some salient points are:

- * Lack of economic resources to travel, be examined, or purchase the necessary treatment such as drugs or glasses.
- * Fear of the unknown and what can happen with treatment.
- * Negative word of mouth comments concerning treatment.
- * Lack of awareness of medical treatment possibilities for eye care.

The urban centers of Colombo, Galle, Kandy, Jaffna and secondary cities have citizens with higher levels of medical information and treatment. Our concentration in this assessment, however, is

with the rural sector since HKI/Sri Lanka interventions are geared toward rural areas.

Regarding blindness in Sri Lanka, estimates vary from 0.4 - 1.1% of the population. Of the approximate 16 million population the estimated total number of blind ranges from 80,000 to 240,000 people. Cataract percentages of total blindness range between 58-70% or 46,400 - 168,000 (58% of 80,000 is 46,400 while 70% of 240,000 is 168,000).

The wide range of estimates from different Sri Lankan sources is obviously not a good situation. It would be useful for medical planners to have more accurate information for decision-making purposes and it is obvious that a well-conducted survey providing accurate data is required to make national eye care plans. For purposes of this assessment the one percent middle level is used resulting in the following rough estimates:

- * 160,000 blind (1% of 16 million)
- * 96,000 cataract blind (60% of total)
- * 64,000 blindness by other causes.

D. Eye Care Programs

The eye care system in Sri Lanka consists of both public and private involvement.

1. Public Sector

Ministry of Plan Implementation. The Government of Sri Lanka has a National Plan for a Program of Eye Care. It is outdated and there is some evidence that it is not in the mainstream of the national health policy. The Ministry of Plan Implementation approves private foreign sector involvement in Sri Lanka and thus monitors the HKI/Sri Lanka program.

Ministry of Health. There is no working policy statement by the Ministry of Health on eye care in Sri Lanka. A national meeting on eye care policy was to take place in June, 1987 in which it was reported that a national eye care policy was to be discussed.

The Office of Deputy Director of Medical Services supervises a World Health Organization (WHO) blindness prevention project.

The Ministry of Health provides an adequate but limited eye care delivery system nationwide using health clinics, peripheral hospitals, and general hospitals for primary eye clinics as well as cataract surgeries. There are 27 ophthalmologists with the Ministry of Health who perform eye surgery. In addition in the Kurunegala District there are 40 trained Medical Officers in eye care clinics who examine and screen patients for treatment by ophthalmologists.

Prior to this project the major eye care service in the country was only at the general hospitals in secondary cities and in public and private hospitals in Colombo.

The pilot project in Kurunegala district is the most complete system in Sri Lanka. Other districts have only sporadic and partial components of an eye care system.

Ministry of Social Services. Provides limited services to the blind. There is no legislation supporting the blind in this ministry.

Ministry of Education. Provides special education schools for the blind and special education classrooms within regular primary schools in urban areas. Twenty special education teachers in Kurunegala district work in regular primary school classrooms with pre-school and primary level blind students. Some braille textbooks are available.

Ministry of Labor. Has affirmative action legislation for the blind.

Ministry of Housing. Makes special allocation and special reduced fees for low income housing for the blind. The Prime Minister alluded to this policy in announcing more affirmative action programs in housing for the blind in the 1987 International Year of Housing.

2. Private Sector

Private Business and Practices. There are good optical services in major and secondary cities. Ophthalmologists deliver eye care of a high standard but are overworked in the peripheral areas. They do adequate work with regular eye treatments and there seems to be adequate cataract surgery in private clinics and private hospitals. Optician offices are located in the major and secondary cities.

Sarvodaya Shramadana Movement. This Sri Lanka non-governmental organization (NGO) provides grassroots integrated rural development programs in Sri Lanka. It was selected as the implementing organization for the Community Based Rehabilitation (CBR) program in Kurunegala district.

Eye Care Sri Lanka. A private Sri Lankan NGO that conducts eye camps providing cataract surgery in many Sri Lankan districts and has financial support from the Royal Commonwealth Society for the Blind. By 1986 3,500 cataract operations had been performed in these eye camps.

Christoffel Blindenmission. A West German private voluntary organization (PVO) that specializes in supporting national eye

care programs. In Sri Lanka it supports the Eye Donation Society and the Ministry of Health ophthalmologic auxiliary training program in Colombo.

Eye Donation Society. Private Sri Lankan NGO that collects corneas for grafting. Supports an eye hospital in Weligama.

Sri Lanka Council for the Blind. Private association with a grant from the Ministry of Health to foster, coordinate, and promote blind prevention and treatment activities in Sri Lanka.

Helen Keller International (HKI). A US-based PVO supporting the Ministry of Health in a primary eye care and blindness prevention program in Kurunegala district. HKI also supports the Sarvodaya Movement Community-Based Rehabilitation program in Kurunegala district. The HKI/Sri Lanka program sustains these efforts through: 1) coordination and catalyst programming through technical cooperation; 2) staff and field worker training; and 3) provision of some supplies and equipment.

There are other unknown eye care activities and together they form the context of the eye care program in Sri Lanka. Following sections will focus in on the project itself.

II. PROJECT BACKGROUND

This chapter provides project background including the development process, strategies, and intended inputs and outputs.

A. Project Development Process

HKI began earlier work in Sri Lanka in the late 1970s, training special education teachers to work with permanently blind students in rehabilitation. This effort was in south Colombo and was implemented by the Sarvodaya Movement. Lessons learned from this project led to interest in exploring further program efforts to assist blind persons, which became the background for the later development of the CBR project.

In 1981 HKI provided assistance to the Sarvodaya Shramadana Movement to initiate community-based rehabilitation programs. This activity was short term and limited to training staff personnel and establishing some guidelines for Sarvodaya's project implementation. Technical assistance from HKI/NY chiefly involved personnel training and designing the CBR strategy.

Subsequently, in 1982, exploratory investigations were made with the Government of Sri Lanka to provide development assistance. Preliminary discussions and further project proposals resulted in a Project Agreement signed on March 3, 1983 between the Government of the Democratic Socialist Republic of Sri Lanka and Helen Keller International. The Project Agreement is with the Ministry of Plan Implementation. That agreement contains some of the following highlights:

- * HKI is to cooperate with the Government of Sri Lanka and local non-profit organizations to "implement a program in the prevention of blindness and rehabilitation of the already blind, to benefit and contribute to the welfare of the people."
- * HKI will provide short-term technical assistance for agreed upon activities with approval of the Government of Sri Lanka.
- * HKI is to submit annual financial and activity reports to the Ministry of Plan Implementation.
- * The Agreement is to be reviewed annually and termination of the agreement requires a 12 month notice by either party. Upon termination of the agreement, all vehicles, equipment, materials and supplies will be transferred to the Government of Sri Lanka.

HKI's mandate for development assistance is broad in scope and quite sufficient to encompass most HKI expertise. It demonstrates the interest of both parties in collaborating together with each other.

HKI has supported its initial development assistance in Sri Lanka through the matching grant program PDC-1078 of the Office of Private and Voluntary Cooperation, Bureau for Food Peace and Voluntary Assistance, of the U.S. Agency for International Development. That matching grant was for the period August 1, 1981 - January 31, 1985 and included several countries in addition to Sri Lanka (Peru, the Philippines, and Tanzania). A new matching grant followed that period, beginning on January 1, 1985, continuing through March, 1988.

In 1983 the Ministry of Health and HKI initiated the blindness prevention and primary eye care program in the central Kurunegala district. Three of the 13 MOH health areas of Kurunegala, Kuliyaipitiya, and Pannala were selected for initial project activities.

A survey was conducted in 1983 on the prevalence of blindness and eye disease in the area. Supplementary information was gathered on eye care service delivery systems in effect and used by the population. Additional information was gathered concerning attitudes toward the blind. In September 1983 a three-week field survey was conducted in Kurunegala in a random sample of 3,700 people and with 2,125 people examined. The prevalence of blind was 1.1% (see Table II-1) but could well be higher as an affluent area was averaged into the data.

The survey data indicated a significant blindness problem in Kurunegala district and a felt need for services in the area. A proposal and action plan was developed. From its inception the HKI intervention has been separated into two areas as follows:

1. Blindness Prevention and Primary Eye Care with the Ministry of Health; and
2. Community Based Rehabilitation implemented by the Sarvodaya Shramadana Movement.

B. Project in Relation to Country Needs

From the outset HKI and MOH have been cognizant that the eye care program must be integrated into the activities of an agency health care system of the Kurunegala district. In developing the project it was the clear intention to take advantage of the existing government primary health care programs and the ongoing network of medical/health personnel. Eye care services would be integrated into an ongoing program in much the same way that one would promote specialized health services within the health field context. An ancillary effect would be to introduce training, equipment and supplies, and organizational change which would most likely improve the entire system.

The community based rehabilitation program, with a somewhat

different developmental approach, was slated to take advantage of the existing field network of Sarvodaya in Kurunegala district. HKI did not choose to use governmental institutions such as the Ministry of Social Services and the Ministry of Education at the time of initial planning due to Sarvodaya's very strong and highly regarded position in the community.

TABLE II-1: PROJECT BASELINE DATA INFORMATION
KURUNEGALA DISTRICT SURVEY, 1983

MEDICAL

- * Blindness prevalence of 1.1%. 3,630 blind of 330,000 population
- * 70% of blind are 65 years or older
- * 11.3% of elderly population are blind
- * 58% of blindness is due to cataracts
- * 70% of blind could possibly have their sight restored immediately
- * About 30% of the rural population has vision problems

DELIVERY

- * A "good number" of people had cataract surgery. Three post operative cases were blind due to lack of follow-up
- * 42% of the rural population uses home remedies first to treat eye care problems
 - 27% use Western-trained doctors
 - 25% traditional healers
- * 67% of the rural population did not seek assistance for vision problems
- * 32% did not seek help for other eye problems
- * Over 35% of the people would not return to the place where they had previously received medical assistance
- * 25-35% gave "bad outcome" as reason for not returning.

SOCIO ECONOMIC

- * About 50% of the people have a family monthly income of less than 500 rupees (about US\$18)
- * 80% of the sample population in Kurunegala district would hire a blind person for simple skill tasks
- * 60% of the rural population would not allow a son or daughter to marry someone wearing glasses. The concern is that the person might lose their sight.

Source: Helen Keller International/Sri Lanka, "Sri Lanka Blindness Prevention Survey: Executive Summary," Mimeo, January, 1984.

C. Goals, Purposes, and Objectives

The project goals, purposes, and objectives are taken from the matching grant proposals, project agreements, and internal HKI documents and are summarized as follows:

1. Goals

- * To improve the quality of life and productivity of the urban and rural poor through the prevention and treatment of blindness, and through the restoration of those who are already blind to productive status in the family and community.
- * To have the preventive, curative and rehabilitative aspect integrated into national health and social welfare policy.

2. Purposes

- * Plan, implement and evaluate the degree to which preventive treatment and restoration services can be integrated into the delivery of primary health care.
- * Design, implement and disseminate innovative strategies to reduce blindness and eye disease, and to deliver services to those already blind.

3. Objectives

- * Reduce levels of blindness in Sri Lanka.
- * Improve eye care services in Sri Lanka.
- * Improve opportunities of the blind.
- * Influence public knowledge and awareness of eye care services and rehabilitation of the blind.
- * Assure viability of primary eye care services.

HKI/Sri Lanka does not have specific behavioral objectives that can be measured. Detailed information regarding action plans for a given year are also not available. This is congruent with the HKI/Sri Lanka evolutionary approach to project management in which project decisions are made on an on-going basis.

D. Strategies

HKI/Sri Lanka utilizes a "process-oriented", evolutionary approach to project management and implementation. This approach is quite flexible, and assumes a dynamic reality that takes into consideration changing circumstances, changed attitudes, and new features. HKI is concerned more with the process of setting up a

system rather than quantitative outcomes. This follows the perceived goal of setting up institutional processes, working through institutions, and in essence becoming a "demonstration effect" project.

The strategy is to set up a primary eye care delivery system in the Kurunegala district that can serve as a model or demonstration, and that can be integrated into the country's health and social infrastructure. This strategy includes three broad-based approaches:

1. Infrastructure development through institutional capacity-building and manpower development;
2. Delivery of primary eye care services;
3. Delivery of the Community Based Rehabilitation Program.

HKI's strategy follows a small scale pilot/demonstration approach that has not yet been fully field tested in Sri Lanka for impact over the long run. Institutional foundations have not, as yet, been laid for sustainable systems development. It is observed that HKI's decision making process, which is oftentimes ad hoc, may resolve an immediate problem but does not clearly lead, in all cases, toward a more systematic project approach. Constraints and bottlenecks may develop further along in this project as it grows and matures. These issues will be explored within this assessment.

E. Inputs and Outputs

The inputs of this project are:

1. Host country institutional personnel. The Ministry of Health and Sarvodaya are the two principal institutions involved in this project with officials, technicians and field workers contributing human resources to implement the two project components.

2. Host country infrastructure and systems. The project uses district level administrative offices, hospitals, clinics, dispensaries, schools, community centers, homes, vehicles, and in-kind contributions of equipment and supplies on a fairly wide scale.

3. Helen Keller International. Personnel, vehicles, equipment and supplies and resources for training, educational materials, and public education.

4. Other contributions. The project receives significant in-kind contributions of other national government and non-governmental organizations.

The intended outputs stated in the logical framework of the matching grant proposal have not been followed completely by HKI/Sri Lanka. Those eleven intended project outputs are:

1. Standard assessments
2. Education and training programs
3. Personnel training
4. Curricula/training materials
5. Public education strategies
6. System of referral
7. Specialized cataract extraction program
8. Aphakic lenses program for cataracts
9. Dissemination of training materials and curricula
10. Host country capacity and institutional development
11. Community participation/NGO groups

Outputs are not stated in quantitative terms for either the PEC/BP or the CBR projects. The project in Sri Lanka makes a sharp distinction between 1) Primary Eye Care and 2) Community Based Rehabilitation. Secondly, the activity components of each project are somewhat different and with different emphases. Therefore, the two different sub-projects are assessed separately in the following chapters.

III. EYE CARE SERVICES: PRIMARY EYE CARE AND BLINDNESS PREVENTION

This section assesses the PEC/BP program in Sri Lanka. The assessment follows a progression from program administration through to delivery, assessing the project implementation components as dependent variables and the inputs as independent variables.

A. Administration of Program

1. Ministry of Health

There is a commitment by the MOH to improve eye care and blindness prevention services in Sri Lanka. Evidence of this commitment includes a good understanding of the HKI program and its aims by the Deputy Director General of Medical Services. The MOH is aware of the various problems facing the program (e.g., manpower, bed space, and training opportunities) for health workers at all levels.

In June, 1987, at the time of this evaluation, the Kurunegala district health office made a strong commitment to take over the primary eye care program immediately and to expand to other regions within the district. At the national level, it is reported that the MOH has made a strong commitment to support the PEC/BP program and to expand into other districts.

2. Hospitals

The Kurunegala General Hospital and the eight peripheral hospitals have all willingly cooperated in this project, the first of its kind in Sri Lanka. It is due, in large part, to their collaboration that the program has achieved the levels of eye care service that it has to date.

While eye care has clearly improved throughout the hospital system, problems remain. For example, appointments to see the ophthalmologist at the general hospital may be difficult to obtain. Patients referred from peripheral regions must be accompanied by Sarvodaya personnel, and in some cases must wait overnight in order to obtain one of the 50 places on the waiting list for an appointment. Additional construction of more peripheral clinics has been suggested as a means to alleviate this problem.

3. Delivery

The impact of the PEC delivery in the district is considered under:

- * Coverage
- * Referral

- * Follow-up
- * Education
- * Reporting

Coverage. Coverage is satisfactory but the quantitative levels are quite low for a sustainable project. There are still some sections of the project area that receive minimal service by the public health workers (PHM, PHN, PHI) and there are other areas in which no service is presently taking place. There is some evidence that although the PEC services may be available, the population does not know about them and therefore does not use them to their best potential.

In the PEC's school screening program, 112,000 school children in the district have reportedly been screened for eye disease (14% out of the total population of 800,000.) This demonstrates a positive outreach program by the MOH to detect eye problems early, before they can program to a more serious stage.

Referral. The link from coverage to referral is important in a systematic development project. The first bottleneck and constraint on this system occurs with the drop-out of clients who have been referred to a health clinic or hospital for the proper treatment.

An estimated 6,720 children (6%) have been referred for check refractions (See Table III-1). However, only 1,608 have attended so far during the 12 months that the ophthalmologist has been offering this service. The ophthalmologist is able to see up to 100 patients per session twice a month (2,400 per annum) and it would appear therefore that this service is not being fully utilized. The reasons for this are the costs of traveling to attend the clinics, insufficient prior announcement of the clinic date, and perhaps that the screening personnel (public health inspectors) are not encouraging the headmasters to instruct the children to attend.

TABLE III-1: SCHOOL SCREENING PROGRAM

| POPULATION | SCREENED | REFERRED | ATTENDED | PRESCRIBED |
|-------------|----------|----------------|----------|------------|
| 8 MOH Areas | 14% | 6% of Children | ---- | Glasses |
| 800,000 | 112,000 | 6,720 | 1,608 | 505 |

Source: HKI/Sri Lanka internal files.

Another potential problem is that a replacement for the ophthalmologist is necessary, preferably with some technically qualified assistants also made available. Several ophthalmologic technologists have been trained by the Christoffel Blindenmission program; perhaps these could assist the ophthalmologist.

The system of patient referral to peripheral hospitals is only moderately effective. The reporting data is insufficient to give an accurate assessment of the number of patients that are referred and who actually take advantage of the eye care services. This is a good example of a problem that will become bigger as the referral system grows or is replicated.

Many patients prefer to try some traditional cures before agreeing to referral by the public health workers. The traditional healer (Aryvedic) still has a large following. This indicates that the rural populations prefer to go with a trusted service and with tradition. There still is that resistance to go to the primary health system for extensive eye care.

This is in spite of the extra eye training given to the Assistant and Registered Medical Practitioners (AMP, RMP) under the HKI program.

Follow-up. There is adequate follow-up of patients referred by public health (PH) workers. Most health workers know the outcome of the patient's visit to an eye clinic or hospital.

There are a number of patients who have had glasses prescribed spectacles but are not able to afford them. This usually applies to aphakic patients, although presbyopes are also involved.

Education. Public education about the goals and objectives of, and the services offered by the PEC/BP program has been given only a moderate level of attention by the MOH. This is due, in part, to other higher priorities of MOH work. There appears to be only superficial attention given to public education despite the fact that the health workers received training in educating the population about PEC/BP. For example, some patients are unaware that surgery is available for cataract and appear not to have been informed of this by the public health workers. Others were unaware that glasses could be purchased for as little as 66 rupees under an assistance scheme set up by the Ministry of Health.

Reporting. The case reporting of public health workers is good. It cannot be said, however, that there is a reporting management system. At present levels this is not a major constraint but could become more serious once the PEC/BP program expands.

There is a problem with the recording of visual acuity. This is

being recorded in a non-standardized manner. Visual acuity worse than 6/60 is frequently being recorded as 6/0, whether aphakic or not, and this will lead to inaccuracies in subsequent analysis. This could be rectified as part of a refresher course for public health workers.

At the DMO level the causes of eye diseases are recorded as cataract, refractive error or other. For better information, the latter category could be further divided into perhaps corneal and conjunctival conditions and others. The use of a standardized form for both categories of workers would improve data accuracy.

B. Cataract Surgery Delivery

1. Coverage and Referral

The numbers of patients referred and operated on for cataracts have increased dramatically since the program began. HKI has been instrumental in this both at the primary care and hospital levels. Public health workers have been trained to recognize and refer cases for surgery. The numbers of referrals and cataracts identified are estimated to have doubled in 1986-87 compared with the 1985-86 total (See Table III-2). The total cataract operations at the Kurunegala General Hospital and the three peripheral hospitals increased significantly in 1986-87 compared with 1985-86.

TABLE 111-2: CATARACT SURGERY

| | 1985/86 | 1986/87 (estimated) |
|--|---------|-------------------------|
| No. Bilaterally Blind Cataract | 4,800 | 5,424 ¹ |
| No. Referred with Eye Problem | 2,335 | 4,800 ² |
| No. Identified as Cataracts ⁴ | 438 | 912 |
| Operated | 192 | NA |
| Capacity | NA | 1,400 |
| Glasses | 39 | 350 |

Source: HKI/Sri Lanka internal files. Elaborated by evaluation team.

1. 17% increase
2. At December, 1986 rate
3. 25% of operated
4. 19% of referred

However there are problems at the primary care, referral, and hospital levels. As mentioned above, there are still patients bilaterally blind from cataract who are not aware that surgery is available. (In four villages, two out of 50 people interviewed, of all ages, knew of the service.) It appears that some public health workers are not emphasizing this aspect adequately. From the referral point of view, there are the usual fears concerning surgery, its outcome and the difficulties of taking an aged relative to the hospital. Many patients simply cannot wait for the surgery.

An additional problem of coverage is that some patients with a unilateral cataract are being operated on. Clearly their need is not as great as the bilaterally blind.

The main problems at the hospital level are lack of surgeons, operating time and beds at some locations. The number of blind from cataract in the project area is estimated to be approximately 4,800 (0.6% of the 800,000 population), increasing at about 17% (316 estimated) per year. Since 192 were operated on in 1985-86, the net increase is 624. The present rate of surgery therefore will account for the annual increase plus 776 of the backlog annually. This is less than the estimates in the 1985-86 annual report (HKI/Sri Lanka, Annual Report, 1985-86, p. 36). However, in six to eight years the backlog of blind cataract patients should be cleared.

Clearly more surgeons are needed and they must be allocated more operating time. Naturally this will necessitate more beds being made available for eye patients. In addition, more peripheral eye clinics and operating sessions will be required.

2. Follow-Up

After surgery 75% patients do not have aphakic glasses. Some are unaware that cheap aphakic glasses are available to them and some cannot even afford the 66 rupees for those glasses. There is also the view that these inexpensive spectacles are of inferior quality and patients are often given a prescription for more expensive glasses. These can cost up to 200 rupees, which they cannot afford on a monthly income of less than 500 rupees.

3. Education

As mentioned above, some patients are ignorant of the cataract surgery services available to them. The public health workers and AMP/RMP are effective in most areas but could devote more

time to educating people.

C. Training

Training is viewed as an independent variable to prepare health workers, doctors, and ophthalmologists to provide the PEC/BP services.

1. Trainees/People Trained

Health workers at all levels demonstrate good knowledge of eye care. The short term training (5-6 days) has equipped the workers to perform effectively. (In particular, the course given by the Kurunegala Hospital ophthalmologist has produced workers of an excellent standard). As could be expected, however, there is now a need for refresher training in several areas.

In the eight MOH areas currently in the project, there is a total of 40 Medical Officers, 68 RMP/AMP, 342 PH workers, and 1,767 PEC volunteers trained in eye care.

2. Curricula and Manuals

There are good manuals for workers at all levels except the MOH/MD/DMO level. The manual for the volunteer workers and for the PH workers and AMP/RMP are in Sinhalese. These manuals provide practical information for the health field workers and appear to be well understood. All health field workers interviewed demonstrated good eye care knowledge.

The course teaching material for DMOs trained by the ophthalmologist was of a high standard and could possibly be included in a small manual to be referred to by the DMO when necessary. The duration of the DMO level worker training was felt to be too short and did not allow enough time for training in ophthalmoscopy.

3. Trainers

The MOH has set up a good training system that uses regional health officials as trainers. This is positive since it incorporates regional talent and ensures that the MOH promotes its own PEC/BP program. HKI/Sri Lanka has provided a good role model in setting up this training program.

The ophthalmologist and the MOHs are all trainers of high standard and the expertise of those trained is testimony to this training.

4. Impact of Training

Training received by project workers has contributed to

Improvement in eye care at all levels. More people are aware of primary eye care and prevention of blindness. They are also aware of and receiving surgical services not previously available to them.

D. Supplies and Equipment

Supplies and equipment are also independent variables that support project implementation.

1. Eye Care and Surgical

HKI is supplementing the government drug supplies in the program area and, together with WHO, has provided sets of cataract instruments to the hospitals. While this is a relatively small input, it must be examined by the MOH for its implications for expansion. At present there is no systemic means for duplicating the provision of these supplies and equipment except through the donor-provided mode. This obviously cannot continue on a nationwide expansion of the PEC/BP program.

As mentioned elsewhere, aphakic spectacles are still beyond the means of many. A more systematic method for provision of cheap glasses will have to be devised if cataract patients are to be satisfied. It is these patients who will spread the word about the project.

Public health workers also require better and more practical vision charts. It is recommended that health workers have plastic eye charts and plastic public education flip charts as part of their equipment.

2. Training Materials

Existing training materials and aids are good, but are lacking in some areas of the program. If the high standard of training is to be maintained, training materials must be made available to all participants in the program.

3. Education

Public education materials for the public health workers and clinic workers need to be reviewed systematically to determine how best to provide public education and what kinds of materials are required. At present there are only minimal and sporadic attempts at public education.

E. Impact

Since HKI's involvement over the past four years, primary eye care and cataract surgery have improved among the limited population in 8 of the 13 regions within Kurunegala district.

The PEC/BP program has been well integrated into the existing district health system. Over 2,000 health workers have been trained at all levels of intervention. HKI/Sri Lanka has been instrumental in these developments while maintaining a low profile.

Expansion is possible given the present set-up. It would be prudent to expand to the other five MOH areas within the Kurunegala district so that there exists a district-wide PEC/BP program. This will be somewhat difficult due to the remoteness of these regions and the lack of hospital infrastructure.

In deciding upon expansion to other districts it is important to put into place certain management systems that assist in avoiding bottlenecks and constraints. Small problems can increase exponentially during an expansion phase. It would be prudent to review carefully all project components (e.g., coverage, screening, referral, surgery, public education, follow-up) before expansion to the new districts.

IV. COMMUNITY-BASED REHABILITATION

The Community-Based Rehabilitation (CBR) project in Kurunegala district is distinct from the PEC/BR program, and has a different background, developmental approach, and institutional model for providing blind rehabilitation. The institutional issues of support, integration, and dependency on international funding are some of the most fundamental issues in program development being addressed and reviewed by HKI. Providing blind rehabilitation and opportunities to rural populations at their home site is an important model to be reviewed.

CBR has been at the cornerstone of the HKI outreach programs worldwide and represents a fundamental approach to providing basic rehabilitation services to rural blind persons. The internal project components assessed in Kurunegala are adequate for providing a small and limited blind rehabilitation program. However, HKI is aware of difficulties with the present approach that will affect how it can be expanded, replicated, have policy impact, and maintain good equitable coverage given the present administrative and programmatic strategy within Sarvodaya. These issues are discussed below.

A. Background/History

In 1981 the Sarvodaya Movement began efforts to provide community-based rehabilitation for the rural blind, in Colombo South and Kalutara. Nine field workers and one supervisor were trained by HKI/NY to work with the rural blind, which they did for three years. When Sarvodaya's international funding terminated the program stopped. However, Sarvodaya's interest and commitment to continue to provide those services remained.

In 1983, following a series of talks with various government and Sarvodaya personnel, HKI approached the Sarvodaya Movement to collaborate on the CBR program in Kurunegala district. Sarvodaya agreed to hire field workers for the CBR program. The Sarvodaya Movement has a long-standing reputation in Sri Lanka as a solid community oriented NGO with worthwhile and accepted goals.

Rehabilitation of the rural blind started in Kurunegala district in April, 1984 in the medical/health areas of Kurunegala, Kuliyaipitiy, and Pannala. It began with 20 Sarvodaya field workers and two supervisors. The HKI CBR Sarvodaya Coordinator provided general coordination, supervision, and direction for the initiation of this project.

In September, 1984 additional field workers were trained by HKI and the work was expanded to the remaining areas of Kurunegala district. As this project evolved the delivery system was designed to include the following services:

- * Orientation and mobility
- * Daily living skills
- * Manual dexterity skills
- * Recreation activities
- * Counseling
- * Social integration
- * Employment assistance/vocational training

Through mid-1987 the project has fulfilled the following:

- * 450 blind people identified and cases reviewed
- * 250 blind people served and/or presently served
- * 15 new cases in 1987
- * 125 blind people being served in mid-1987

In addition this project has trained the following people:

- * 52 field workers
- * 5 supervisors

In mid-1987 there are currently 42 field workers, 5 supervisors, and one administrator. There has been some turnover of personnel as field workers have vacated positions or been promoted to field supervisors.

The program follows a well-tested HKI CBR model of training community-based field workers to provide full scale services to rural blind people in orientation and mobility, daily living skills, and employment skills so that these individuals can be independent, productive members of their families and villages. Most importantly, the blind individual is treated in the context of his/her home environment and individual needs. In a holistic approach the field worker is concerned with integrated services including increasing the client's awareness of available governmental and nongovernmental services and resources, as well as assisting in the development of income generating activities where possible.

B. Administration

1. Sarvodaya Movement

This Sri Lankan NGO is the project implementation agency in Kurunegala district. Field workers are experienced Sarvodaya community development workers, many of whom are teachers who dedicate 50% of their community development effort to the CBR program. HKI makes a financial payment to Sarvodaya who in turn pays the workers and supervisors to cover travel expenses and a token volunteer subsidy established by Sarvodaya.

Sarvodaya provides an important institutional role in supporting the project. Unfortunately, due to changes that have taken place

In the country since 1984, Sarvodaya has been unable to integrate the CBR program into its overall community development strategy. The concern now is that Sarvodaya will not be able to support this CBR program without outside financial assistance. Sarvodaya has been reluctant to take on the program more fully with this potential future limitation. HKI is aware of the crucial need to address this sustainability issue and has pursued talks with Sarvodaya, the Ministry of Social Services and the Ministry of Education. User fees, national funding, self-financing of Sarvodaya or other schemes should also be explored. Without such funding there is serious danger that the current program will stop once HKI's financial support is withdrawn.

A somewhat related issue is the resignations of Sarvodaya employees, both from the Sarvodaya Movement itself and from the CBR program. About 13 trained field workers have resigned, perhaps due, in part, to low salaries or better job offers elsewhere. Often, better employment is offered because of the CBR training the workers have received.

2. Government Institutions

Because of Sarvodaya's involvement, the Ministry of Social Service in Kurunegala district has a minimal role in providing direct services to rural blind persons. Ministry of Education school teachers assist pre-school blind children. Primary Eye Care health workers are associated with this project through referrals and eye testing. However more should be done to integrate these various components into the CBR program.

3. Helen Keller/Sri Lanka

HKI/Sri Lanka provides one field coordinator and overall guidance by the country director. HKI consultants and headquarters staff have been instrumental in providing useful project guidelines, staff training, curriculum development, and educational materials. The combination of these services has been positive for bringing about the high degree of professionalism which is present in the CBR staff.

C. Staff Training

Staff training is viewed here as an independent variable to implement the project components. Appropriate and relevant field worker training is the cornerstone of this project since these workers must work one-on-one with clients. HKI has provided good technical expertise, and has done all field worker training with its consultants, staff in other countries, and the HKI/Sri Lanka CBR Program Administrator, who is a member of Sarvodaya. Training skills for personnel other than this administrator have not been incorporated into the Sarvodaya institution.

The training curriculum follows the three general areas of 1) orientation and mobility, 2) living skills, and 3) income generation. HKI's "Training Guide for Field Workers" manual, written with Indonesian field background but generic in nature, and field tested in Sri Lanka, is excellent for present purposes. It has the potential for wider use in the Sri Lanka program if it is made available in an adapted and reduced form for a wider audience of school teachers, MOH officials and field workers, families, and others who may also be able to do CBR training with family members.

The result of training is that field workers perform quite well in orientation and mobility, and living skills. There is some constraint on income generation performance indicating further training is required.

HKI has addressed the need for on-going training of new staff members, through apprenticeships, mini-workshops, and informal one-on-one training by supervisors. Supervisors have the potential to become master trainers and to update the field workers through refresher courses.

D. Delivery System

The overall CBR delivery system functions well but with limited coverage to date and some specific constraints that will affect long term outcomes.

1. Client Identification

Historically, field workers have been trained to identify potential blind clients at the household level. HKI is now assessing the effectiveness of other possibilities for identifying clients through a community leader contact system. Operationally, through this approach the field workers would interview school children, and key village informants, in order to identify new clients. The results of this assessment will be useful within the Sri Lankan program as well as to other CBR country projects.

It is reported that 450 blind cases have been identified and received during the 1984-1987 three-year period. At the start-up phase there were 2,400 permanently blind people of varying ages and rehabilitation needs throughout the eight regions of Kurunegala district, who constituted potential clients.

- * 8,000 blind in Kurunegala district as one percent of 800,000 million people
- * 5,600 cataract blind (70% of 8,000)
- * 2,400 permanent blind (30% of 8,000)

At the present level of operation and the given strategy it will

be most difficult to reach larger numbers of people over the next few years. However, it is expected that this number can be increased substantially as the project is now modified and can be better integrated within Sarvodaya and other government ministries.

2. Client Training

Forty-two field workers provide orientation and mobility, daily living skills, and employment generation assistance to 168 blind clients in mid-1987. (This includes 147 adults and 21 pre-school children.) Each worker has an average of four clients, although some may have as high as seven clients and other as low as two clients. Each CBR Sarvodaya field worker provides 50% of their job time to their clients, recruiting new clients, and attending monthly staff case review meetings. Each CBR worker spends five hours per day on CBR activities, or 25 hours per week; roughly six hours per person per week.

However, this plan often gets disrupted by other activities such as the identification of new clients, meetings, and travel time. Effective training time with clients is reduced to 2-3 hours per client per week. Over a six month period of rehabilitation with a client it is reported that the CBR workers provide 50 hours of effective orientation and mobility and living skills training.

The delivery of services demonstrated a high degree of skill, indicating solid understanding of the techniques and strategies to be used. CBR field workers use implementation plans, notes and handout sheets received in training. The CBR training manual serves as a resource for the Field Supervisor and Administrator.

3. Case Review

Each client requires a different action plan based on a careful assessment of age, self-reliance, degree of past independent mobility, and other factors. Each case is reviewed in the monthly staff meetings and action plans are revised. Some clients may never go beyond Stage I of orientation and mobility, while others may work up to Stage III of employment and vocational assistance. This process is in line with the program emphasis on appropriate, individualized training.

4. Income Generation Activities

Sarvodaya's promotion of vocations, employment, and income generation is a positive aspect of this project, designed to promote self-reliance. In mid-1987 there are about 50 people enrolled in this program in the areas of:

- * Agriculture production at the subsistence level with some cash crop potential;

- * Artisan and cottage industry activities of mat weaving, knitting, chair repairs, bicycle repairs, etc.;
- * Production of flower pots, crafts, and other items.

Sarvodaya provides financial assistance in the form of small loans (up to 500 rupees, with no interest) to start a cottage industry or business activity; repayment is in monthly installments after a 3-5 month grace period. Although this low level capital revolving fund may be appropriate for Sarvodaya's general loan program, it may limit the potential of some clients. The loan program should be reviewed with the possibility of expanding employment opportunities for blind persons on a larger scale.

E. Public Education

It is important to disseminate information about the CBR services in Kurunegala district in order to recruit more potential clients in the program and also to motivate families to rehabilitate their blind family members. This can be done with simple guidelines, posters, photo-novellas, manuals, and educational games. Since the CBR program has focused uniquely on training to date, there are currently only the initial elements of a public information strategy that could enhance the program.

The rough cut of the video explaining the CBR project was reviewed. It is a good presentation of the project components of identifications of clients, recruitment, case review, orientation and mobility training, and employment generation. It could be used for broader presentation as well as for training, and should be reviewed by project staff for use with the Kurunegala district's targeted audience. It may also be useful for the project staff to assess and develop a more in-depth approach to implementing a well-organized community public education strategy that will fully expand upon current efforts.

F. Impact Assessment

The Sarvodaya's CBR project has many positive elements which could be developed into a comprehensive demonstration effect project. When consolidated, streamlined, and made systemic, it can be expanded and adopted in the district and elsewhere. The positive elements include: 1) utilization of a respectable Sri Lankan institution as the implementing agency; 2) excellent field worker training; 3) good one-on-one training of clients; and 4) dedicated HKI staff and Sarvodaya supervisors.

At the same time some project elements require reinforcement to make this a well-functioning project. These include: 1) the time consuming case review process; 2) client identification strategies; 3) utilization of field workers in direct CBR training; and 4) limited income generation projects supported by

restricted loan funds. These aspects should be reviewed.

It is suggested that the CBR program could benefit from a major systemic management review such as was initiated through this evaluation. It is also recommended that other approaches for the delivery of CBR services be explored, utilizing the technical experience, expertise, and program planning know-how of HKI/NY and field staff. This is crucial for institutional development, which will contribute to program sustainability.

V. PROJECT ADMINISTRATION

A. Planning and Design

HKI/Sri Lanka has relied on a substantial degree of guidance from the HKI/New York headquarters for policy direction, planning of project components, and project design. Initial research and surveys emanated from the HKI headquarters. Matching grant proposals and logical framework designs came from outside the country. One result is that the logical framework "language" is not well-known nor adhered to within the country, while the essence of it is understood.

Even though initial planning and design came from outside, the HKI/Sri Lanka staff has evolved working arrangements based on their evolutionary approach. In practical terms this means that while the HKI headquarters may be "result or quantitatively" oriented, the field operation is process-oriented.

HKI has some very well-tested strategies and methodologies worldwide for implementing PEC/BP and CBR programs in developing nations. These strategies are based on "lessons learned" and are integrated effectively into HKI's proposals to funding sources and in a great many valuable publications. However, in some cases, HKI/Sri Lanka is still experimenting with approaches and strategies that one would think are already conventional wisdom.

B. Project Management and Staffing

The HKI/Sri Lanka staff is as highly dedicated and committed a group of individuals as you will find anywhere in the world. They work as a cohesive unit and with a common philosophy.

The Country Director has full responsibility for all aspects of the program. His work style is "process-oriented", with the long-term goal of having the HKI program concepts accepted and integrated into the national programs. This philosophy permeates all of his actions.

The Field Coordinators serve as regional directors for the PEC/BP and CBR projects respectively. Both are well-qualified individuals and have intimate knowledge of their programs. They also work well together in the field office in Kurunegala district.

Other support staff consisting of the regional office administrator, the home office administrator, and the two drivers demonstrate equal competence.

The imminent departure of the PEC/BP Field Coordinator will create a vacuum since he has the additional responsibility of financial reporting. HKI/Sri Lanka should take this opportunity

to explore ways that the Ministry of Health in Kurunegala district can take over this aspect of the project.

C. Headquarters Support

HKI/New York provides ongoing staff and consultant support for this project. There is some slight "dependency" on the outside technical assistance to bolster certain project components. For example, there is a large degree of input to the CBR program from outside consultants in the areas of training, survey design, and field trips, which provides direct outside intervention into the project.

Headquarters provides excellent and ongoing moral support, physical presence, and continual communications to and from the field.

It is recommended, if possible, that headquarters pass on to HKI/Sri Lanka certain state-of-the art publications and documents that assist in implementing strategies and methodologies.

D. Provision of Supplies and Equipment

HKI/Sri Lanka receives supplies and equipment through HKI/New York with no apparent difficulties. Other supplies are purchased locally again without difficulty. The records appear to be in good order.

The distribution of supplies and equipment is done in a positive manner that follows the project management style, with the objective of being a colleague rather than a bearer of gifts. We observed the transfer of several pieces of equipment to the local level, and it is done in a meaningful way within the context of the technical cooperation style.

E. Relation to AID

The HKI/SRI Lanka relation to USAID/Sri Lanka is good. The USAID PVO office supports 37 local projects with a \$5 million program over a six year period. It also monitors to a certain degree the AID centrally-funded projects of American PVOs.

VI. INSTITUTIONALIZATION OF PROGRAM

This section begins an assessment of certain factors that affect the institutionalization of this program.

A. Project Relation with Ministry of Health

The Ministry of Health supports several different eye care model projects in Sri Lanka. They do not compete for attention but rather add to a comprehensive eye health care program. The HKI PEC model is viewed as the most comprehensive and integrated approach for eye health care delivery in one district. Ministry officials view this demonstration project positively and want to expand it to other districts.

Ministry of Health officials look to HKI for guidance and implementation strategies. They view the project as feasible within the context of the Ministry's financial and personnel resources. In this sense they are pleased that the model can be expanded without placing unnecessary pressure on the entire primary health care delivery system.

At the district level of MOH, HKI is viewed as an international colleague with common goals and objectives. HKI's non-pressured approach, as well as its low budget working style, are welcomed.

The CBR program has no governmental affiliations. The Ministry of Health has not expressed any interest in CBR since it believes that responsibility lies with other ministries.

B. Relation with PVOs and International Organizations

HKI/Sri Lanka maintains good relations with the national and international PVOs or NGOs working in eye care in Sri Lanka. It has working relationships with UNICEF and WHO. Again, their non-threatening approach could be their most positive attribute in this case.

In Sri Lanka there are competing philosophies, models, and working operations that could be potentially explosive. Possible sparks areas of conflict include issues such as: 1) training of paraprofessionals for cataract surgery; 2) establishing less than holistic eye camps for quick quantitative advances in cataract surgery; or 3) research into causes of certain eye diseases. While HKI/Sri Lanka has policy orientations on these issues, they prefer to maintain a low profile in their daily work so as to affect these changes from the inside. The result of this approach is a steady and almost calming positive effect on the eye care field in the country.

C. Evidence of Institutionalization in Country

In discussing institutionalization it is important to differentiate between the two separate projects of PEC/BP and CBR.

In the past four years the PEC/BP program has had slow and steady acceptance by the Ministry of Health as an effective eye care delivery system. By mid-1987 the Kurunegala district had taken over the project as its own. Ministry of Health officials intend to expand the PEC/BP model to other districts. Training approaches have been accepted as the most effective way of getting information to rural families, and the referral system is viewed in a most positive light.

The CBR program requires further refinement if it is to have the stature of the PEC/BP program. There is only initial recognition by the Ministry of Social Services that the CBR approach is viable. The Ministry of Health is reluctant to get involved in CBR at present and thus it is a low priority for them. The Ministry of Education accepts some concepts of the CBR approach but does not accept the additional burden of providing blind rehabilitation in rural areas. Sarvodaya itself has made no gesture towards adopting this program into its already full and comprehensive integrated rural development program.

D. Counterpart Commitment

Ministry of Health officials at all levels, from MOH headquarters to the volunteer field workers, demonstrate good commitment to the PEC/BP program. There is a high level of cooperation and collaboration, with minimal conflict. Through verbal statements and actions the confidence, pride, and dedication of these people are obvious.

Sarvodaya provides good rural development projects and relies on international financial support for its programs. Field workers show high commitment to working with rural blind people. However, there is a high turnover of personnel, with low salaries causing employees to seek employment elsewhere. Sarvodaya staff make gestures of support for the project but there are only few actual examples that back up their commitment.

E. Technology and Methodology Impact

Some ophthalmic surgical equipment has been introduced into two district hospitals. Other low-cost surgical equipment is also provided but it is not totally new for Sri Lanka. HKI has introduced low-cost spectacles and is attempting to get national manufacturing firms to produce these at prices poor people can afford. In general, however, the equipment technologies are not viewed as outstanding.

Methodological impacts are more considerable and noteworthy. Through implementation and catalytic activities HKI has made considerable achievements that can affect the district-level primary health care system. These include:

- * A training system that is action- and result-oriented rather than general training with no end purpose. End-of-training expectations are that public health personnel will perform specific functions. The same holds true for CBR field workers who are expected to carry through with an action plan.
- * A referral system which is systemic in that field workers refer patients upward to receive proper treatment.
- * CBR case reviews, which demonstrate the importance of reviewing cases to assure proper action plans in the field. They also demonstrate the efficacy of maintaining contact and coordination with, and support of the CBR field workers. While the system requires refinement it is still a good methodology.
- * A demonstration project which emphasizes how specialized health care components such as eye care programs can be integrated into on-going primary health care programs with minimal interruption and resistance, and within the financial capabilities of MOH.

F. Spin-Off Effects

The project is demonstrating to other national and international PVOs in Sri Lanka the benefits of a low-key process-oriented approach to introducing an additional health component to the rural development programs of the MOH and Sarvodaya. Other organizations can observe and assess the advantages and disadvantages of this approach. Whether one accepts or rejects this process-oriented methodology, it is helpful to view it in operation.

HKI, in this sense, adds its distinct contribution to the continual discussion and debate of how best to provide primary health care in Sri Lanka and elsewhere. That debate includes how to reduce the number of untreated cataract cases, how to train field workers and at what levels, how to organize and implement a referral system, and how to provide follow-up.

Some results that were not foreseen in the project plan include:

- * Use of primary eye care clinics (PEC clinics) as an intermediate step in the system for treating cases referred by field workers.
- * Vision clinics for school children, providing examinations and

referrals for corrective lenses.

- * Involvement of the Public Health Inspector (PHI) in monitoring drug stores that sell lime in plastic bags and encouraging the abandonment of this practice. Also, his involvement in public education to promote occupational safety through the use of goggles is notable.
- * Use of volunteers is much more extensive than originally planned. Training of community volunteers sets up good community involvement in both eye care and rehabilitation programs.
- * Satellite cataract surgery centers established.
- * Equipment and supplies from WHO to the MOH are set aside specifically for HKI use in the PEC/BP program.

G. Sustainability/Replicability

The PEC/BP demonstrates good potential for sustainability and replicability by the MOH. There are public statements by high level MOH officials that there will be expansion in at least one and possibly two other health districts. It is envisioned that the demonstration project will be used elsewhere with essentially the same model. There are some requirements for refining certain project components such as the referral system, and the reporting system, and ensuring that cataract surgery services are in place to meet the increased demand.

The CBR model can also be sustained within Sarvodaya. As stated, it will require commitment by the national NGO and a specific plan which will demonstrate this commitment. At present there are no definite proposals by the Ministries of Health, Education, or Social Services to replicate this program in other areas; however, HKI has been attempting to address this need and to bring parties together for planning.

VII. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

HKI/Sri Lanka has two rather different service development approaches in its PEC/BP and CBR programs. They operate in the same district but with two different implementing agencies. Their historical roots are different and they have only minimally interacted with each other. They make interesting case studies for examination of sustainability, replicability, and policy impact.

The PEC/BP has good prospects for sustainability because it has been worked into a well-structured MOH primary health care system. It can be replicated because of a low cost methodology, perhaps with the exception of cataract surgery services, which does not require any major changes in the MOH. There is sufficient evidence of moderate policy impact within the country.

On the other hand, the CBR cannot be sustained beyond Sarvodaya because it is entirely dependent on outside funding. There has been only minimal involvement of government agencies in the development of this CBR program to date. If replicated in its present form the quantitative coverage should be assessed more fully. There has been little policy impact within Sri Lanka because of the limited scope of the project.

HKI/NY and Sri Lanka field staff are open to review specific recommendations and revise project areas as are being presented in this report.

B. Strengths and Weaknesses

This final section summarizes the strengths and weaknesses for both the PEC/BP and CBR programs. The assessment provides a flow analysis for each program separately and lists recommendations for alleviating the identified weaknesses.

1. Primary Eye Care/Blindness Prevention

Strengths

- * Good health care system functioning in Kurunegala district that has most major components in place to integrate eye care into the existing health care delivery system.
- * HKI has adopted a low key collaborative working operation that functions within the general health care framework of Kurunegala district and that does not provide an overriding burden or stress on the present system.

- * HKI has provided respected and professional judgment in serving as a catalytic agent, coordinator, and provider of meaningful technical cooperation.
- * The Ministry of Health, WHO, and other observers have recognized that the eye care program is acceptable and respected by the national ophthalmologist community so that there is no apparent resistance to its functioning in Sri Lanka.
- * The project provides eye care services that were not previously provided in any systematic way.
- * A cadre of public health workers at all levels have been trained and have good understanding and positive attitudes about providing this service in the district. Good training manuals and guidelines also have been prepared.
- * The PEC/BP program demonstrates a low key model that can be adapted by other institutions and that can be expanded within the country.
- * Good referral system in which field workers identify and screen eye patients and if necessary refer them to the appropriate level to receive which proper examinations and treatments.

Weaknesses

- * A less than adequate management system in which the entire program is not viewed in systematic terms but rather in a reactive fashion.
- * A referral system that does not function smoothly at all levels and that has some bottlenecks at the primary, secondary, and tertiary levels in the delivery of services. This is particularly due to some monitoring and supervision elements which are not in place.
- * Inadequate standardized eye medical forms that cause inefficiencies in reporting information up through the delivery and referral systems.
- * Inadequate availability of cataract surgical services that keeps levels of services to a minimum and impedes possible impact and coverage.
- * Certain project components that require systemic and managerial refinement so that all are functioning fully, and so that the project can provide a more effective and efficient program in Kurunegala district.

- * There is a slight deficiency in using well-tested communication, educational, and training strategies to ensure that the inputs made will provide the most effective and efficient outputs.
- * Project staff concern balances qualitative concerns with quantitative outputs and sometimes loses the optimum results. While this may be appropriate to some degree the bias toward this orientation has obvious negative consequences for the overall effectiveness of the project.

2. Community-Based Rehabilitation

Strengths

- * A cadre of well trained field workers who perform well in orientation and mobility and daily living skills with blind clients.
- * Good case review procedures and processes to ascertain specific problem areas, support changes, and develop individualized training plans for clients.
- * Good beginning for a low-level income generation program for about 50 adults in agriculture and cottage industries.
- * Good video documentary, although still rough cut, for promoting the project throughout Sri Lanka.

Weaknesses

- * Sarvodaya's inability to make a full institutional commitment to the CBR project due to political and economic changes in Sri Lanka since the program was initiated. HKI staff is aware of the need to demonstrate program sustainability and replicability and are working to find solutions within Sarvodaya and government agencies.
- * A need to improve the management system for more efficient and effective client identification, recruitment, case review, and follow-up based on operational research now being completed. In assessing the project there most likely will be substantial and fundamental changes that will be required in the present project make-up that the HKI staff is willing to move ahead with these changes.
- * A well-intentioned income generation program that has good potential, but which should refocus on higher-level expectations with better employment opportunities, increased capital revolving fund, and give more credence to this project component in the overall project scheme.

- * A need to improve recognition of CBR and its potential by initiating a public information effort with booklets, training manuals, and guidelines for families with blind members.

C. Recommendations

1. Primary Eye Care

- * Conduct additional surveys, including a National Eye Survey, to provide relevant information for program planning, data bases, and eye health care in general. This should form the basis of future program planning and review.
- * Establish a National Eye Care Policy that encompasses the various public and private institutions involved in eye care in Sri Lanka, and which includes a means for integrating this policy into the national health care program.
- * Establish guidelines for eye care programs including specific objectives and procedures at all levels, which use some of the more positive aspects of the Kurunegala district model experiences.
- * Establish standardized forms for recording eye health information so that it can be used in a systematic fashion at all levels within each given district level program.
- * Establish a Blind Registry that will facilitate future planning of blindness intervention programs.
- * Investigate further training for public health workers and surgical training for ophthalmologists, with short-term combined courses for both groups.
- * Encourage MOH to provide trained ophthalmologists for peripheral hospitals as soon as possible. Increase bed space for eye patients in specific locations.
- * Encourage MOH to provide funds for drugs, dressings, and instruments, for any planned expansion of this project.
- * Provide more eye clinics and cataract surgery sessions at peripheral hospitals to reduce the backlog of blind cataract patients.
- * Provide short term refresher courses for public health workers to improve their expertise. Design and issue plastic testing charts and teaching aids.
- * Establish collaborative arrangements with traditional healers who are providing eye care services at present.

- * Provide refresher courses in cataract surgery for public health workers so that they can disseminate information to clients in order to alleviate their fears about this surgery.
- * Tighten up and systematize the school screening program.
- * Conduct refraction clinics at more widely distributed sites thereby reducing the distance patients must travel to be seen.
- * Train more personnel in appropriate refraction techniques in order to have additional manpower in the clinics.
- * Provide mechanisms for low cost aphakic and presbyopic spectacles through the establishment of a cottage industry, with support from HKI and MOH.
- * Relocate the distribution point for aphakic glasses from the eye clinic at Kurunegala General Hospital to the office of the Medical Officer for Hygiene.
- * Promote media education programs that provide information on eye care to wide audiences.
- * Provide public education about cataract surgery and eye disease with a systematic and well planned communication strategy. Update teacher aids such as flip charts and animated videos.
- * Standardize visual acuity testing forms for reporting results.
- * Upgrade the classification system for causes of eye diseases and expand this reporting system to include more useful information.
- * Provide better teaching aids for the ophthalmologist. Trainees at DMO level should be provided with a manual of basic ophthalmology for subsequent reference.

2. Community-Based Rehabilitation

- * Request that Sarvodaya set forth clear and specific action plans for its involvement in the CBR program, including how it will institutionalize this program once HKI work is terminated.
- * Negotiate and implement MOH and Sarvodaya relationship at the Kurunegala district level so that the two project components are well-coordinated.
- * Assign one person from Sarvodaya at staff level as Employment Generation Coordinator to work with the blind people in income generation.
- * Establish a capital revolving fund of at least US\$10,000 to

increase types of employment activities.

- * Hire several "graduate" blind people as permanent staff members who can participate in program planning, training, expansion.
- * Organize group meetings of blind people, with family and other community members, for regular opportunities to share concerns and experiences.
- * Provide guidelines for families so that they can more fully and actively participate in the rehabilitation process.
- * Edit and publish a Sri Lanka training manual and make it available to wider audiences of school teachers, MOH officials, field workers, and rural families with blind members.
- * Establish five master trainers within Sarvodaya, who can carry out on-going training of field workers and new employees coming into the program.
- * Conduct media social marketing campaigns about the CBR project.

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BIBLIOGRAPHY

A. General

American Council of Volunteer Agencies, Evaluation Sourcebook, 1983.

Arigaratne, A.T., Collected Works, Volume I, no date.

Helen Keller International, "Matching Grant Proposal," 1984.

Helen Keller International, "Annual Report 1985/86," 1986.

Helen Keller International, "To Restore Sight: The Global Conquest of Cataract Blindness," 1986.

Horton, J. Kirk, "Community-Based Rehabilitation of the Rural Blind: A Training Guide for Field Workers," Helen Keller International, 1986.

B. Sri Lanka Specific

Campbell, Lawrence, "Trip Report: Sri Lanka, February 20 - March 7, 1987," 1987.

_____, "Sri Lanka Trip Report," June 28 - July 6, 1985.

Government of Sri Lanka, "Agreement Between the Government of the Democratic Socialist Republic of Sri Lanka and Helen Keller International of USA," 1983.

Harary, Joel, "Protocol: Cataract Operation Sessions in Sri Lanka," Helen Keller International, 1987.

Helen Keller/Sri Lanka, "Annual Report 1985-86," 1986.

_____, "Primary Eye Care in Sri Lanka, Manual for Assistant Medical Practitioner and Registered Medical Practitioner," no date.

_____, "Manual for Public Health Nurses, Public Health Inspectors, and Family Health Workers," no date.

_____, "Manual for Community Volunteer Workers," no date.

_____, "Quarterly Report July-September, 1986," 1986.

_____, "Quarterly Report October-December, 1986," 1986.

_____, "Quarterly Report January-March, 1987, (draft), 1987.

_____, "Sri Lanka Blindness Prevention Survey, Executive

Summary," 15 pp., mimeo, 1984.

_____, "Training of Primary Health Care Workers in Primary Eye Care Curriculum," 3 pp., mimeo, no date.

_____, "Sri Lanka Strategy Framework for Prevention of Blindness and Visual Impairment," 10 pp., mimeo, 1985.

_____, "Final Report Matching Grant PDC 1078," May, 1985.

Munasinghe, Tilak, "Health Manpower Development for Ophthalmic Services in Sri Lanka," 1984.

Siemon, C.R., "Blindness in Sri Lanka," paper for SLMA Session, 8 pp., 1986.

Texley, Ron, "Trip Report: Sri Lanka, October 14-22, 1986," 1986.