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HELEN KELLER
INTERNATIONAL

Detailed Implementation Plan for:

Project SEE II and the Childhood Blindness Amendment

May 1997

submitted to:

United States Agency for International Development
Bureau for Food and Humanitarian Assistance
Office of Private and Voluntary Cooperation

Award No. FAO-01580A-00-6048-00
Matching Grant 1996 Funds

John M. Palmer
President

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Project S.E.E. II
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Section A.DIP TIME LINE / SCHEDULE OF ACTIVITIES

A.1 Time line attached. Please see Appendix II.

Section B. LOCATION AND FORMAL AGREEMENTS

B.1 Location Description

Bangladesh is one of the world's poorest nations facing a dire population crisis. Bangladesh has been the site of a very successful HKI effort to curb nutritional blindness by encouraging home gardening, promoting nutrition action through a nutritional surveillance project and conducting national vitamin A surveys.

B.2 Location Justification

Bangladesh currently has very limited resources to deal with the problem of childhood blindness. Therefore, HKI's proven track record in this field, the scope of the problem, as well as our current presence in Bangladesh, justifies this initiative.

B.3 Formal Agreements

HKI maintains formal agreements with the Institute of Public Health Nutrition, 45 NGO's the, Directorate of Social Services of the Ministry of Social Welfare and the Department of Agricultural Extension, Ministry of Agriculture with NGOs Affairs Bureau.

Section C. PROJECT DESIGN

C.1 Baseline Survey

All data currently available on children between the ages of 0-15 in Asia indicates a blindness prevalence of 0.9%. A conservative estimate of children blinded by vitamin A deficiency, retinopathy of prematurity and congenital cataract in Asia is 1,080,000.

C.2 Goals and Objectives

See attached Table I.

C.3 Project Design

HKI's strong track record with blindness prevention programs in this developing country (including the establishment of the highly successful home gardening initiative which has safeguarded thousands of children against nutritional blindness), and congenital cataract surgery programs elsewhere, will help guide the project design. Many of the details of the design will be worked out during this calendar year, and HKI will submit a final design to USAID when it is available.

The project will establish a children's cataract surgery center at Chittagong Eye Infirmary and Training Complex. This center will be staffed by 5 collaborating ophthalmologists, under the direction of Dr. Rabiul Hussain, and will provide screening and diagnosis and surgical intervention to those who require it. In addition, local physicians and nurses will be trained in primary eye care techniques as described earlier in this DIP. Under the amendment to the Project SEE II grant, the project will also address the problems of childhood blindness due to congenital cataract. This will be accomplished by :

- Training doctors and nurses from the rural and semi urban areas in identification and referral of children with congenital cataract.
- Providing, if necessary, the equipment to test and treat children for congenital cataract to secondary and tertiary hospitals.
- Providing encouragement, professional advice and knowledge to doctors who are willing to provide comprehensive follow-up to children who present.
- Removing obstacles which prevent parents from bringing their children for diagnoses and treatment (including transportation funds, overnight stays, and the need for multiple visits from remote areas)
- Ensuring that every child receives the optimal visual experience through the use of corrective eye wear, strabismus surgery if necessary, and the training parents and social workers in the use of low vision aids.
- Enabling local health workers and trainers to provide proper and sustained follow-up to the parents of the children involved and thereby ensuring that the child with low vision can develop independence.

C.4 Project Evaluation

In year 2, a consulting ophthalmologist will also monitor and evaluate the project. The project will be evaluated by HKI country staff including the Country Representative in Year 3 of the grant. HKI headquarters staff will closely monitor the progress of this center.

C.5 Training Plan

The training calls for local health workers to receive instruction in cataract screening and referral. Local ophthalmologists will receive training in surgical techniques. The initial training involves instruction in anatomy and physiology of the eye. Subsequently, the participants are provided with basic information on the prevention of blindness, visual acuity screening, a graphical description of the most common eye

diseases, and general recommendations on their prevention. Community health workers will be trained in following-up with congenital cataract patients in order to ensure their visual rehabilitation.

Section D. PROJECT INFORMATION SYSTEM

D.1 PIS Plan

Data will be collected and analyzed by an epidemiologist, HKI technical assistant/consultant for Bangladesh and Cambodia. HKI headquarters staff, including the Director of Eye Health and the Medical Director, will analyze the data and use the results to modify and direct the project.

D.2 Data Collection and Use

Each evaluation will assess the quantitative data achieved including:

- Number of cataract surgeries
- Number of local health workers trained in PEC techniques
- % of congenital cataract patients followed-up 6 months after surgery
- % of congenital cataract patients receiving regular and sustained follow-up

Qualitative data which will be assessed includes:

- Nature and extent of the systems which have been put into place
- The proficiency of those health workers trained in PEC in diagnosing and referring cases
- The degree of surgical skill on the part of local physicians.

Section E. DIP SUSTAINABILITY STRATEGY

E.1 Sustainability Plan

As with every HKI initiative, this project is designed to provide demonstrated, measurable results which would attract the attention of local governments and NGOs. This, in conjunction with HKI's advocacy to these same groups, will encourage them to take over the project. HKI will then act as a technical advisor providing know-how and logistical support. By the end of the grant period, the project will leave in place:

- Physicians trained in the techniques of cataract surgery
- Equipment for diagnosing and operating on congenital cataracts
- Local health workers trained in PEC techniques
- A limited referral system

E.2 Collaboration

HKI will collaborate with the Ministry of Health, and the Chittagong Eye Infirmary and Training Complex in order to carry our this project.

E.3 Phase-over Plan

This project will employ local ophthalmologists who will, provided that interest exists on the part of the government, sustain and take over the project. Since the Philippines CBI is farther along, their experience will inform the steps taking in Bangladesh

E.4 Cost Recovery

At this point, cost recovery is not deemed to be a major component of this project. Due to the poverty of the country, such cost-recovery mechanisms as fees for services will not be implemented. Fund-raising strategies will be explored.

Section F. HUMAN RESOURCES

F.1 Organizational Chart

See Table A.

F.2 Community Groups

Local health workers will participate in follow-up and data collection. HKI will work to involve the parents in the project. Parents will be encouraged to bring their children for screening and surgery, if necessary. Parents will also be trained in the use of visual aids in order to reinforce the follow-up protocol which is crucial for the child's rehabilitation.

F.3 Staff Education

Due to the fact that this is a new program in HKI's Bangladesh portfolio, HKI headquarters staff will inform and train HKI Bangladesh of progress to date in other HKI-served countries where the Childhood Blindness Program has been in existence. The Philippines Childhood Blindness Program will serve as a model for the one in Bangladesh.

F.4 Role of Country Nationals

This project will be fully integrated into the existing health care delivery system. Therefore, country nationals will implement the project under the direction of HKI personnel. Country nationals are employed by HKI in its country office. In addition, country nationals will be performing the training, diagnosis, follow-up, and surgical intervention.

F.5 Role of Headquarters Staff

HKI headquarters staff will provide technical assistance and administrative support including a number of diverse functions: organizational management, solicitation and distribution of gifts-in-kind, financial management and donor reporting, among others. The Director of Eye Health and the Medical Director will provide evaluation and program direction. The Director of Training, or a designated consultant, will train local trainers and collaborators.

Section G. Procurement

G.1 Procurement

The following logistical needs must be met for this project:

Children's aphakic spectacles and low vision devices
Surgical supplies for children (cataract sets, Perkins tonometer, etc.)

PROJECT GOALS AND OBJECTIVES
Bangladesh

Table I

PROJECT OBJECTIVES BY INTERVENTION	MEASUREMENT METHOD--HOW/WHEN	MAJOR PLANNED INPUTS AND ACTIVITIES	OUTPUTS	MEASUREMENT METHOD AND DATA SOURCE--HOW/WHEN
To strengthen the capability of local institutions to plan, manage, and finance eye care services	• Size of the government budget and personnel deployed for eye health • NGO's collaboration in blindness prevention activities • Community participation	• Provide technical assistance • Conduct training needs assessments and TOTs • Develop and test training and health materials • Conduct field visits by H.Q Staff	• Detailed implementation plans • Developed and tested training materials	• Quarterly and Annual Project management reports
To increase the eye services available to children: Childhood blindness	• Completed forms and follow-up of children • Post operative visual acuity and low vision services	• Develop referral mechanisms • Identify, train and equip pediatric ophthalmologists	• 100 childhood blindness surgeries performed	• Project Data • Length of followup completed on children's surgery

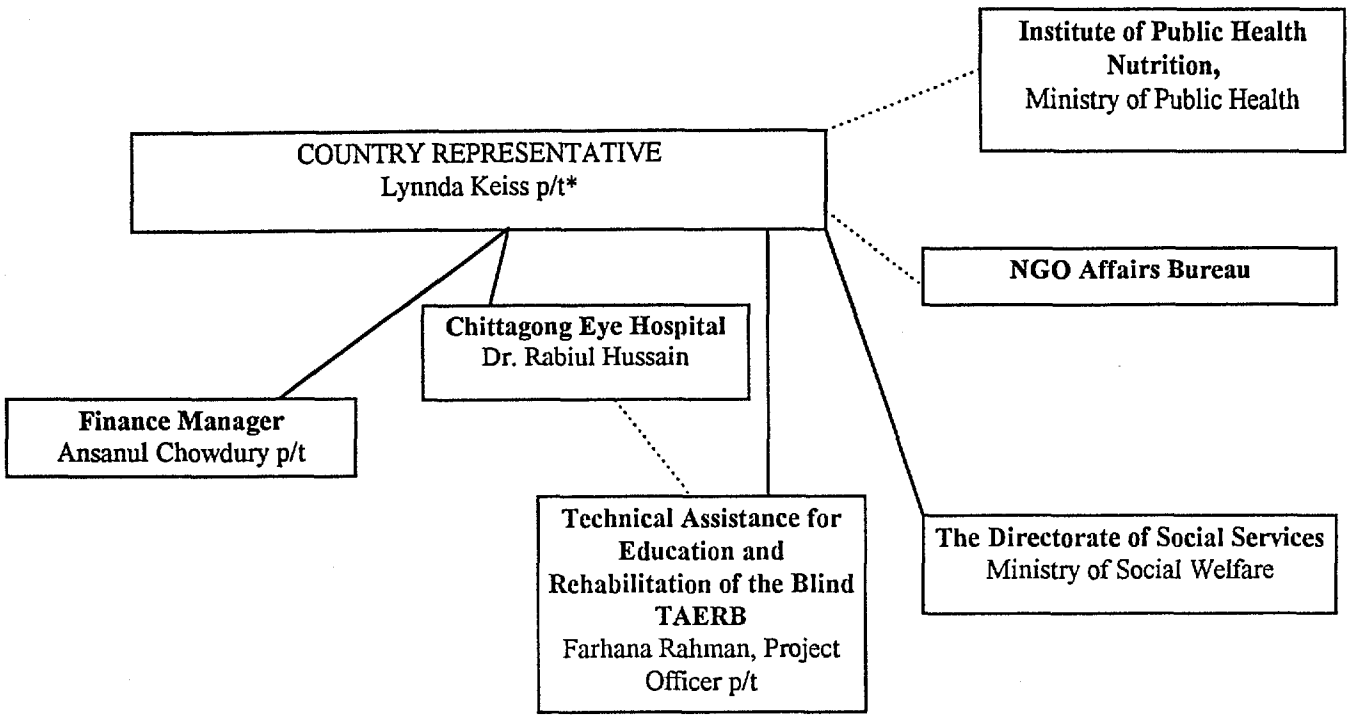
Matching Grant
FY 96 Application-Amendment
Country Budget For: Bangladesh
(Supported by Budget Narrative - CASH $ in thousands)

PVO: Helen Keller International

	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5		ALL YEARS		
	AID	PVO	AID	PVO	AID	PVO	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. Program Elements													
a) Salaries (titles/rates/# days)													
Representative (100%)			0.00	0.00	0.00	0.00					0.00	0.00	0.00
Accountant (25%)			1.00	0.00	1.00	0.00					2.00	0.00	2.00
Monitoring (25%)			2.00	0.00	2.00	0.00					4.00	0.00	4.00
b) Fringe Benefits			0.00	0.00	0.00	0.00					0.00	0.00	0.00
c) Travel, Transportation, & Per Diem													
International Travel: Childhood Blindness Consultant Yr 2, $3,000			3.00	0.00	0.00	0.00					3.00	0.00	3.00
International Per Diem: C B Consultant Ophthalmologist Yr 2 ,x $200 10 days			2.00	0.00	0.00	0.00					2.00	0.00	2.00
Domestic: Per diems 2 person x 5 days x $100 HKI Rep & Local Optometrist			1.00	0.00	1.00	0.00					2.00	0.00	2.00
d) Subcontracts			0.00	0.00	0.00	0.00					0.00	0.00	0.00
e) Other Direct Costs													
Training Workshops 4 days @25 per diem x 100 medical personnel Yr 2, 3			5.00	0.00	5.00	0.00					10.00	0.00	10.00
Training Workshops 4 days @10 per diem x 100 parents Yr 2, 3			4.00	0.00	4.00	0.00					0.00	0.00	0.00
Office Support			0.00	0.00	0.00	0.00					1.00	0.00	1.00
Office Supplies			0.50	0.00	0.50	0.00					1.00	0.00	1.00
Telephone/Fax			0.50	0.00	0.50	0.00					1.00	0.00	1.00
Contingency			0.50	0.00	0.50	0.00					2.00	0.00	2.00
Computer			2.00	0.00	0.00	0.00					1.00	0.00	1.00
Postage & Delivery			0.50	0.00	0.50	0.00					37.00	0.00	37.00
SUBTOTAL -- Program Elements:			22.00	0.00	15.00	0.00							
II. Procurement													
a) Consultancies													
Local Optometrist/low vision Consultant support to 30 days @ $200			3.00	0.00	3.00	0.00					6.00	0.00	6.00
Childhood Blindness Consultant Fee @ $300 x 5			0.00	0.00	0.00	0.00					0.00	0.00	0.00
b) Supplies													
Children's Aphakic Spectacles & Low Vision Devices $70 x100/yr			3.50	0.00	3.50	0.00					7.00	0.00	7.00
Surgical Supplies for Children (1 Cataract Set, Perkins Tonometer, etc.)			10.00	0.00	0.00	0.00					10.00	0.00	10.00
SUBTOTAL -- Procurement:			16.50	0.00	6.50	0.00					23.00	0.00	23.00
SUBTOTAL I + II			38.50	0.00	21.50	0.00					60.00	0.00	60.00
III. Indirect Costs													
SUBTOTAL --Indirect Costs:			8.28	0.00	4.62	0.00					12.90	0.00	12.90
TOTAL PROGRAM COSTS (I+II+III):			46.78	0.00	26.12	0.00					72.90	0.00	72.90

Table A

Helen Keller International
Organizational Chart-Bangladesh
1996-2001



All Staff except Lynnda Keiss are host country nationals. Ms. Keiss is an American.

CAMBODIA

Project S.E.E. II
PRELIMINARY DETAILED IMPLEMENTATION PLAN
Matching Grant Funds: 1996 – 2001

Section A. DIP TIME LINE / SCHEDULE OF ACTIVITIES

A.1 Time line attached. Please see Appendix II.

Section B. LOCATION AND FORMAL AGREEMENTS

B.1 Location Description

Cambodia is continuing to recover from a devastating civil war which, combined with the brutal regime of Pol Pot, killed millions of inhabitants. Cambodia is seeded with innumerable landmines (some estimates place the number at 10,000,000, which is equivalent to the approximate population of the country). Many of the doctors in Cambodia fell victim to Pol Pot's purges, and therefore, the medical community in the country is relatively small.

B.2 Location Justification

Currently the ability to perform cataract surgery on children does not exist in Cambodia. HKI has been working in Cambodia since 1992 on nutritional blindness and integrated eye care. HKI has established a presence at the Ang Dong Hospital. Therefore, HKI is well equipped to begin work on the problem of childhood blindness.

B.3 Formal Agreements

HKI has a protocol with the Ministry of Health, which is its essential partner in this project in Cambodia. HKI collaborates with other NGOs such as Helpage, Maryknoll Christoffel-blindemission and Rotary on a regular basis.

Section C. PROJECT DESIGN

C.1 Baseline Survey

A population-based survey conducted by HKI in Kandal province indicated that up to 50 children per year can benefit from cataract surgery.

C.2 Goals and Objectives

See attached Table II.

C.3 Project Design

HKI's country program in Cambodia is in a period of transition. There will be a new Country Representative in place in several months.

However, HKI's efforts to train Cambodian ophthalmologists in the techniques of cataract surgery (through the work of HKI consulting ophthalmologist Dr. Alan Rutzen), have paved the way for the introduction of the Childhood Blindness Program. Many of the details of the design will be worked out during this calendar year, and HKI will submit a final design to USAID when it is available.

Under the amendment to the Project SEE II grant, the project will address the problems of childhood blindness due to congenital cataract. This will be accomplished by:

- Working with MOH officials to establish a protocol at Ang Dong and Takeo hospitals, collaborating on case finding with ophthalmologists from Helpage at hospitals in Battambang and from CBM/Maryknoll in Takeo Province
- Providing, if necessary, the equipment to test and treat children for congenital cataract to secondary and tertiary hospitals
- Training local staff and ophthalmologists in data collection, monitoring and evaluation of cases with congenital cataract
- Providing encouragement, professional advice and knowledge to doctors who are willing to provide comprehensive follow-up to children who present.
- Removing obstacles which prevent parents from bringing their children for diagnoses and treatment (including transportation funds, overnight stays, and the need for multiple visits from remote areas)
- Ensuring that every child receives the optimal visual experience through the use of corrective eye wear, strabismus surgery if necessary, and the training parents and social workers in the use of low vision aids.
- Enabling local health workers and trainers to provide proper and sustained follow-up to the parents of the children involved and thereby ensuring that the child with low vision can develop independence.

Two local physicians in Phnom Penh will be trained in the techniques of cataract surgery. HKI-trained PEC workers will e trained in cataract identification, diagnosis and data collection. An optometrist will be trained in low vision to ensure that children who receive surgery will attain the optimal use of their vision. The focus of these efforts will be at Ang Dong Hospital, where two doctors will be trained and logistically supported by HKI. In addition, cases of traumatic cataract will be located through expatriate ophthalmologists who work in Takeo and Battambang hospitals.

C.4 Project Evaluation

The project will be evaluated by HKI country staff including the Country Representative. Consulting ophthalmologists will also monitor and evaluate the project. HKI headquarters staff will closely monitor the progress of this center.

C.5 Training Plan

The training calls for local health workers to receive instruction in referral of cases and post-operative follow-up. Local ophthalmologists will receive training locally in surgical techniques through consultant ophthalmologists and/or at the collaborating institutions in the Philippines where childhood blindness activities have been in progress for 3 years. Training will stress the importance of follow-up in ensuring that these children become independent and can make the best use of their vision. Health care workers will be engaged in the process of case finding and ensuring that parents bring their children for follow-up visits through a process of incentives such as round trip travel and overnights.

Section D. PROJECT INFORMATION SYSTEM

D.1 PIS Plan

Data will be collected by local ophthalmologists utilizing HKI's Childhood Blindness Form, after completing training in its use. A consulting epidemiologist will conduct the training and gather the data. HKI headquarters staff including Meredith Tilp, Director of Eye Care, Dr. Louis Pizzarello, Medical Director, and HKI's ChildSight^{SM} and monitoring and evaluation staff will compile data from the field on a quarterly and annual basis, and submit these reports to HKI's Program Committee of the Board of Trustees, the ChildSight^{SM} Technical Advisory Group (TAG) and the Childhood Blindness TAG. Recommendations from these groups are provided to staff in the field in a timely fashion.

D.2 Data Collection and Use

Each evaluation will assess the quantitative data achieved including:

- Number of cataract surgeries
- Number of local health workers trained in PEC techniques
- % of congenital cataract patients followed-up (6) months after surgery
- % of congenital cataract patients receiving regular and sustained follow-up

Qualitative data which will be assessed includes:

- Nature and extent of the systems which have been put into place
- The proficiency of those health workers trained in PEC in diagnosing and referring cases
- The degree of surgical skill on the part of local physicians.

Section E. DIP SUSTAINABILITY STRATEGY

E.1 Sustainability Plan

By training local ophthalmologists in these techniques, HKI will ensure that the system remains permanently in place. By the end of the grant period, the project will leave in place:

- Physicians trained in the techniques of cataract surgery
- Equipment for diagnosing and operating on congenital cataracts
- Local health workers trained in PEC techniques
- A limited referral system

E.2 Collaboration

HKI's key collaborators will be the MOH and Ang Dong Hospital where the bulk of the project will take place.

E.3 Phase-over Plan

This project will employ local ophthalmologists who will, provided that interest exists on the part of the government, sustain and take over the project. Refer to the Philippines

E.4 Cost Recovery

At this point, cost recovery is not deemed to be a major component of this project. Due to the poverty of the country such cost-recovery mechanisms as fees for services will not be implemented. Fund-raising strategies will be explored.

Section F. HUMAN RESOURCES

F.1 Organizational Chart See Table B.

F.2 Community Groups There are few established community groups other than village level committees with which HKI will work.

F.3 Staff Education

Due to the fact that this is a new program in HKI's Cambodia portfolio, HKI headquarters staff will inform and train HKI Cambodia staff in the goals, objectives and monitoring and evaluation of childhood blindness interventions. The staff will be exposed to progress to date in other HKI-served countries where the Childhood Blindness Program has been in existence. The Philippines Childhood Blindness Program will serve as a model for the one in Cambodia.

F.4 Role of Country Nationals

This project will be fully integrated into the existing health care delivery system. Therefore, country nationals will implement the project under the direction of HKI personnel. Country nationals are employed by HKI in its country office. In addition, country nationals will be performing the training, diagnosis, follow-up, and surgical intervention.

F.5 Role of Headquarters Staff

HKI headquarters staff will provide technical assistance and administrative support including a number of diverse functions: organizational management, solicitation and distribution of gifts-in-kind, financial management and donor reporting, among others. The Director of Eye Health and the Medical Director will provide evaluation and program direction. The Director of Training, or a designated consultant, will train local trainers and collaborators.

Section G. Procurement

G.1 Procurement

The following logistical needs must be met for this project:

Children's aphakic spectacles and low vision devices
Surgical supplies for children (cataract sets, Perkins tonometer, etc.)

PROJECT GOALS AND OBJECTIVES
Cambodia

Table II

PROJECT OBJECTIVES BY INTERVENTION	MEASUREMENT METHOD— HOW/WHEN	MAJOR PLANNED INPUTS AND ACTIVITIES	OUTPUTS	MEASUREMENT METHOD AND DATA SOURCE-- HOW/WHEN
To strengthen the capability of local institutions to plan, manage, and finance eye care services	• Size of the government budget and personnel deployed for eye health • NGO's collaboration in blindness prevention activities • Community participation	• Provide technical assistance • Conduct training • Develop and test training and health materials • Conduct field visits by H.Q Staff	• Detailed implementation plans developed • Developed and tested training materials	• Quarterly and Annual Project management reports
To increase the eye services available to children: Childhood blindness	• Completed forms and follow-up of children • Post operative visual acuity and low vision services	• Develop referral mechanisms • Identify, train and equip pediatric ophthalmologists	• Perform cataract surgery • 50 childhood blindness surgeries performed	• Project Data • Length of followup completed on children's surgery

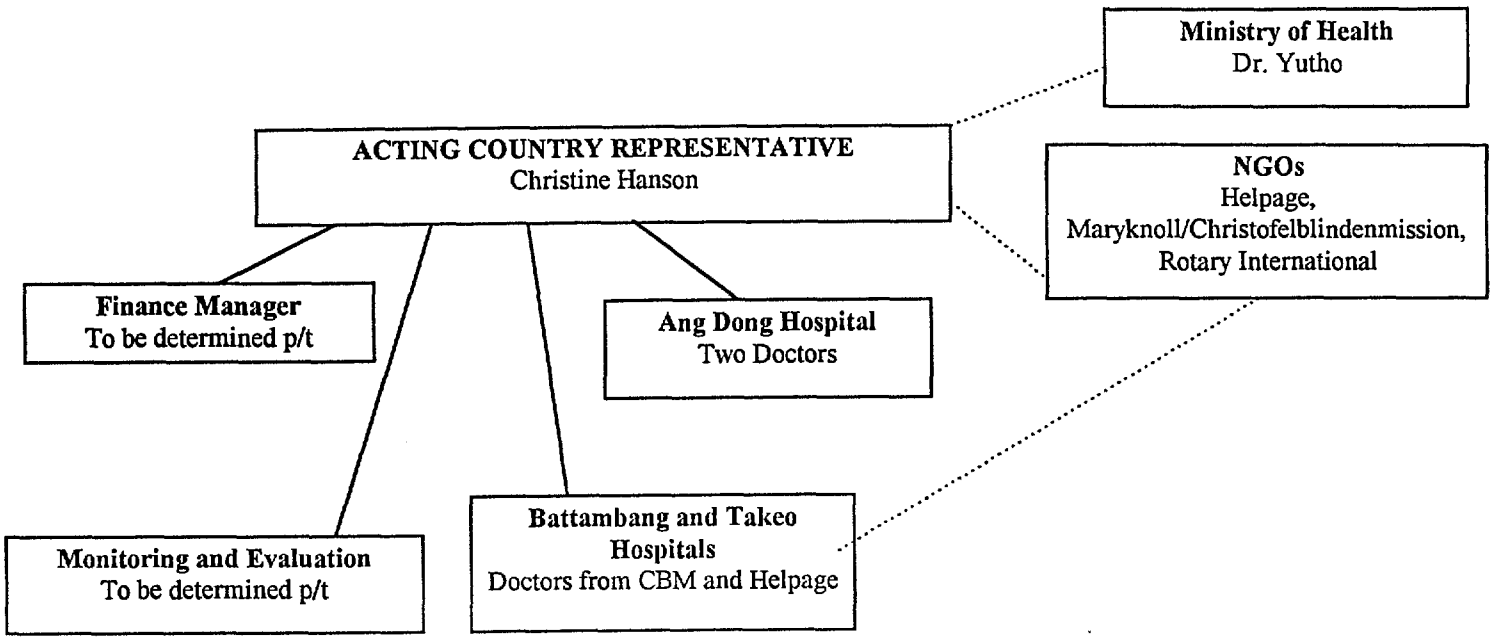
Matching Grant
FY 96 Application-Amendment
Country Budget For: Cambodia
(Supported by Budget Narrative - CASH $ in thousands)

PVO: Helen Keller International

	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5		ALL YEARS		
	AID	PVO	AID	PVO	AID	PVO	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. Program Elements													
a) Salaries (titles/rates/# days)			0.00	0.00	0.00	0.00					0.00	0.00	0.00
Representative (100%)			1.00	0.00	1.00	0.00					2.00	0.00	2.00
Accountant (25%)			2.00	0.00	2.00	0.00					4.00	0.00	4.00
Monitoring (25%)													
b) Fringe Benefits			0.00	0.00	0.00	0.00					0.00	0.00	0.00
c) Travel, Transportation, & Per Diem													
International Travel: Childhood Blindness Consultant Yr 2, 3 x $3,000 x 2			3.00	0.00	3.00	0.00					6.00	0.00	6.00
International Per Diem: Childhood Blindness Consultant Ophthalmologist Yr 2 & 3, 10			2.00	0.00	2.00	0.00					4.00	0.00	4.00
Domestic: Per diems person x 5 days x $100 each year Local Optometrist			0.50	0.00	0.50	0.00					1.00	0.00	1.00
d) Subcontracts			0.00	0.00	0.00	0.00					0.00	0.00	0.00
e) Other Direct Costs			0.00	0.00	0.00	0.00					0.00	0.00	0.00
Office Support			2.25	0.00	2.25	0.00					4.50	0.00	4.50
Trainers Workshops 3 days @ $15 per diem x 50 medical personnel Yr 2-3			0.50	0.00	0.50	0.00					1.00	0.00	1.00
Training for 2 Pediatric Ophthalmologists 10 days x $50 per day, Yr2,3			0.50	0.00	0.50	0.00					1.00	0.00	1.00
Office Supplies			0.50	0.00	0.50	0.00					1.00	0.00	1.00
Telephone/Fax			0.50	0.00	0.50	0.00					1.00	0.00	1.00
Contingency			2.50	0.00	0.00	0.00					2.50	0.00	2.50
Computer			0.50	0.00	0.50	0.00					1.00	0.00	1.00
Postage & Delivery													
SUBTOTAL -- Program Elements:			15.75	0.00	13.25	0.00					29.00	0.00	29.00
II. Procurement													
a) Consultancies			1.50	0.00	1.50	0.00					3.00	0.00	3.00
Local Optometrist/low vision Consultant support 15 days @ $200			1.50	0.00	0.00	0.00					1.50	0.00	1.50
Childhood Blindness Consultant Fee @ $300 x 5													
b) Supplies			3.00	3.50	3.00	3.50					6.00	7.00	13.00
Children's Aphakic Spectacles & Low Vision Devices $60 x100/yr			0.50	0.00	0.50	0.00					1.00	0.00	1.00
Outreach and support to families for followup visits 100 kids x $5			10.00	20.00	0.00	20.00					10.00	40.00	50.00
Surgical Supplies for Children (1 Cataract Set, Perkins Tonometer, etc.)													
SUBTOTAL -- Procurement:			16.50	23.50	5.00	23.50					21.50	47.00	68.50
SUBTOTAL I + II			32.25	23.50	18.25	23.50					50.50	47.00	97.50
III. Indirect Costs													
SUBTOTAL --Indirect Costs:			6.93	5.05	3.92	5.05					10.86	10.11	20.96
Cambodia TOTAL PROGRAM COSTS (I+II+III):			39.18	28.55	22.17	28.55					61.36	57.11	118.46

Table B

Helen Keller International
Organizational Chart-Cambodia
1996-2001



All Staff except Christine Hanson are host country nationals. Ms. Hanson is British.

MEXICO

Project S.E.E. II
DETAILED IMPLEMENTATION PLAN
Matching Grant Funds: 1996 – 1997

Section A. DIP TIME LINE / SCHEDULE OF ACTIVITIES

A.1 Time line attached. Please see Appendix II.

Section B. LOCATION AND FORMAL AGREEMENTS

B.1 Location Description

The project in Mexico includes the entire state of Chihuahua. This state is located in northern central Mexico, bordering on the west with Sonora, in the southwest with Sinaloa, in the south with Durango, in the east with Coahuila and in the north with Texas in the USA. It has an area of 244,938 km^2, and a population of 2.4 million, 46% of whom are employed primarily in manufacturing, agriculture, forestry, commerce and services. The Indian population of Chihuahua is approximately 66,000, and comprises 4 separate ethnic groups, each speaking its own distinct dialect. All aspects of the Childhood Blindness Program are located in Mexico City.

B.2 Location Justification

Chihuahua has a contiguous border with the United States and is influenced to a great extent by the U.S. economy. There are over 500 U.S. companies operating within Chihuahua. The population is concentrated in two main cities: Juarez, with a population of 1.2 million and Chihuahua City, with a population of 600,000. This creates ideal conditions to have a significant impact upon the state's health system. Mexico City is the point of referral for all cases of congenital cataract, with 100 surgeries being performed in two leading hospitals: Hospital de Pediatria and Hospital Luis Sanchez Bulnes.

B.3 Formal Agreements

There is a cooperation agreement between HKI and the Secretaria de Salud (Ministry of Health). At the state level, HKI was invited by the Governor of Chihuahua to implement an eye care program. Prior to 1993, there had been no state funding of eye care in Chihuahua. However, with the advent of Project SEE, the state government committed resources to improving eye health care. The government has agreed to: 1. Hire government ophthalmologists; 2. Sustain ChildSight^{SM} ; 3. Appoint a director of eye care in 1998. HKI maintains collaboration agreements with DIF and Fomento Social.

NGO Partners :
El Comite Contra La Ceguera (The Committee Against Blindness) is an association consisting of governmental agencies and non-governmental organizations whose purpose is to supervise eye-health activities in the state. Two such committees have been formed (one in Juarez, and one in Chihuahua) and meet monthly. A third committee will be formed in La Sierra. The participating NGOs are: College of Ophthalmologists, El Centro Empressarial, Rotary and Lions clubs, El Colegio de Trabajo Social.

In Mexico City, as part of the Childhood Blindness Program, The Association for the Prevention of Blindness (APEC) is a key collaborating institution which provides outreach to neighboring areas (the Yucatan, Morelia, and Chiapas).

Section C. PROJECT DESIGN

C.1 Baseline Survey
In 1994 a survey was conducted by HKI, ICHISAL (Instituto Chuhuahuense de la Salud) and DIF. The sample used consisted of 2,354 inhabitants of 10 different towns/cities in the state of Chihuahua. The sample group was tested for visual acuity, and those who tested with a result of 20/40 or less were examined by an ophthalmologist. It was found that 2.1% of the sample had visual acuity problems, with 1.4% diagnosed being children between the ages of 11 and 14, exhibiting refractive error. Of the remaining .7%, half had vision problems caused by cataract, diabetic retinopathy, or macular degeneration.

C.2 Goals and Objectives
See attached Table III.

C.3 Project Design
In the State of Chihuahua a training team on primary eye care, consisting of an anthropologist from HKI, a nurse from the health institute, a social worker from DIF, a community worker from the state community centers, and ophthalmologist and a training instructor from HKI. This team will provide training to nurses, teachers, community and social workers in the prevention of blindness.

The second component of the project will be HKI's ChildSight^{SM} program which provides school children between the ages of 11-14 with glasses. It will be implemented by HKI in conjunction with DIF, whose nurses will assemble the glasses, and the Education Department which will carry out the initial screening. Those students who fail the Snellen Test will then be screened by an optometrist. It is intended that 21,000 school children will be screened with Snellen charts with approximately 5,250 children examined by an ophthalmologist, 4,050 pairs of glasses distributed and 300 children referred for additional treatment.

HKI will undertake a feasibility study and a two year-pilot project to combat nutritional blindness in La Sierra. Training in this area is planned for DIF and ICHISAL personnel. HKI will provide in-kind donations of vitamin A capsules and expertise in home gardening initiatives. It is expected that this project will yield 50 operational home gardens.

Under the amendment to the Project SEE II grant, the project will also address problems of childhood blindness due to congenital cataract. This will be accomplished by:

- Training provincial doctors and nurses in rural and semi urban areas in identification and referral of children with congenital cataract
- Providing, if necessary, the equipment to test and treat children for congenital cataract to secondary and tertiary hospitals
- Providing encouragement, professional advice and knowledge to doctors who are willing to provide comprehensive follow-up to children who present.
- Removing obstacles which prevent parents from bringing their children for diagnoses and treatment (including transportation funds, overnight stays, and the need for multiple visits from remote areas)
- Ensuring that every child receives the optimal visual experience through the use of corrective eye wear, strabismus surgery if necessary, and the training parents and social workers in the use of low vision aids.
- Enabling local health workers and trainers to provide proper and sustained follow-up to the parents of the children involved and thereby ensuring that the child with low vision can develop independence. HKI will conduct congenital cataract surgery in Mexico City through Dr. Barrojas Weber at the Hospital Luis Sanchez Bulnes, with an additional center planned through APEC, a local NGO.

C.4 Project Evaluation

Data will be reviewed every 6 months with accomplishments measured against the stated project goals.

C.5 Training Plan

The goal of the PEC training plan is to provide quality referral services to those who present eye diseases at the community level. The initial training involves instruction in anatomy and physiology of the eye. Subsequently, the participants are provided with basic information on the prevention of blindness, visual acuity screening, a graphical description of the most common eye diseases, and a general recommendation on their prevention.

The course typically lasts for 4 to 5 hours. Following the training course, the participants are evaluated on their performance. An example of this situation is as follows: a teacher who had been trained in primary eye care refers 105 students to an ophthalmologist who determines that only 100 of them need corrective lenses.

Therefore, a 5% margin of error exists. Should that margin exceed 5%, this would indicate that the initial visual acuity screening was not performed properly and hence the training did not have the desired effect.

HKI's training plan is geared to instruct physicians and other health workers in the importance of follow-up for children who have undergone surgery to correct congenital cataract. This follow-up will ensure that the children develop independence and full functional use of their low vision.

DIF and ICHISAL personnel will be trained in issues relating to nutritional blindness, such as vitamin A nutritional issues and home gardening activities.

Section D. PROJECT INFORMATION SYSTEM

D.1 PIS Plan

HKI headquarters staff including Meredith Tilp, Director of Eye Care, Dr. Louis Pizzarello, Medical Director, and HKI's ChildSight[SM] and monitoring and evaluation staff will compile data from the field on quarterly and annual basis, and submit these reports to HKI's Program Committee of the Board of Trustees, the ChildSight[SM] Technical Advisory Group (TAG) and the Childhood Blindness TAG. Recommendations from these groups are provided to staff in the field in a timely fashion. Childhood Blindness Forms have been used extensively by designated Mexico City ophthalmologists, and this data is regularly presented at the Pan American Association of Ophthalmology meetings.

D.2 Data Collection and Use

Quantitative data:

- Number of congenital cataract surgeries
- Number of children who receive glasses through ChildSight[SM]
- Number of children who keep their glasses at the end of the school year
- Number of primary eye care training courses held
- Amount of resources committed to blindness prevention activities by NGOs and the private sector

Qualitative data:

- Level of government involvement in and support for blindness prevention activities
- The quality of eye care services available at the community level
- The quality and regularity of follow-up for children who receive cataract surgery

Section E. DIP SUSTAINABILITY STRATEGY

E.1 Sustainability Plan

Objectives of the sustainability plan:

1) Increased governmental support for eye care services at public hospitals and clinics
2) Increased number of primary eye care training courses
3) Increased number of formal agreements with the government
4) Increased involvement on the part of local NGOs and the private sector
5) The creation of a more efficient referral system in order to provide access to eye care services for those who cannot afford them

Indicators of success will consist of:

1) An increase in the number of cataract surgeries in public hospitals
2) Strength of the system implemented last year which provides low-cost spectacles to those children who require them
3) Improvement in the time required for servicing patients

The project is expected to leave in place:

1) A governmental commitment to blindness prevention
2) Eye care services at all state hospitals in Juarez, Chihuahua, and La Sierra
3) Access to an ophthalmologist for every person living in urban areas
4) Five blindness prevention committees
5) The training of every nurse, teacher, and social worker in La Sierra in primary eye care
6) Physicians trained in the techniques of congenital cataract surgery on children and the sustained post-operative follow-up required

At the end of the grant period, it is expected that the government will finance most of the eye care services initiated under this project from its own resources. However, funding from the private sector will be necessary in order to maintain the provision of glasses, and the purchasing of equipment for the public hospitals. ICHISAL's hospital in Chihuahua now has a permanent ophthalmologist, who is paid through government resources. HKI already has a commitment from ICHISAL to sustain ChildSight[SM] after a successful demonstration of the program.

E.2 Collaboration

Since the state government will be in charge of the budgeting for most of the eye care programs, and the fact that HKI will be implementing these programs within the state's jurisdiction, a collaboration between the state health agency and HKI will exist. However, increased involvement from DIF will be required, in the form of manpower to conduct training courses and to participate in the assembly of eye glasses.

La Direccion de Fomento Social (The Social Promotion agency) through ICHISAL (Institute of Health) collaborated on the development of the DIP.

E.3 Phase-over Plan

The government has agreed to employ a coordinator of eye health services for Cd. Juarez. This is a vital first step toward institutionalizing the project. By the end of the grant period, it is expected that the government will employ a staff which will manage the activities begun under this project.

As part of the phase over plan, HKI will strengthen the management skills on the part of governmental employees in this area by training two people in each state agency (DIF, ICHISAL, and the Education Department) in decision-making skills, personnel management, and eye health issues.

E.4 Cost Recovery

Currently a proposal exists which would purchase frames and lenses manufactured in Mexico for the ChildSight^{SM} program. The parents of the children would be charged a nominal fee for their child's spectacles. In addition, local opticians are considering a proposal for providing approximately 17,000 pairs of glasses to needy adolescents in the entire state, at cost.

Section F. HUMAN RESOURCES

F.1 Organizational Chart

Please see Table C.

F.2 Community Groups

The ChildSight^{SM} program will be carried out in conjunction with the Rotary Clubs in Juarez, which provide spectacles in the diopter range which falls outside that normally available from HKI. A local organization called PASE participates in the assembly of eye glasses distributed through this program. In the city of Camargo, the School Parents Association participates in the assembly of eye glasses. Cataract surgery programs are carried out with the help and cooperation of the College of Ophthalmologists and the Lions Club. Community health workers will participate in the follow-up which is so vital to the Childhood Blindness Initiative. They will not only perform post-operative follow-up, but train others to do so and advocate for its importance. Community leaders will also help advocate for proper vitamin A intake in order to raise awareness and help prevent nutritional blindness.

F.3 Staff Education

The staff education will be reinforced through regular follow-up training by HKI country and headquarters staff. HKI's Country Representative will take one trip to HKI headquarters in New York City, in September of 1997, for training, and two trips to Pan American Academy of Ophthalmology meetings.

F.4 Role of Country Nationals

Country nationals currently participate in the following capacities: the promotion of blindness prevention within the government; advocating blindness prevention to local NGOs; the design and operative implementation of blindness prevention programs; supervising the staff which implements these programs; follow-up of all activities performed in the area of eye care. Country nationals are also involved in the accounting and financial reporting for the HKI Mexico office.

F.5 Role of Headquarters Staff

HKI headquarters staff will provide technical assistance and administrative support including a number of diverse functions: organizational management, solicitation and distribution of gifts-in-kind, financial management, donor reporting, among others. The Director of Eye Health and the Medical Director will provide evaluation and program direction. The Director of Training, or a designated consultant, will train local trainers and collaborators.

Section G. Procurement

G.1 Procurement

The following logistical needs must be met for this project:

Surgical equipment and supplies for cataract and pterygium campaigns
Home garden seeds and seedlings
Cataract glasses (adult)
Children's eyeglasses
Children's aphakic spectacles

PROJECT GOALS AND OBJECTIVES
Mexico
Table III

PROJECT OBJECTIVES BY INTERVENTION	MEASUREMENT METHOD--HOW/WHEN	MAJOR PLANNED INPUTS AND ACTIVITIES	OUTPUTS	MEASUREMENT METHOD AND DATA SOURCE--HOW/WHEN
To demonstrate the integration of eye care services into existing health care systems under Project SEE II.	• Quarterly monitoring of nature and number of eye problems and vitamin A deficiency at the community level • Quarterly monitoring of the number of adult cataract surgeries and of post operative results • Assessment on an annual basis the skills of PEC trained workers and retrain if needed	• Orient staff to Project SEE II • Sign/Renew formal agreements • Train and equip personnel • Distribute ophthalmic equipment and supplies • Recruit staff	• Renewed/new formal agreements • Trained personel • Improved eye clinic services • An extended program plan based on the results of Project SEE I	• Data analysis • Regular evaluations • Surgical outcome of cataract patients • Training outcome of health workers • Clinical records and summary records
To strengthen the capability of local institutions to plan, manage, and finance eye care services	• Size of the government budget and personnel deployed for eye health • NGO's collaboration in blindness prevention activities • Community participation	• Provide technical assistance • Conduct training needs assessments and TOTs • Develop and test training and health materials • Conduct field visits by H.Q Staff	• Convene blindness prevention committees • Develop detailed implementation plans • Develop and test training materials	• Project management reports
To increase the eye services available to adults and children: a) ChildSight[SM] b) Childhood blindness	a) Quarterly data analysis of quality and quantity of adult cataract surgery b) % of children with refractive error, those who receive glasses and those who retain them yearly c) Completed forms and follow-up of children d) Post operative visual acuity and low vision services	a) Train personnel in the identification and referral of refractive errors b) Develop referral mechanisms c) Identify, train and equip pediatric ophthalmologists	• Perform cataract surgery • Implement ChildSight[SM] • Perform childhood blindness surgery • Promote community gardens	• Number of children who benefit from ChildSight[SM] activities • Number of forms and length of followup completed on children's surgery • Number of community gardens implemented
To demonstrate a community gardens model	# of community gardens after year 2	d) Identify agronomist e) Conduct training in developing community gardens	• 1 feasibility report • plan for community gardens targeted at vitamin A rich foods	• number of gardens • number of trained gardeners

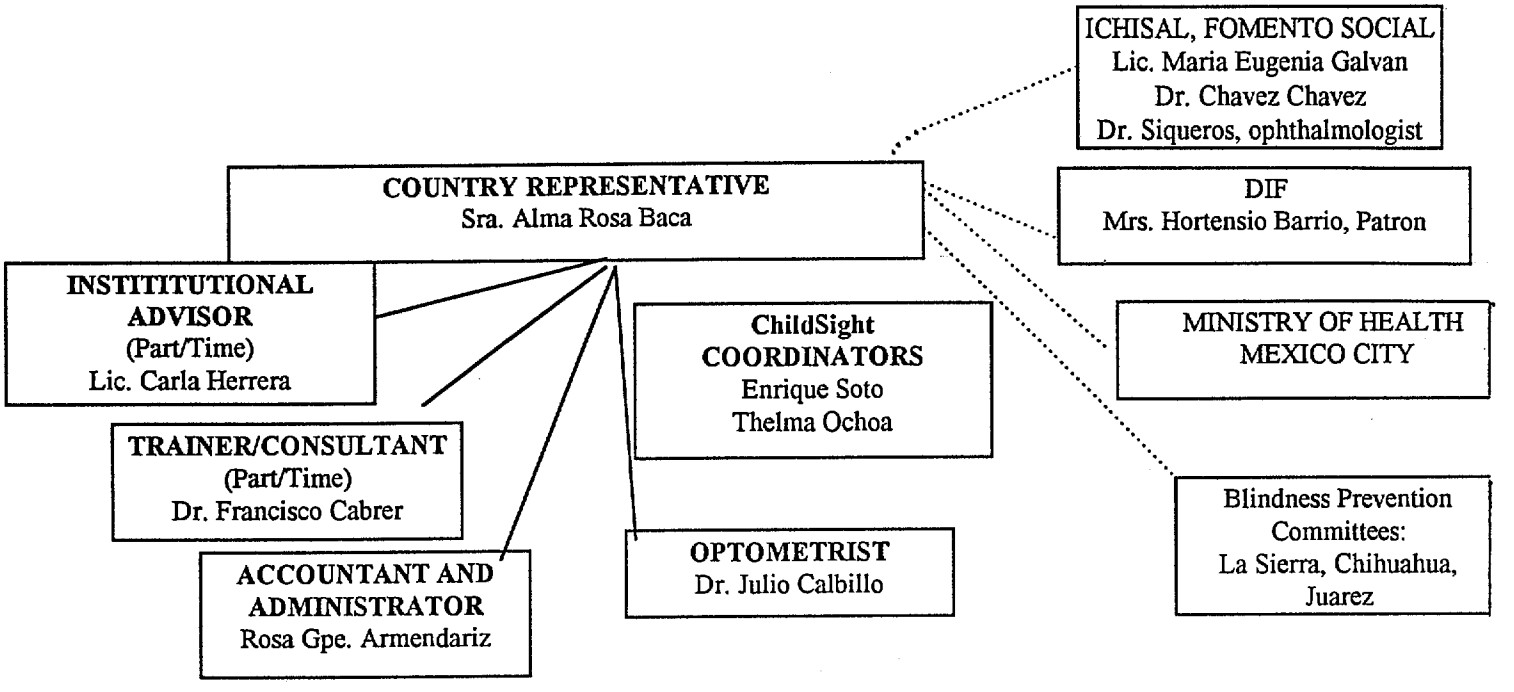
Matching Grant
FY 96 Application- Amendment
Country Budget For: Mexico
(Supported by Budget Narrative - CASH $ in thousands)

PVO: Helen Keller International

	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5		ALL YEARS		
	AID	PVO	AID	PVO	AID	PVO	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. Program Elements													
a) Salaries (titles/rates/# days)													
Representative (100%)	24.00	0.00	24.00	0.00	24.00	0.00	25.00	0.00	25.50	0.00	122.50	0.00	122.50
Institutional Advisor (10% yr2, 10%yr3, 10%yr4, 10% yr5)	0.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	3.00	0.00	12.00	0.00	12.00
Manager/Assistant (100% yr1, yr2, yr 3, yr4)	8.00	0.00	8.50	1.00	4.00	6.00	4.00	6.50	0.00	0.00	24.50	13.50	38.00
Accountant (25% time)	2.50	0.00	3.00	1.00	3.00	0.00	3.50	0.00	3.50	0.00	15.50	1.00	16.50
Secretary/Typist (25% time)	2.50	0.00	2.50	1.00	3.00	0.00	3.50	0.00	3.50	0.00	15.00	1.00	16.00
b) Fringe Benefits	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
c) Travel, Transportation, & Per Diem													
International (Repr one trip (Yr 1) one trip (Yr 2) in the Americas (Yr 3,4,5) HQ	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	5.00	0.00	5.00
HKI Rep Per diems 1 person x 5 days x $200 each year	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	5.00	0.00	5.00
Domestic: Insurance, Fuel	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	5.00	3.00	8.00
Domestic: Air Travel (Mexico City, El Paso 2 trips x $500)	1.00	0.50	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	3.00	0.50	3.50
Domestic: Per diems 1 person x 5 days x $100 each year	0.50	0.50	0.50	0.00	0.50	0.00	0.50	0.00	0.50	0.00	2.50	0.50	3.00
Domestic Ground Travel (Agronomist to La Sierra)	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.50
Domestic Per Diem Agronomist 10 days @ $50, yrs 1 & 2	0.50	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
d) *Subcontracts*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
e) Other Direct Costs													
DIP Startup Workshop 15 people @ $50 per day x 2 days + CB(Yr 4)	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	3.00	0.00	3.00
Training Materials Printing	2.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	3.00
Training Posters, materials, radio spots	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
Trainers Workshops 4 days @ 6 pers x 1 per year $50	1.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	4.00	0.00	4.00
Social Workers Followup CB Workshops 3 days @$30 per person/ 30 pers x 2 p	0.00	0.00	0.00	0.00	0.00	0.00	1.80	0.00	1.80	0.00	3.60	0.00	3.60
Training nurses in Childsight	0.50	0.00	0.50	0.00	0.50	0.00	0.00	0.00	0.00	0.00	1.50	0.00	1.50
Trainer Consultant	3.50	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	11.50	0.00	11.50
Local Banking Fees	0.50	0.00	0.50	0.00	1.00	0.00	1.00	0.00	1.00	0.00	4.00	0.00	4.00
Office Supplies	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	5.00	0.00	5.00
Telephone/Fax	1.00	0.00	1.00	0.00	1.50	0.00	1.50	0.00	1.50	0.00	6.50	0.00	6.50
Postage & Delivery	1.00	0.00	1.00	0.00	1.50	0.00	1.50	0.00	1.50	0.00	6.50	0.00	6.50
SUBTOTAL -- Program Elements:	55.50	2.00	55.00	4.00	49.00	7.00	52.30	6.50	50.30	0.00	262.10	19.50	281.60
II. Procurement													
a) Consultancies													
Local Ophthalmologist support 4 @ $80 x 4 days	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	3.00
Childhood Blindness Consultant Fee @ $200 x 5 - Yr1,4,5	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.50	0.00	1.50	0.00	1.50
Childhood Blindness Consultant Per Diem @ $100 x 5	0.50	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.50	0.00	1.50	0.00	1.50
Optometrist, ChildSight, 50days @ $60	0.00	3.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	6.00
Low vision Consultant Optometrist @$200 x 10 Yr 4,5	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	2.00
Local Agronomist $200 x 10 days, yrs 1 & 2	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	4.00
b) Supplies													
Children's Eye Glasses $8.50 x 8,000/yr2 & 3	0.00	68.00	0.00	68.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	136.00	136.00
Low Vision Aids Yr 1,2,3,4,5	0.50	0.00	0.50	4.50	0.50	4.50	0.50	4.50	1.50	0.00	3.50	13.50	17.00
RT bus fare 200 kids per year/ $30 per 4 visits to Center	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00	10.00	0.00	10.00
Surgical Equipment & Supplies for Cataract & Pterygium Campaigns	0.00	50.00	0.00	50.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00	150.00	150.00
Surgical Support 100 (Yr 1,2,3) 200 children (Yr 4,5) @ $25 per year	2.50	0.00	2.50	0.00	2.50	0.00	5.00	0.00	5.00	0.00	17.50	0.00	17.50
Cataract Glasses, Adults @ 350 x $5	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	3.00	3.00
Children's Aphakic Spectacles & Breakfast 50 kids	1.00	0.00	1.00	0.00	1.00	0.00	1.00	10.00	1.00	10.00	5.00	20.00	25.00
Home Gardens Seeds & Seedlings	0.00	0.00	0.50	0.00	0.50	0.00	0.00	0.00	1.00	0.00	2.00	0.00	2.00
SUBTOTAL -- Procurement:	10.00	122.00	9.50	126.50	7.50	55.50	10.50	14.50	12.50	10.00	50.00	328.50	378.50
SUBTOTAL I + II	65.50	124.00	64.50	130.50	56.50	62.50	62.80	21.00	62.80	10.00	312.10	348.00	660.10
III. Indirect Costs													
SUBTOTAL --Indirect Costs:	14.08	26.66	13.87	28.06	12.15	13.44	13.50	4.52	13.50	2.15	67.10	74.82	141.92
Mexico TOTAL PROGRAM COSTS (I+II+III):	79.58	150.66	78.37	158.56	68.65	75.94	76.30	25.52	76.30	12.15	379.20	422.82	802.02

Table C

Helen Keller International
Organizational Chart-Mexico
1996-2001



COLLABORATING PARTNERS IN MEXICO

College of Ophthalmologists Pan American Association of Opht.

Louise Braille Schools
Benito Juarez School for the Blind, Study Centers for the Blind

Mexico City: Associacion para Evitar Cegeira (APEC)
Hospital Luis Sanchez Bulnes
Hospital Infantil

IMSS, ISSTE,
Secretary of Public Education (SEP)

Rotary Club
Lions Clubs

All staff are host country nationals unless otherwise noted
All staff who are part/time are listed as such

MOROCCO

Project S.E.E. II
DETAILED IMPLEMENTATION PLAN
Matching Grant Funds: 1996 – 2001

Section A. DIP TIME LINE / SCHEDULE OF ACTIVITIES

A.1 Time line attached. Please see Appendix II.

Section B. LOCATION AND FORMAL AGREEMENTS

B.1 Location Description

The activities under Project SEE II will seek to bring the activities initiated Project SEE I into the remaining provinces of Morocco. In 1996, the population of Morocco was 26 million. Of the total, 50% are women and 25% are children between the ages of zero and 17 years. Under Project SEE I, Helen Keller International (HKI) has worked with the Programme National de Lutte contre la Cecité (PNLC) of the Ministry of Health (MOH) to ensure that 18 million people in the 31 provinces served by the project have better access to eye care services. The location of Project SEE II will be the remaining 22 provinces (Wilaya Meknes (2 provinces), El Hajeb, Khenifra, Boulemane, Kénitra, Khouribga, Marakesh (5 provinces), Settat, El Jadida, Safi, Essaouria, Ben Slimane, Ifrane, Laayoune, Es Samra, Oued Eddahab, and Boujdour), home to approximately 31% of the population, which have thus far not been targeted by HKI. These provinces are the poorest and remotest regions of Morocco, with 6 of them falling into the southernmost region which is sparsely populated and extremely arid, according to statistics provided by the Moroccan Ministry of Health (MOH).

B.2 Location Justification

In the 22 target provinces there is a severe lack of eye care providers, with only 21 ophthalmologists, and 993 doctors thinly distributed throughout the region. Therefore, intervention is necessary to train and equip additional GPs and nurses in the techniques of diagnosis, early screening, preventive care, surgery, and referral of eye diseases to the secondary level.

B.3 Formal Agreements

The formal agreements between HKI and the PNLC concluded prior to the implementation of Project SEE II remain in place. HKI also maintains an agreement with the Moroccan Society of Ophthalmology. In addition, a new agreement has been concluded between the Society of Moroccan Opticians and the MOH, under the terms of which the Society will provide glasses at cost to children who do not qualify (due to insufficient financial need) to receive a free pair through HKI's ChildSight^{SM} program. Since 1986 there has been a formal agreement with the PNLC which has been renewed.

Section C. PROJECT DESIGN

C.1 Baseline Survey Results

The target population of Project SEE II in Morocco is 8.1 million people living in the 22 underserved provinces, which were not currently covered under Project SEE I. The prevalence of blindness is 0.76%, exceeding the WHO limit (0.5%), and therefore constitutes a problem of public health proportions (*Prévalences et Causes de la Cécité et de la Baisse de Vision au Royaume de Maroc* by Chami, Akalay and Negrel). The adult cataract backlog is 287,000 persons nationwide (MOH, 1992). Congenital blindness represents 7% of total blindness, and is due primarily to consanguity and rubella. Approximately 4,000,000 Moroccans need eyeglasses. An average pair of eyeglasses costs US$18, while the minimum wage is US$8 per day. Annually, 76,000 people seek trichiasis surgery.

C.2 Goals and Objectives

The objective of Project SEE II is to bring eye care services to the underserved provinces described above. Table 1, summarizing the project's overall goal(s) and measurable objectives for each intervention, is attached after **Section H.**

C.3 Project Design

HKI will continue the initiatives begun under Project SEE. Additionally, HKI will provide training and equipment to decentralize the deliver, monitoring, and evaluation of congenital cataract surgery for babies and children ages 0-16 years. Also, HKI, in partnership with the PNLC, will conduct visual acuity screening and distribute eyeglasses to needy children through its ChildSight^{SM} program.

Specific interventions consist of:

Expansion of Primary Eye Care

The major activities involved in the program in Morocco are health worker training (especially physicians and nurses), public education and the equipping of health centers. Training is discussed in **Section C.5** Training plan.

Cataract Surgery

Cataract surgery is a regular output of the ophthalmologists who work with the MOH. The surgical output is 18,276 cases per year. In the life of Project SEE I, a tripling of cataract surgeries occurred in campaigns. At the current level of surgical output, the PNLC will soon be able to cover the incident cases and any surgeries above that will allow a reduction in the cataract case backlog. HKI provides gifts-in-kind of sutures, viscoelastic and intraocular lenses to facilitate these surgeries. The estimated value of these items is $250,000 annually.

Congenital cataract surgery is currently being conducted at two centers in Rabat and Casablanca. To further decentralize these services, make them more cost-effective, and bring them closer to the affected population, ophthalmologists in Tangiers, Fez, Marrakesh and Agadir will receive training in the surgical protocol established by HKI's TAG. HKI will provide these physicians with equipment, technical advice and evaluation of the case selection, pre- and post-operative results and surgical techniques. Aphakic glasses will be provided for needy children who receive the surgery.

ChildSight[SM]

The ChildSight[SM] program will be developed in the Province of Larache. Past experience with testing children for refractive error reveals that approximately 5% of children between the ages of 7 and 16 have a vision deficit. The MOH provides vision testing for these children and 50% of them currently receive a refraction, and only 20% receive the corrective eyeglasses they need. Under Project SEE II, a total of 60,000 children will be screened. HKI will provide 3,000 children over 3 years with eyeglasses. Moroccan opticians will provide the rest at cost.

Trachoma Control

Azithromycin® trials will be performed with the assistance of HKI by the MOH. The goal of this program which is funded by Pfizer, Inc., is the elimination of trachoma by the year 2000 (MET 2000: Morocco Elimination of Trachoma by the year 2000).

Childhood Blindness

Under the amendment to the Project SEE II grant, the project will also address the problems of childhood blindness due to congenital cataract. This will be accomplished by:

- Training provincial doctors and nurses in rural and semi urban areas in identification and referral of children with congenital cataract
- Providing, if necessary, the equipment to test and treat children for congenital cataract to secondary and tertiary hospitals
- Providing encouragement, professional advice and knowledge to doctors who are willing to provide comprehensive follow-up to children who present.
- Removing obstacles which prevent parents from bringing their children for diagnoses and treatment (including transportation funds, overnight stays, and the need for multiple visits from remote areas)
- Ensuring that every child receives the optimal visual experience through the use of corrective eye wear, strabismus surgery if necessary, and training of parents and social workers in the use of low vision aids.
- Enabling local health workers and trainers to provide proper and sustained follow-up to the parents of the children involved and thereby ensuring that the child with low vision can develop independence.

The Childhood Blindness Program is designed to capture the interest of the Ministry of Health, local NGOs and ophthalmological personnel. By demonstrating measurable results in visual rehabilitation of children with congenital cataract, HKI hopes to win support for continued surgical intervention.

C.4 Project Evaluation

Two evaluations will be conducted. In Year 3, an evaluation of progress toward institutionalization of eye care services and sustainability will be conducted. In Year 5 of the Childhood Blindness Program an evaluation measuring the success of the program will be conducted. Patient information is kept in a register by the PEC workers and this data is sent to the PNLC at the end of every quarter. The Childhood Blindness Component will be monitored by the Directors of University Hospitals, Prof. Amina Berraho-Hamani (Rabat) and Prof. Abdelouahad Amraoui (Casablanca), who will evaluate the trained doctors and nurses in the skills of congenital cataract diagnosis, surgical techniques and post-operative follow-up. PNLC staff will monitor the number of school children screened under ChildSight^{SM}, as well as the number who receive corrective eye wear, the number who wear their glasses during school, and the reasons for non-use such as breakage and loss.

C.5 Training Plan

Under Project SEE II, a total of 815 MOH personnel (258 doctors and 557 nurses) are scheduled for training. These personnel hold the responsibility for the identification, treatment and referral of eye disease at the local level.

Each training seminar will take place at the provincial level and last five (5) days. After completion, the trainees will know: structures of the eye, vision mechanisms, signs of abnormalities, visual acuity measurement, treatment and referral , and will have the ability to distinguish between primary and urgent eye care. The training team will consist of an ophthalmologist, an instructor from the nursing school, health promoters, and the médecin chef. The team will make use of slides, posters, a French language version of the eye care manual and various photocopied materials to carry out the training.

The training schedule is as follows:

1996-1997	Wilaya Méknès (2 provinces), Khenifra, Boulmane, Ben Slimane and Khourigba
1997-1998	Marrakesh (5 provinces), Khénitra, Al Haouz, Safi, Essaouira, El Hajeb
1998-1999	Chichaoua, Settat and El Jidada
1999-2000	Ifrane, Laayoune, Es Smara
2001-2002	Oued Eddahab, Dakhla, and Boujdour

Section D. PROJECT INFORMATION SYSTEM

D.1 PIS Plan

In-country, data collection will be handled by PEC trained doctors and nurses as well as: Mme. Fatima Zohra Akalay, HKI Country Representative; Dr. Youssef Chami Khazraji, Division Chief of Communicable Diseases in Department of Epidemiology and Public Health of the Ministry of Health; Dr. Jaouad Mahjour, Director of the Department of Epidemiology and Public Health of the Ministry of Health.

D.2 Data Collection and Use

Monitoring and evaluation will be conducted by the National Program of Prevention of Blindness Moroccan Ministry of Health. The Ministry is interested in evaluating:
Data on Primary Eye Care activities and beneficiaries:

- The name, age, sex, address, diagnosis, and health care facility where seen
- Number of consultations and treatments administered
- Number of primary eye care surgeries (example: foreign body removal)
- Number of patients referred to an ophthalmologist
- Number of post-operative cases followed at the primary level

Sustained follow-up of daily activities by collection of specific data, such as:

- Number of blind and low vision children
- Number of children tested for visual problems
- Number of children wearing glasses at school
- Number of glasses distributed by the optical workshop
- Utilization of services and trends
- Analysis of costs (training, services, personnel, etc.)

Evaluation of specific activities

- Monitoring the prevalence of serious inflammatory trachoma in children under 10 years of age
- Monitoring the prevalence of childhood blindness and low vision

Specific indicators of success will be as follows:

Coverage: 53 provinces (31 "Maintenance" + 22 "New")
53 Provinces with trained, equipped health centers and hospitals providing PEC services.

- 10% annual increase in the number of consultations for primary eye care (1994 total is 206,924)
- 10% annual increase in the number of cataract surgeries (1994 total is 14,492)
- 10% annual increase in the % of school children who have and wear glasses

Quality: % of congenital cataract patients followed up after 6 months
% of congenital cataract patients receiving updated information every 6 months
% decrease in waiting time for congenital cataract and adult surgery

Gender: % improvement in women receiving PEC and referral services at rates equal to their proportionate need versus that of men.

Section E. DIP SUSTAINABILITY STRATEGY

E.1 Sustainability Plan

The following are indicators which will used in measuring the sustainability of Project SEE II:

- % of provincial MOH health directors (médecins chefs) purchasing PEC equipment MOH budgets
- Amount and nature of in-kind donations
- Amount and nature of PNLC budgetary support (e.g. equipment purchases, training in PEC and pediatric-related specialties other than congenital cataract) for the 4 new CB centers
- % increase in ChildSight^{SM} projects adopted by businesses and local governments

Over the last few years, an important public and private partnership has emerged in Morocco to implement a plan for trachoma control. Through a grant from the Edna McConnell Clark Foundation and with the help of Pfizer, Inc., HKI has been conducting azythromycin trials in Morocco.

In addition, the funds allocated by the Moroccan government for blindness prevention have risen steadily to their current level of $732,995 for 1996 – 1997, and are expected to reach the level of $1,005,682 by the year 2000 – 2001.

E.2 Collaboration

As has been mentioned, this is a collaborative project with the MOH as the lead planner, implementor and evaluator, They have been intimately involved in the development of the DIP as well as the start-up meeting and dialogues concerning equipment.

E.2 Phase-over Plan

Since our role is defined as advisor and consultant, no phase-over is planned at this time. The expected duration of this role is 10 years. At the end of that period, all rural provinces will have been embraced by the program and the Ministry of Public Health will have committed to finance whatever functions have not been fully integrated into the government.

E.4 Cost Recovery

Cost recovery has not been identified as a major component of this program but mechanisms such as fee for service, low cost spectacle production, etc., will continue to be explored, along with local fundraising efforts targeted at local corporations. The Moroccan Society of Ophthalmology has committed to providing spectacles for the ChildSight^{SM} program after the initial demonstration, thereby contributing to its sustainability.

Section F. HUMAN RESOURCES

F.1 Organizational Chart

Please see Table D.

F.2 Community Groups

The community groups involved with this project are: the Organization Alaouite for Protection of the Blind in Morocco (OPAM), the K.K. Society, and Foyers de Femmes (women's centers where information about eye care can be integrated into their ongoing discussions about basic health and sanitation).

F.3 Staff Education

The staff of HKI's Morocco will travel to HKI headquarters in New York City, in September of 1997, for training. Mme. Akalay, HKI Country Representative, has begun learning English to facilitate communication with headquarters staff and experts in the field of blindness prevention.

F.4 Role of Country Nationals

The entire program is an initiative of the Moroccan Ministry of Health in collaboration with HKI Moroccan filed staff. Country nationals manage every aspect of this project from planning and design, to implementation and follow-up. HKI serves merely as a technical advisor and consultant, while continuing to provide logistical support in the form of gifts-in-kind and technical assistance.

F.5 Role of Headquarters Staff

HKI headquarters staff will provide technical assistance and administrative support including a number of diverse functions: organizational management, solicitation and distribution of gifts-in-kind, financial management, and donor reporting, among others. The Director of Eye Health and the Medical Director will provide evaluation and program direction. The Director of Training, or a designated consultant will train local trainers and collaborators.

Section G. Procurement

G.1 Procurement

The following logistical needs must be met for this project:

Primary eye care kits
Children's eye glasses
Surgical supplies for cataract and pterygium campaigns
Childhood blindness equipment (indirect ophthalmoscope, Perkins tonometer, Teller acuity cards)
Low vision devices

PROJECT GOALS AND OBJECTIVES
Morocco
Table IV

PROJECT OBJECTIVES BY INTERVENTION	MEASUREMENT METHOD--HOW/WHEN	MAJOR PLANNED INPUTS AND ACTIVITIES	OUTPUTS	MEASUREMENT METHOD AND DATA SOURCE--HOW/WHEN
To demonstrate the integration of eye care services into existing health care systems under Project SEE II.	• Quarterly monitoring of nature and number of eye problems including trachoma at the community level • Quarterly monitoring of the number of adult cataract surgeries and of post operative results • Assessment on an annual basis the skills of PEC trained workers and retrain if needed	• Orient staff to Project SEE II • Sign/Renew formal agreements • Train and equip personnel • Distribute ophthalmic equipment and supplies • Recruit staff	• Renewed/new formal agreements • Trained personnel • Improved eye clinic services • An extended program plan based on the results of Project SEE I	• Data analysis • Regular evaluations • Surgical outcome of cataract patients • Training outcome of health workers • Clinical records and summary records
To strengthen the capability of local institutions to plan, manage, and finance eye care services	• Size of the government budget and personnel deployed for eye health • NGO's collaboration in blindness prevention activities • Community participation	• Provide technical assistance • Conduct training needs assessments and TOTs • Develop and test training and health materials • Conduct field visits by H.Q Staff	• Convene blindness prevention committees • Develop detailed implementation plans • Develop and test training materials	• Project management reports
To increase the eye services available to adults and children: a) ChildSight^{SM}. b) Childhood blindness	a) Quarterly data analysis of quality and quantity of adult cataract surgery b) % of children with refractive error, those who receive glasses and those who retain them yearly c) Completed forms and follow-up of children d) Post operative visual acuity and low vision services	a) Train personnel in the identification and referral of refractive errors b) Develop referral mechanisms c) Identify, train and equip pediatric ophthalmologists	• Perform cataract surgery • Implement ChildSight^{SM} • Perform childhood blindness surgery • Promote community gardens	• Number of children who benefit from ChildSight^{SM} activities • Number of forms and length of followup completed on children's surgery
To eliminate trachoma in Morocco by the year 2,000 (MET 2,000)	• Quarterly reports • Data analysis	• Conduct baseline survey • Training in IEC activities • Conduct azithromycin® trial	• Personnel trained in trachoma identification • Increased trichiasis surgery	• # of cases identified and treated • # of surgeries performed

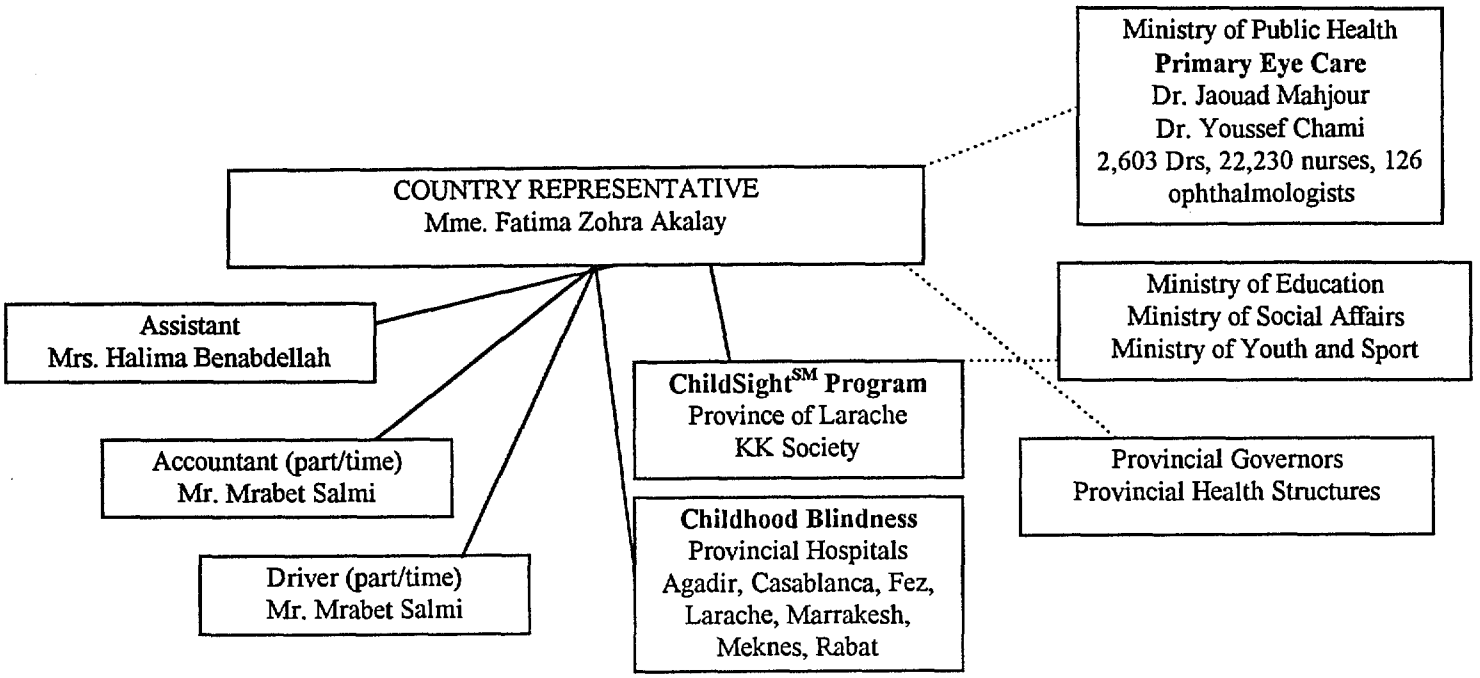
Matching Grant
FY 96 Application- Amendment
Country Budget For:Morocco
(Supported by Budget Narrative - CASH $ in thousands)

PVO: Helen Keller International

	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5		ALL YEARS		
	AID	PVO	AID	PVO	AID	PVO	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. Program Elements													
a) Salaries (titles/rates/# days)													
Representative (90% Yrs 1-3, Yr 4,5 75%)	27.00	3.00	28.00	3.00	28.00	4.00	24.00	8.00	24.00	9.00	131.00	27.00	158.00
Accountant (25%)	6.00	1.20	6.00	0.80	6.50	0.00	6.50	0.00	6.50	0.00	31.50	2.00	33.50
Typist/Secretary (25%)	6.00	1.20	6.00	1.20	6.50	0.00	6.50	0.00	6.50	0.00	31.50	2.40	33.90
Translations	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
Driver (50%)	4.00	1.00	4.50	1.00	4.50	0.00	4.50	0.00	4.50	0.00	22.00	2.00	24.00
b) Fringe Benefits	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
c) Travel, Transportation, & Per Diem													
International Travel HKI Rep Year 1 @ $1,500 HQ	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	1.50
International HKI RepPer diems 1 person x 5 days x $200 Yr 1	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
International Travel pediatric surgeon and anaesthesiologist 1 trip $1,250	0.00	0.00	3.40	0.00	0.00	0.00	3.40	0.00	3.40	0.00	10.20	0.00	10.20
Domestic: Insurance, Fuel	1.00	1.90	1.00	1.90	1.00	0.00	1.00	0.00	1.00	0.00	5.00	3.80	8.80
Domestic: Air Travel (2 Trips to Tangiers, Agadir and Marrakesh x $500) HKI Rep Yrs 2	0.50	0.20	0.50	0.20	0.50	2.00	0.50	0.00	0.50	0.00	2.50	2.40	4.90
Domestic: Per diems 2 person x 5 days x $100 each year HKI Rep & Trachoma Advisor	0.50	1.00	0.50	1.00	0.50	1.00	0.50	0.00	0.50	0.00	2.50	3.00	5.50
d) Subcontracts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
e) Other Direct Costs													
Office Support	0.00	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	4.00
Final Celebration Event	0.00	0.00	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	1.50	0.00	1.50
Training Materials	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
Radio spots	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
Trainers Workshops 3 days @ $10 per diem x 250 medical personnel Yr 1-5	9.00	0.00	7.00	0.00	7.00	0.00	7.00	0.00	7.00	0.00	37.00	0.00	37.00
Training for 11 Pediatric Ophthalmologists 2 days x $50 per day, Yr1-5	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	5.00	0.00	5.00
Office Supplies	0.50	1.00	0.50	1.00	0.50	0.00	0.50	1.00	0.50	1.00	2.50	4.00	6.50
Telephone/Fax	1.00	1.80	1.00	1.80	1.00	0.00	1.00	0.00	1.00	0.00	5.00	3.60	8.60
Contingency	0.60	0.50	0.00	0.50	0.00	0.00	0.60	0.00	0.60	0.00	1.80	1.00	2.80
Computers Yr 1, 2nd 2 laptops @ $2,000	0.00	4.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	4.00	8.00
Postage & Delivery	1.00	0.20	1.00	0.20	1.00	0.00	1.00	0.20	1.00	0.20	5.00	0.80	5.80
SUBTOTAL -- Program Elements:	60.60	20.00	64.40	17.60	59.50	9.00	58.00	9.20	58.00	10.20	300.50	66.00	366.50
II. Procurement													
a) Consultancies													
Local Monitoring Consultant support 90 days @ $35	3.00	8.00	3.00	8.00	3.00	0.00	3.00	0.00	3.00	0.00	15.00	16.00	31.00
Childhood Blindness Consultant Fee @ $300 x 5	0.00	0.00	1.50	0.00	0.00	0.00	1.50	0.00	1.50	0.00	4.50	0.00	4.50
Childhood Blindness Consultant Per Diem @ $100 x 5	0.00	0.00	0.50	0.00	0.50	0.00	1.00	0.00	1.00	0.00	3.00	0.00	3.00
Pediatric Anaesthesiologist Fee $200 x 5	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	3.00	0.00	3.00
Pediatric Anaesthesiologist per diem @ $100 x 5	0.00	0.00	0.50	0.00	0.00	0.00	0.50	0.00	0.50	0.00	1.50	0.00	1.50
b) Supplies													
Primary Eye Care Kits $22.50 x 130 nurses	1.00	0.00	6.00	0.00	12.00	0.00	0.00	0.00	0.00	0.00	19.00	0.00	19.00
Children's Eye Glasses $70 x 1,000 per year	0.00	70.00	0.00	70.00	0.00	70.00	0.00	70.00	0.00	70.00	0.00	350.00	350.00
Children's Aphakic Spectacles $70 x 50	0.00	3.50	0.00	3.50	0.00	3.50	0.00	3.50	0.00	3.50	0.00	17.50	17.50
Surgical Supplies for Cataract & Pterygium Campaigns	0.00	50.00	0.00	50.00	0.00	50.00	0.00	50.00	0.00	50.00	0.00	250.00	250.00
Childhood Blindness Eqmnt (Indirect ophthalmoscopes, perkins tonometers, teller acuity c	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	0.00	10.00
Low Vision Devices 40 x $90 x 4	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	0.00	10.00
SUBTOTAL -- Procurement:	4.00	131.50	32.50	131.50	15.50	123.50	7.00	123.50	7.00	123.50	66.00	633.50	699.50
SUBTOTAL I + II	64.60	151.50	96.90	149.10	75.00	132.50	65.00	132.70	65.00	133.70	366.50	699.50	1066.00
III. Indirect Costs													
SUBTOTAL --Indirect Costs:	13.89	32.57	20.83	32.06	16.13	28.49	13.98	28.53	13.98	28.75	78.80	150.39	229.19
Morocco TOTAL PROGRAM COSTS (I+II+III):	78.49	184.07	117.73	181.16	91.13	160.99	78.98	161.23	78.98	162.45	445.30	849.89	1295.19

Table D

Helen Keller International
Organizational Chart-Morocco
1996-2001



COLLABORATING PARTNERS IN MOROCCO

Moroccan Society of Ophthalmology
Pan Arab Association of Ophthalmologists

Moroccan Society Opticianry

Fondation Hassan II
Catholic Relief Services
Embassy of France
Association of Solidarity and Development

MET 2000 FUNDERS (Trachoma)
Edna McConnell Clark Foundation
Pfizer Inc.

Organization Alaouite for Protection of the Blind in Morocco (OAPAM)
US Peace Corps

All staff are host country nationals unless otherwise noted
All staff who are part time are listed as such

TANZANIA

Project S.E.E. II
DETAILED IMPLEMENTATION PLAN
Matching Grant Funds: 1996 - 2001

Section A. DIP TIME LINE / SCHEDULE OF ACTIVITIES

A.1 Time line attached. Please see Appendix II.

Section B. LOCATION AND FORMAL AGREEMENTS

B.1 Location Description

This project is located at Kongwa, in the Dodoma Region of the United Republic of Tanzania. As part of the overall expansion proposed under Project SEE II, the town of Singida (located 257 km north-west of Dodoma) is being included. The following constraints on project activities are commonly encountered in this part of the country:
Geographic: heavy rains causing slippery roads from January through April
Economic: Cultivation season from January through April and harvesting period from May through July of every year
Educational: Low number of children enrolled in the schools
Cultural: Circumcision festivals from August through November of every year.
The current health care infrastructure is comprised of two regional hospitals (Dodoma Regional Hospital and Singida Regional Hospital), three district hospitals in Dodoma, and two district hospitals in Singida.

B.2 Location Justification

This location was chosen because it is trachoma hyperendemic according to the last available survey, which was conducted in 1989. Tanzania is one of the poorest nations served by HKI and our program there has done remarkable work with a very limited budget. Qualitatively speaking, the HKI program in Tanzania is among the best examples of the agencies work. However, the scope of the eye health problems is Tanzania, necessitates a sustained and expanded effort the part of HKI. The project location is contiguous to the area where HKI currently has programs and there is an ophthalmologist, and surgical facilities, present in the region. In order to reassure the Tanzanian government that HKI's programs can be successfully replicated, and thereby cement government support for blindness prevention efforts, the project must be expanded into the above-mentioned regions.

B.3 Formal Agreements

Currently, HKI maintains formal agreements with the Ministry of Health of Tanzania, which has recognized the program, and the National Prevention of Blindness Committee, which acts as an advisory body. Additionally, HKI collaborates with the Central Eye Health Foundation (CEHEFO), a local NGO. HKI will be registered as an NGO in Tanzania within the next 6 months.

Section C. PROJECT DESIGN

C.1 Baseline Survey Results

A population based survey of the prevalence of trachoma was conducted in 1986 in the Kongwa Subdistrict by Johns Hopkins University. The results of this survey showed the prevalence of trachoma in the region to be at 63%. The number of cataract surgeries currently performed in the Dodoma region is approximately 100. Approximately 267 trichiasis surgeries are performed. Nearly 800 malnourished children are treated with vitamin A capsules. The prevalence of blindness overall was 1.5%.

C.2 Goals & Objectives

See attached Table V.

C.3 Project Design

The project in Tanzania will consist of the following interventions: immunization, cataract surgery, environmental sanitation, community-based rehabilitation, and the recently launched Kongwa Women's Credit Project. The program provides immunization support services to 25 out of 56 villages. The coverage in the Kongwa district alone is 47%, and in the Mpwapwa district the coverage is 44%. In the Dodoma rural district 5 villages are covered by this project. The coverage of five 5 villages in Singida is planned. The choice of program design was influenced by the role of the community in helping the eligible population to enter and participate in the child surgery initiatives. Community-based rehabilitation initiatives will be expanded to include one 1 village in the Singida district after client profiles are obtained.

C.4 Project Evaluation

Tracking and monitoring of the program participants' progress will be conducted by community health workers and village health committees, and via thorough regular follow-ups by program staff. Regular follow-up visits by project staff will continue in Dodoma as before, and especially in Singida which is in the early stages of the project. A customer satisfaction survey is underway to determine the needs and level of satisfaction of the clients. An institutional capacity consultant will conduct an organizational development assessment in Year 2 of the project. This information will be compiled into a plan for sustainability of the program and CEHEFO. Several evaluations are planned for Year 3: they include the Kongwa Women's Program, the Trachoma Resource Center and Project SEE II sustainability.

C.5 Training Plan

The overall design of the training programs (both initial and refresher/follow-ups) consists of educating local health workers in the following areas:

1. Cataract screening
2 For active trichiasis screening

3. Environmental sanitation
4. Setting up of "Primary Eye Care Programs"
5. Kongwa Women's Credit Project seminars
6. Community-based rehabilitation seminars

Participants convene at a central location (usually Kongwa) where informal and formal lectures take place, with the goal of developing new strategies and recommending solutions to problems faced in the field by the end of the training period (approximately 3-5 days). Reports from participants are usually sent to HKI offices at Kongwa and Dodoma.

Section D. PROJECT INFORMATION SYSTEM

D.1 PIS Plan

The data will be collected by community health workers, and analyzed by the Country Representative, Sydney Katala. This data will be routed to HKI headquarters on a quarterly and annual basis, and will be further analyzed by HKI Headquarters staff.

D.2 Data Collection and Use

Data on project activities will be reviewed throughout the project. The following qualitative and quantitative data will be collected by village health workers, medical assistants, rural medical aides, teachers, and program staff:

- Number of trichiasis, cataract, trabeculectomy and other extra-ocular operation performed
- Number of cataract patients with visual acuity in the 0 - 1 range after surgery
- The number of trees planted and their survival rate
- Number of surgical referrals
- The cost-effectiveness of all programs

Section E. DIP SUSTAINABILITY STRATEGY

E.1 Sustainability Plan

A national blindness prevention plan modeled on those from other HKI country programs, as well as WHO standards is in the process of development. This will provide an excellent tool for obtaining collaboration of partners in the field of blindness prevention and the commitment of the government of Tanzania.

The measurable objectives and indicators the project will use to track the progress toward sustainability are:

- Total number of country nationals involved in planning program activities at the village, district, regional, and national level
- Total number of health committee members in each village

- Level of community involvement in cataract/trichiasis/community-based rehabilitation screening
- Number of key people participating in the immunization program and the number of these who have attended training seminars
- The formation of women's groups and active involvement on the part of women in health issues in each village
- Number of women participating in the Kongwa Women's Credit Project

At the end of the grant period, the project is expected to leave in place the following:

- A permanent behavioral change on face washing patterns among children
- A sufficient number of motivated people who will participate in health-related activities
- A well established referral system for eye care delivery
- Teachers who are trained and motivated to instruct students in face washing and environmental sanitation
- A greater number of productive blind people who have been trained and skilled through the community-based rehabilitation initiatives
- Bicycles for village health workers
- Sufficient manpower to train others in eye care related activities
- Medical schools which embrace the concept of Sustainable Efficient Eye Care

Continued support from the community, the Ministry of Health and the Central Eye Health Foundation will be integral to the sustainability of the project.

The Trachoma Resource Center, also known as the CEHEFO Center, Kongwa (CECEKO) is a major new training facility for the use of the Ministry of Health and others. EMCF, with USAID, the McKnight Foundation, Het Schild, and individual donors support well-planned, deeply integrated, rural health and development.

The Kongwa Women's Credit Program, funded by the McKnight Foundation, provides economic assistance which will measure the ability and desire women to take advantage of health care services.

E.2 Collaboration

Collaboration with other NGOs and governmental agencies will continue during the grant period to ensure sustainability. The following entities will collaborate with HKI: The Ministry of Youth and Labor/Community Development, the Ministry of Agriculture, the Ministry of Land and Urban Development, the Ministry of Water, Energy and Minerals, and the Prime Minister's Office.

E.3 Phase-over Plan

As with all HKI programs, this project is designed to be completely phased over by the end of the grant period. Currently, the programs in Tanzania are operated locally, with country nationals holding key program posts. Therefore, the bulk of the phase

over has been completed. HKI will continue to provide expert technical advice, along with follow-up training seminars to ensure the continued sustainability of the programs.

E.4 Cost Recovery

The cost recovery strategy in Tanzania consists of fees charged to patients for registration, hospital admission, and surgery. However, these fees are charged only at district and regional hospitals. Patients at rural health centers are not required to pay a fee. HKI's training in orientation, mobility and daily living skills have enabled 13 blind people to attain a level of self sufficiency, thereby integrating them into the economy and community. Those who have been trained sell vegetables, and the proceeds from the sales are used to offset program expenses. Rental of the facilities of the Trachoma Resource Center, which was constructed with funds from Edna McConnell Clark, have enabled the Kongwa Trachoma Resource Center and CEHEFO to derive additional income for the maintenance of that facility. In addition, the Kongwa Women's Credit Program provides additional revenue which helps offset the overall cost of the project. If the pilot project is successful, it will mean that cost recovery will become an integral part of the Tanzania program.

Section F. HUMAN RESOURCES

F.1 Organizational Chart

Please see Table E.

F.2 Community Groups

The following is a list of community groups involved with this project and the names of their respective liaisons:

Groups	Liaisons
Schools	Ms. N. Lyimo/ Mr. S. Katala
Women's Groups	Mr. D. Chambasi/ Mr. S. Katala
Traditional dancers	Mr. Seenga Mlacky
Traditional healers	Mr. D. Chambasi/ Mr. S. Katala
Youth groups	Mr. Seenga Mlacky/ Mr. Romanus

The schools will educate students and the rest of the community about the importance of face washing. The schools will demonstrate techniques for face washing which also conserve water. In addition, the schools will raise awareness of the need for immunization.

Women's groups will engage in income generating activities, leading to independence and empowerment. They will hold meetings to discuss the importance of face washing and trachoma control. Forestry and agricultural extension officers will be working with women's groups to educate them on proper sowing and weeding techniques to obtain bumper harvests.

Traditional dancers will carry the message of blindness prevention through songs. HKI has recorded several of these which are broadcast on local radio stations.

Traditional healers will receive short seminars on referral of eye patients, and on why it may do more harm than good to apply herbs to patients' eyes.

Youth groups will help motivate people to come for trichiasis and cataract surgery.

F.3 Staff Education

Mr. Mlack, Mr. Romanus, Mr. Schuve, Mr. Benjamin, received training in Tanzania. Under this grant, Sidney Katala, Country Representative Project SEE II, will come to the U.S. for orientation. HKI's African regional workshop in Niger will be attended by Mr. Katala and Mr. Molahan, administrator. Mr. Molohan will take courses in spreadsheet accounting and organizational development in New York September 1997. Mr. Katala will participate in a Project SEE II orientation in New York in September of 1997.

F.4 Role of Country Nationals

At present, country nationals are managing this project. All project staff are trained by the Ministry of Health, while National Prevention of Blindness Committee (NBPC) oversees the execution of all activities. The NBPC is also involved with program design and implementation. Country nationals are therefore involved with every facet of the project, and this helps ensure the project's ultimate sustainability.

F.5 Role of Headquarters Staff

HKI headquarters staff will provide technical assistance and administrative support including a number of diverse functions: organizational management, solicitation and distribution of gifts-in-kind, financial management, donor reporting, among others. The Director of Eye Health and the Medical Director will provide evaluation and program direction. The Director of Training, or a designated consultant will train local trainers and collaborators.

Section G. Procurement

G.1 Procurement

The following logistical needs must be met for this project:
Cataract sets
Copier/printer
Medical supplies

PROJECT GOALS AND OBJECTIVES

Tanzania

Table V

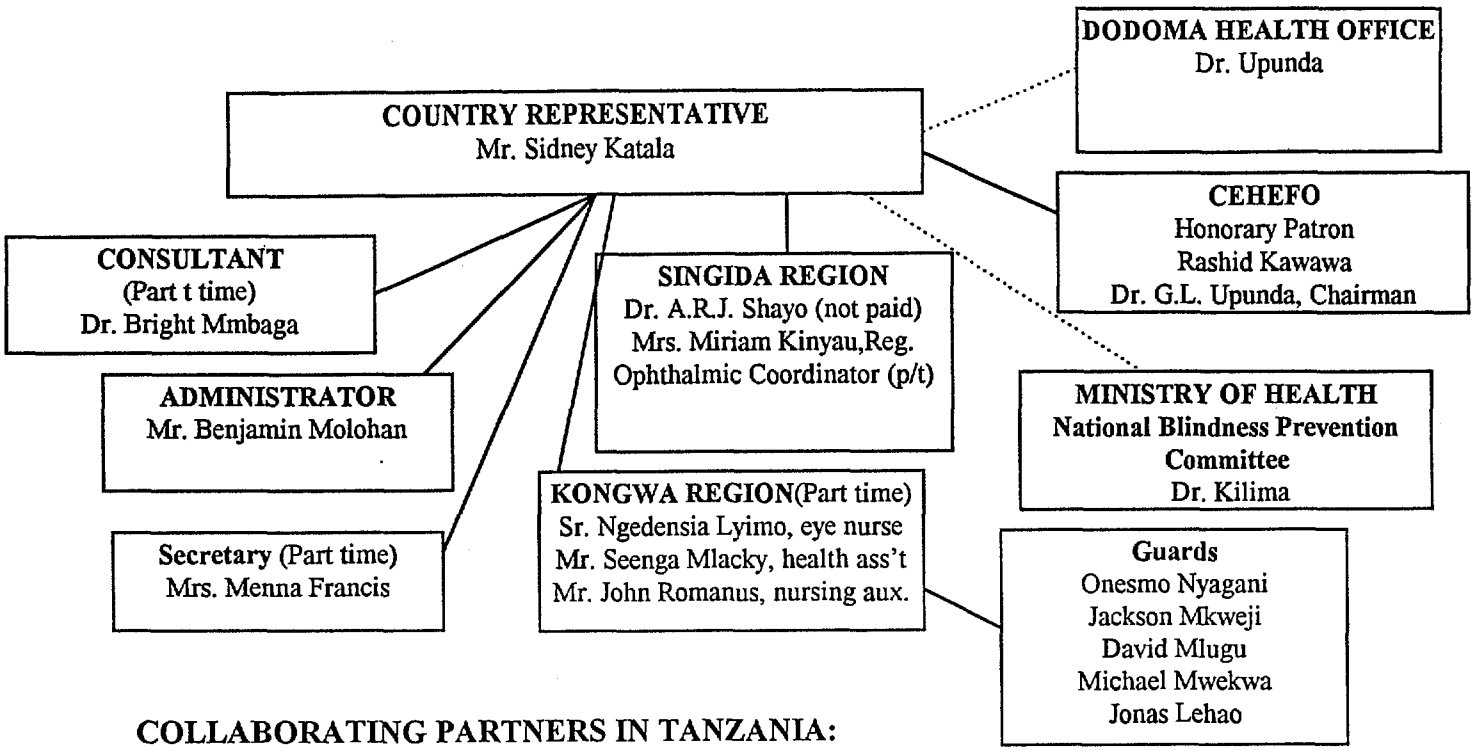
PROJECT OBJECTIVES BY INTERVENTION	MEASUREMENT METHOD--HOW/WHEN	MAJOR PLANNED INPUTS AND ACTIVITIES	OUTPUTS	MEASUREMENT METHOD AND DATA SOURCE--HOW/WHEN
1. To increase the number of cataract surgeries	• Number of cataract operations through station reports	• Cataract screening • Major cataract surgery sets	• Number of surgeries • Productivity on the part of post-operative patients	• Monthly program reports • Quarterly program reports • Annual reports • Community development quarterly reports • Final report
2. To increase the number of trichiasis surgeries	• Number of trichiasis surgeries through station reports • Number of mobile blind people	• Trichiasis surgical sets • Training nurses in trichiasis surgery • Training in cane assisted mobility • Canes and staff for the project	• Number of trichiasis surgeries • Income generating activities on the part of those treated/or rehabilitated	• As above plus: - Follow-up with every patient - Monthly, quareterly and annual reports
3. To expanded PEC program in Singida	• Number of PEC trainees through TOT method • Number of villages covered • Number of patients screened for cataract and trichiasis	• Training seminars for trainers • Diagnostic screenings	• Wider coverage of PEC program activities • Greater number of operable cataract and trichiasis cases detected and referred	• As above plus: - Monthly and quarterly reports - Follow-up and supervision
To demonstrate the integration of eye care services into existing health care systems under Project SEE II.	• Quarterly monitoring of nature and number of eye problems including trachoma at the community level • Quarterly monitoring of the number of adult cataract surgeries and of post operative results • Assessment on an annual basis the skills of PEC trained workers and retrain if needed	• Orient staff to Project SEE II • Sign/Renew formal agreements • Train and equip personnel • Distribute ophthalmic equipment and supplies • Recruit staff	• Renewed/new formal agreements • Trained personnel • Improved eye clinic services • An extended program plan based on the results of Project SEE I	• Data analysis • Regular evaluations • Surgical outcome of cataract patients • Training outcome of health workers • Clinical records and summary records

Matching Grant
FY 96 Application - Tanzania
Country Budget For: Tanzania
(Supported by Budget Narrative - CASH $ in thousands)

PVO: Helen Keller International

	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5		ALL YEARS		
	AID	PVO	AID	PVO	AID	PVO	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. Program Elements													
a) Salaries (titles/rates/# days)											22.00	16.00	38.00
Dodoma:											4.50	19.50	24.00
Senior Advisor (75%)	10.00	5.50	6.00	5.50	6.00	5.00					4.00	6.00	10.00
Representative (100%)	1.50	6.50	1.50	6.50	1.50	6.50							
Administrator (50%)	1.00	2.00	1.00	2.00	2.00	2.00							
											1.50	2.10	3.60
Typist/Secretary (65%)	0.50	0.70	0.50	0.70	0.50	0.70					8.00	0.00	8.00
6 Security Guards (100%) @$500	2.50	0.00	2.50	0.00	3.00	0.00					5.00	0.00	5.00
2 Ophthalmic Nurses @$700	1.50	0.00	1.50	0.00	2.00	0.00							
Kongwa:											4.00	0.00	4.00
3 Nursing Auxiliaries @ $400	1.00	0.00	1.00	0.00	2.00	0.00					0.00	1.50	1.50
Driver	0.00	0.50	0.00	0.50	0.00	0.50					0.00	3.00	3.00
Assistant Health/Community Development Off.	0.00	1.00	0.00	1.00	0.00	1.00							
Singida:											3.00	0.00	3.00
Regional Outreach Coordinator 50%	1.00	0.00	1.00	0.00	1.00	0.00							
	0.00	0.00	0.00	0.00	0.00	0.00					0.00	0.00	0.00
b) Fringe Benefits													
											4.00	0.00	4.00
c) Travel, Transportation, & Per Diem	4.00	0.00	0.00	0.00	0.00	0.00					4.50	0.00	4.50
International Travel to US @ $4,000	3.00	0.00	1.50	0.00	0.00	0.00					1.00	0.00	1.00
Per diems 2 persons x 7 x $200	0.00	0.00	1.00	0.00	0.00	0.00					10.50	10.50	21.00
Institutional Capacity Consultant Travel NBO RT $1,000 Yr 2	3.00	3.00	3.50	3.50	4.00	4.00					15.00	0.00	15.00
Local Travel (Dodoma, Singida) Petrol & Vehicle Maintenance	5.00	0.00	5.00	0.00	5.00	0.00							
Travel (PEC data collection Kongwa)											0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00							
d) Subcontracts											3.00	0.00	3.00
e) Other Direct Costs	3.00	0.00	0.00	0.00	0.00	0.00					24.00	180.00	204.00
DIP Startup Workshop @ $100 per person x 15 people x 3 days	6.00	60.00	8.00	60.00	10.00	60.00							
Training (PEC, CBR, Women and School Teachers Child-to-Child Seminars)													
											0.50	0.00	0.50
	0.50	0.00	0.00	0.00	0.00	0.00					9.00	0.00	9.00
Training in Management and Finance NYC $250 x2	3.00	0.00	3.00	0.00	3.00	0.00					3.50	0.00	3.50
Occupancy	1.00	0.00	1.00	0.00	1.50	0.00					7.00	0.00	7.00
Office Supplies	2.00	0.00	2.00	0.00	3.00	0.00					5.50	0.00	5.50
Telephone/Fax	1.50	0.00	2.00	0.00	2.00	0.00					10.00	0.00	10.00
Postage & Delivery	3.00	0.00	3.00	0.00	4.00	0.00							
Services (auditing & insurance)											149.50	238.60	388.10
SUBTOTAL -- Program Elements:	54.00	79.20	45.00	79.70	50.50	79.70	0.00	0.00	0.00	0.00			
II. Procurement													
											2.00	0.00	2.00
a) Consultancies	0.00	0.00	2.00	0.00	0.00	0.00					1.00	0.00	1.00
Institutional Capacity Consultant @ 10 days x $200	0.00	0.00	1.00	0.00	0.00	0.00					2.50	0.00	2.50
Consultant Per Diem @ 10 days x $100	2.50	0.00	0.00	0.00	0.00	0.00					1.00	0.00	1.00
Customer Satisfaction Consultant @ $250 x 10	1.00	0.00	0.00	0.00	0.00	0.00							
Customer Satisfaction Consultant Per Diem @ 10 days x $100													
											4.00	0.00	4.00
b) Supplies	4.00	0.00	0.00	0.00	0.00	0.00					2.00	0.00	2.00
2 Cataract Sets	2.00	0.00	0.00	0.00	0.00	0.00					4.00	9.00	13.00
Copier/Printer	2.00	3.00	1.00	3.00	1.00	3.00							
Medical Supplies											16.50	9.00	25.50
	11.50	3.00	4.00	3.00	1.00	3.00							
SUBTOTAL -- Procurement:							0.00	0.00	0.00	0.00	166.00	247.60	413.60
SUBTOTAL I + II	65.50	82.20	49.00	82.70	51.50	82.70							
III. Indirect Costs													
							0.00	0.00	0.00	0.00	35.69	53.23	88.92
SUBTOTAL --Indirect Costs:	14.08	17.67	10.54	17.78	11.07	17.78							
							0.00	0.00	0.00	0.00	201.69	300.83	502.52
Tanzania TOTAL PROGRAM COSTS (I+II+III):	79.58	99.87	59.54	100.48	62.57	100.48							

Helen Keller International
Organizational Chart-Tanzania
1996-2001



COLLABORATING PARTNERS IN TANZANIA:

Edna McConnell Clark Foundation The McKnight Foundation	WaterAid Lions Netherlands	Christoffel BlindenMission Johns Hopkins University

All staff are host country nationals unless otherwise noted
All staff who are part time are listed as such

BUDGET SUMMARIES
APPENDIX I

Matching Grant
FY 96 Application-Revised
Program Summary By Country and Source
(Supported by Budget Narrative - CASH $ in thousands)

PVO: Helen Keller International, Inc.

Direct Costs	YEAR 1 USAID	YEAR 1 PVO	YEAR 2 USAID	YEAR 2 PVO	YEAR 3 USAID	YEAR 3 PVO	YEAR 4 USAID	YEAR 4 PVO	YEAR 5 USAID	YEAR 5 PVO	ALL YEARS USAID	ALL YEARS PVO	LL YEARS TOTAL
Country 1 -- Mexico -- Total Program	65.50	124.00	64.50	130.50	56.50	62.50	62.80	21.00	62.80	10.00	312.10	348.00	660.10
Country 2 -- Morocco -- Total Program	64.60	151.50	96.90	149.10	75.00	132.50	65.00	132.70	65.00	133.70	366.50	699.50	1066.00
Country 3 -- Tanzania -- Total Program	65.50	82.20	49.00	82.70	51.50	82.70	0.00	0.00	0.00	0.00	166.00	247.60	413.60
Country 4 -- Cambodia -- Total Program			32.25	23.50	18.25	23.50					50.50	47.00	97.50
Country 5 -- Bangladesh -- Total Program			38.50	0.00	21.50	0.00					60.00	0.00	60.00
Headquarters -- New York -- Total Progra	211.89	206.36	224.33	192.13	223.32	204.81	191.08	180.00	169.61	198.75	1020.21	982.05	2002.26
TOTAL Direct Costs	**407.49**	**564.06**	**505.48**	**577.93**	**446.07**	**506.01**	**318.88**	**333.70**	**297.41**	**342.45**	**1975.31**	**2324.15**	**4299.46**
INDIRECT COSTS @ 21.5%	**87.61**	**121.27**	**108.68**	**124.25**	**95.90**	**108.79**	**68.56**	**71.75**	**63.94**	**73.63**	**424.69**	**499.69**	**924.38**
TOTAL MG PROGRAM	**495.10**	**685.34**	**614.15**	**702.18**	**541.97**	**614.81**	**387.43**	**405.45**	**361.35**	**416.08**	**2400.00**	**2823.84**	**5223.85**

Matching Grant
FY 96 Application-Revised
Program Sumary by Cost Element and Source
($S IN THOUSANDS)
PVO : Helen Keller International, Inc.

COST ELEMENTS:	YEAR 1 USAID SHARE	YEAR 1 PVO SHARE	YEAR 1 TOTAL ANNUAL	YEAR 2 USAID SHARE	YEAR 2 PVO SHARE	YEAR 2 TOTAL ANNUAL	YEAR 3 USAID SHARE	YEAR 3 PVO SHARE	YEAR 3 TOTAL ANNUAL	YEAR 4 USAID SHARE	YEAR 4 PVO SHARE	YEAR 4 TOTAL ANNUAL	YEAR 5 USAID SHARE	YEAR 5 PVO SHARE	YEAR 5 TOTAL ANNUAL	TOTAL COSTS
a) Salaries	223.31	126.29	349.60	251.00	122.70	373.70	250.20	125.95	376.15	200.00	126.50	326.50	184.80	136.00	320.80	1746.75
b) Fringe Benefits	31.08	25.67	56.75	36.13	24.13	60.25	35.93	25.06	60.99	29.88	28.00	57.88	26.95	31.75	58.70	294.56
c) Travel, Transportation, Per Diem	48.50	36.10	84.60	43.65	39.10	82.75	33.50	47.50	81.00	18.90	0.00	18.90	13.40	0.00	13.40	280.65
d) Subcontracts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
e) Procurement	33.00	296.50	329.50	84.50	314.50	399.00	41.00	235.50	276.50	21.00	168.00	189.00	23.00	163.50	186.50	1380.50
f) Other Direct Costs	71.60	79.50	151.10	90.20	77.50	167.70	85.44	72.00	157.44	49.10	11.20	60.30	49.26	11.20	60.46	597.00
TOTAL:	407.49	564.06	971.55	505.48	577.93	1083.40	446.07	506.01	952.08	318.88	333.70	652.58	297.41	342.45	639.86	4299.46
A.I.D. SHARE																0.00
RECIPIENT (PVO) SHARE (NON-FEDERAL CASH)																0.00
OTHER CONTRIBUTIONS **																0.00
TOTAL EST. PROJECT COSTS			971.55			1083.40			952.08			652.58			639.86	4299.46

** Specify in attachment to this budget. Note: This would be over and above non-federal cash match.

Matching Grant
FY 96 Application -Amendment
HEADQUARTERS (REGIONAL OFFICE) BUDGET
(Supported by Budget Narrative - CASH $ in thousands)
PVO Helen Keller International

	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5		ALL YEARS		
	AID	PVO	AID	PVO	AID	PVO	AID	PVO	AID	PVO	AID	PVO	TOTAL
I. Program Mgmt Elements													
a) Salaries (titles/rates/# days)													
-Project Director (Yr 1, 67%, Yr 2,3,4 50% ,Yr 5 25%)	45.56	22.44	34.00	35.00	35.70	36.75	37.50	37.50	24.30	52.00	177.06	183.69	360.75
-Medical Director (50%)	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	62.50	62.50	125.00
-Trachoma Advisor (5% yr1, 5% yr2, 0% yr3)	4.50	0.00	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.00	0.00	9.00
-Monitoring & Evaluation Specialist (Yr 2, 3, (100%) Yrs. 1,4, 5 50%)	20.75	20.75	*40.00*	*0.00*	*40.00*	*0.00*	21.00	21.00	21.50	21.50	143.25	63.25	206.50
-Training Director (10% yrs 1&2,3,4,5)	6.00	0.00	7.00	0.00	7.00	0.00	8.00	0.00	8.00	0.00	36.00	0.00	36.00
-Nutrition Advisor (10% yrs 2,3)	0.00	10.00	10.00	10.00	10.00	10.00	0.00	0.00	0.00	0.00	20.00	30.00	50.00
-Grant Manager (20%)	9.50	0.00	10.00	0.00	10.50	0.00	11.00	0.00	11.50	0.00	52.50	0.00	52.50
-Field Operations (50%)	17.00	17.00	17.50	18.00	18.00	19.00	19.00	19.00	19.00	19.00	90.50	92.00	182.50
-Administrative Assistant (30%)	8.50	20.00	9.00	21.00	10.00	22.00	10.50	22.00	11.00	22.00	49.00	107.00	156.00
b) Fringe Benefits	31.08	25.67	36.13	24.13	35.93	25.06	29.88	28.00	26.95	31.75	159.95	134.61	294.56
c) Travel, Transportation & Per Diem													
-1 HQ staff DIP STARTUP WORKSHOPS International Trip to Mexico $1,250, Tanzania $2,000, Mor	5.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	1.00	6.00
-1 HQ Staff DIP STARTUP WORKSHOP International per diems 15 days @$200 per day	3.00	2.00	0.00	0.00	0.00	0.00	*0.00*	*0.00*	*0.00*	*0.00*	3.00	2.00	5.00
-1 International Air Mexico $1,250 and Morocco $1,750 ChildSight Program Officer 10 days	3.00	1.00	0.00	5.50	0.00	5.50	0.00	0.00	0.00	0.00	3.00	12.00	15.00
-2 International Trips ChildSight Program OfficerPer Diems 10 days @$200 per day	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	4.00	6.00
-Medical Director, Morocco $1,750 & Mexico $1,250, yr 1 & 2	1.50	0.00	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	3.00
-Medical Director Per Diems 10 days @$200	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
-International Air Director of Eye Health Mexico $1,250 & Morocco $$1,750	0.00	0.00	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	4.00
-Director of Eye Health 20 days @$200 per diem	0.00	0.00	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	4.00
-Trachoma Advisor Morocco *$1,250 & Tanzania $4,000, 3 trips per year*	*0.00*	15.00	0.00	15.00	0.00	15.00	0.00	0.00	0.00	0.00	0.00	45.00	45.00
-Trachoma Advisor Per Diems @ $200 x 10 +$100 x 10, 3 trips per year	0.00	9.00	0.00	9.00	0.00	9.00	0.00	0.00	0.00	0.00	0.00	27.00	27.00
-Epidemiologist Airfare to Bangladesh, Cambodia ($3,000 x 2, Yr 1,); Mexico, Morocco ($1,250 Y	6.00	0.00	2.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.25	0.00	8.25
-Epidemiologist per diem @ $200 x 10 days (Bangladesh Yrs 1 & Cambodia) (Mexico, Morocco Yr	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	4.00
-Sustainability Consultant 2 Int'l Morocco $1,250 - Yr 3	0.00	0.00	0.00	0.00	1.50	0.00	*0.00*	*0.00*	*0.00*	*0.00*	1.50	0.00	1.50
-Sustainability Consultant Per diems 10 days @ $200 per day	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
-Evaluations: Childhood Blindness HKI Visit Bangladesh & Cambodia Yr, 3 Airfare $3,000 & $3,0	0.00	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	10.00	0.00	10.00
-Evaluations: Childhood Blindness HKI Visit Mexico & Morocco Yr, 5 Airfare $1,000 & $1,250 pe	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	4.50	0.00	4.50
-Evaluations Air Fare Tanzania $2,000	0.00	0.00	0.00	0.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	4.00	6.00
-Evaluations: Travel & Per Diems Tanzania 10days @$200	0.00	0.00	0.00	0.00	2.00	4.00	0.00	0.00	0.00	0.00	2.00	4.00	6.00
e) Other Direct Costs													
-Occupancy	10.00	0.00	10.50	0.00	11.03	0.00	11.58	0.00	12.16	0.00	55.26	0.00	55.26
-Telephone/Telex/FAX	2.50	0.00	2.63	0.00	5.00	0.00	3.00	0.00	2.63	0.00	15.75	0.00	15.75
-Postage & Delivery	1.50	0.00	1.58	0.00	1.65	0.00	1.74	0.00	2.00	0.00	8.47	0.00	8.47
-*Office Supplies*	2.00	0.00	2.10	0.00	2.21	0.00	2.32	0.00	2.43	0.00	11.05	0.00	11.05
-Outside Business (Inc.LAN/Internet)	2.00	0.00	2.00	0.00	3.00	0.00	3.00	0.00	3.50	0.00	13.50	0.00	13.50
-Equipment Maintenance	3.00	0.00	3.15	0.00	3.31	0.00	3.47	0.00	3.65	0.00	16.58	0.00	16.58
-HQ Staff Start-up Meeting, 20 people @ $75	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	1.50
-Shipping Costs of Medical Supplies	0.50	0.00	*0.50*	*0.00*	*0.50*	*0.00*	*0.50*	*0.00*	*0.50*	*0.00*	2.50	0.00	2.50
-Computer Upgrade	2.50	0.00	0.00	0.00	0.00	0.00	2.60	0.00	0.00	0.00	5.10	0.00	5.10
-Training Materials Printing ChildSight Manual, Trachoma Materials French, Spanish & English	0.00	10.00	5.00	10.00	0.00	10.00	0.00	10.00	0.00	10.00	5.00	50.00	55.00
SUBTOTAL -- HQ Program	204.39	166.36	218.83	162.13	217.82	174.81	187.58	150.00	166.11	168.75	994.71	822.05	1816.76
II. Procurement													
a) Consultancies													
-Sustainability Consultant 10 days @ $300	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	3.00
-ChildSight Manual Editor 10 days @$200	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00
-ChildSight & Childhood Blindness Technical Advisory Committee Meetings 1 per year x 2 X $500	1.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	2.00	0.00	7.00	0.00	7.00
-Low Vision Consultant/Optometrist @$250 x30	1.50	0.00	1.50	0.00	1.50	0.00	1.50	0.00	*1.50*	*0.00*	7.50	*0.00*	7.50
-Epidemiologist Consultant for CB Forms Training @$300 x20 Yr. 1,2	3.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	0.00	6.00
b) Supplies													
Medical Equipment	0.00	40.00	0.00	30.00	0.00	30.00	0.00	30.00	0.00	30.00	0.00	160.00	160.00
SUBTOTAL -- HQ Procurement	7.50	40.00	5.50	30.00	5.50	30.00	3.50	30.00	3.50	30.00	25.50	160.00	25.50
SUBTOTAL -- (I+II)	211.89	206.36	224.33	192.13	223.32	204.81	191.08	180.00	169.61	198.75	1020.21	982.05	2002.26
III. Indirect Costs													
SUBTOTAL -- Indirect Costs	45.56	44.37	48.23	41.31	48.01	44.03	41.08	38.70	36.47	42.73	219.35	211.14	430.49
TOTAL PROGRAM COSTS (I+II+III):	257.44	250.73	272.55	233.43	271.33	248.85	232.16	218.70	206.07	241.48	1239.56	1193.19	2272.75
TOTAL HEADQUARTERS COSTS:	257.44	250.73	272.55	233.43	271.33	248.85	232.16	218.70	206.07	241.48	1239.56	1193.19	2272.75

Budget Justification

I. Program Elements

Salaries and Fringe Benefits: Salaries support essential personnel for management and technical direction of the project at HQ and overseas. Salaries are based on agency salary levels, recognized indicators of salary structure for the job market in each country, surveys of comparable agencies, and funds available for staffing. Percentages of time are illustrated in the detailed budgets of this proposal. Fringe Benefits are calculated for U.S. citizens and expatriates at 25% of salary.

Travel, Transportation and Per Diem: International travel for responsible program management is calculated on economy fares for U.S. carriers between countries. Calculations of per diems are based on HKI's most recent experience in these countries. Actual expenses are reimbursed upon submission of receipts, as per HKI's Standard Operating Procedures.

Subcontracts: No subcontracts are proposed.

Other Direct Costs: Training expenses are based on HKI's previous and current work in all locales. Estimates for this area were developed in consultation with professionals with current knowledge of prices and the economy at the location. Estimates for all other ODCs (banking fees, office supplies, communications, etc.) are based on current and past activity in each area. Costs for ODCs are based on HKI's past experience in the start-up of such an activity as well as the economy of the location.

II. Procurement

Consultancies: Consultants' fees and expenses are based on HKI's extensive experience with external consultants. Extensive collaboration with a wide variety of public health consultants has developed solid working relationships with individuals possessing expertise specific to the agency's mission. Fees are maintained at a reasonable level through knowledge gained from frequent interaction of HKI's Program Directors and Country Representatives with colleagues in other organizations. Consultants' expenses are monitored in accordance with HKI's standard operating procedures and are reimbursed upon submission of receipts. Budgeted amounts for fees and expenses are therefore based on current and prior experience.

Supplies: Headquarters and field in Mexico, Morocco, Bangladesh and Cambodia well understand procurement procedures and in-country availability of necessary equipment and medical supplies. Standard Operating Procedures provide agency guidelines for procurement (document available upon request). In-kind gifts of equipment, such as children's eye glasses, supplies, pharmaceuticals, and other such materials are detailed in each country budget. HKI has a record of successfully obtaining such gifts for over 60 years and anticipates maintaining this level of achievement.

III. Indirect Costs: HKI's indirect cost rate is calculated at a provisional rate of 21.5%. This Negotiated Indirect Cost Rate is under review, pending the A-133 audit

TIME LINES
APPENDIX II

Childhood Blindness

AMENDMENT TO PROJECT SEE II

IMPACT OF $1 MILLION IN ADDITIONAL FUNDS

	1991	1993	1994	1995	1996	1997	1999	2001
BANGLADESH						**AMENDMENT--2 YRS** 1 center: Chittagong • 50 kids operated/yr		
CAMBODIA			**Control of Avoidable Blindness** •referrals by PEC workers •kids operated			**AMENDMENT--2 YRS** 1 center: Phnom Penh •50 kids operated/yr •Traumatic/landmine		
MEXICO			**3 YRS** 1 center: Mexico City • 50 kids operated		**3 YRS** 1 center: Mexico City • 100 surgeries/yr		**AMENDMENT--2 YRS** 2 centers Mexico City 200 Surgeries/yr sustained	
MOROCCO	20 kids operated		**3 YRS** 2 university centers: Rabat, Casablanca Referrals from 35 Provinces 144 kids operated		**3 YRS** 2 university centers 4 regional hospitals • Referrals from 44 Provinces • 200 kids/yr		**AMENDMENT--2 YRS** 2 university hospitals 4 regional centers 2 NGOs • Referrals from 53 provinces • 250 kids/yr sustained	
PHILIPPINES			**3 YRS** 1 center: Philippines General Hospital • 55 kids operated/yr					

EACH CENTER HAS:

- 5 collaborating ophthalmologists
- 50-100 output kids.yr (each kid is operated on both eyes), except Cambodia--unilateral
- 6 months follow-up
- Low-vision services

HEADQUARTERS/MANAGEMENT

- Childhood Blindness Technical Assistance Group
- Monitoring & Evaluation person full-time
- Low-vision consultant for post-op surgery & glasses
- Childhood blindness consultants, technical assist. in pediatric ophthalmology & anaesthesiology
- Papers/evaluation of surgical output

PROJECT SEE II-IMPLEMENTATION SCHEDULE-PRIMARY EYE CARE

Appendix II

Activity plan	Country:	Time Line Work Plan-Quarter											
		1	2	3	4	5	6	7	8	9	10	11	12
1. Recruit Staff	MEXICO	x											
	MOROCCO	x											
	TANZANIA	x											
2. Orient Staff to Project SEEII	MEXICO	x											
	MOROCCO	x											
	TANZANIA	x											
3. Sign/Renew Formal Agreements	MEXICO	x											
	MOROCCO	x											
	TANZANIA	x											
4. Convene Blindness Prevention Committees	MEXICO			x			x			x		x	
	MOROCCO	x		x									
	TANZANIA			x				x			x		
5. Develop Detailed Implementation Plans	BANGLADESH					x							
	CAMBODIA					x							
	MEXICO	x											
	MOROCCO	x											
	TANZANIA	x											

Activity plan	Country:	Time Line Work Plan-Quarter											
6. Provide Technical Assistance	BANGLADESH					x	x	x	x	x	x		
	CAMBODIA					x	x	x	x	x	x		
	MEXICO			x			x			x			
	MOROCCO			x		x				x			
	TANZANIA			x			x			x			
		1	2	3	4	5	6	7	8	9	10	11	12
7. Do Training Needs Assess-ments & TOTs	MEXICO		x										
	MOROCCO		x										
	TANZANIA		x										
		1	2	3	4	5	6	7	8	9	10	11	12
8.Develop & Test Training & Health Materials	MEXICO	x											
	MOROCCO	x											
	TANZANIA	x											
		1	2	3	4	5	6	7	8	9	10	11	12
9. Train personnel	MEXICO		x			x			x				
	MOROCCO					x		x		x			
	TANZANIA			x		x		x		x			
		1	2	3	4	5	6	7	8	9	10	11	12
10.Distribute Ophthalmic Equipment & Supplies	MEXICO					x			x			x	
	MOROCCO					x			x			x	
	TANZANIA					x			x			x	
		1	2	3	4	5	6	7	8	9	10	11	12

Activity plan	Country:	Time Line Work Plan-Quarter											
11. Perform Cataract, Trichiasis & Ophthalmic Surgery	MEXICO	x	x	x	x	x	x	x	x	x	x	x	x
	MOROCCO	x	x	x	x	x	x	x	x	x	x	x	x
	TANZANIA	x	x	x	x	x	x	x	x	x	x	x	x
		1	2	3	4	5	6	7	8	9	10	11	12
12. Field Staff Visit HKI/NY Staff	MEXICO					x							
	MOROCCO					x							
	TANZANIA					x							
		1	2	3	4	5	6	7	8	9	10	11	12
13. Implement ChildSight[SM]	MEXICO				x	x	x	x	x	x	x	x	
	MOROCCO				x	x	x	x	x	x	x	x	
	TANZANIA												
		1	2	3	4	5	6	7	8	9	10	11	12
Implement 14. Childhood Blindness Surgery	BANGLADESH					x	x	x	x	x	x	x	x
	CAMBODIA					x	x	x	x	x	x	x	x
	MEXICO					x	x	x	x	x	x	x	x
	MOROCCO					x	x	x	x	x	x	x	x
	TANZANIA												
		1	2	3	4	5	6	7	8	9	10	11	12
15. Conduct Evaluations	BANGLADESH									x			
	CAMBODIA									x			
	MEXICO									x			
	MOROCCO									x			
	TANZANIA									x			
		1	2	3	4	5	6	7	8	9	10	11	12

AMENDMENT TO PROJECT SEE II-TIMELINE-COUNTRY PROGRAMS 1997-2001

1. Activity plan — Country: — Time Line Work Plan-Quarter

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Identify Center Locales, Form agreements & Orient,MOHs, NGOs & Ophthalmologists	Bangladesh				→												
	Cambodia				→												
	Mexico	→															
	Morocco	→															
		Year 1				Year 2				Year 3					Year 4		

2. Activity plan — Country: — Time Line Work Plan-Quarter

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Conduct Detailed Implementation Plan workshops w/ stakeholders	Bangladesh	→															
	Cambodia	→															
	Mexico	→															
	Morocco	→															
		Year 1				Year 2				Year 3					Year 4		

3. Activity plan — Country: — Time Line Work Plan-Quarter

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Assess availability of essential equipmt and supplies	Bangladesh				→												
	Cambodia				→												
	Mexico				→												
	Morocco				→												
		Year 1				Year 2				Year 3					Year 4		

4. Activity plan — Country: — Time Line Work Plan-Quarter

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Provide necessary equipment and logistical support	Bangladesh	→	→	→	→	→	→	→	→								
	Cambodia	→	→	→	→	→	→	→	→								
	Mexico	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
	Morocco	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	
		Year 1				Year 2				Year 3					Year 4		

N.B. Yr. 1= 1997-1998, Yr. 2 = 1998-1999, Yr. 3 = 1999-2000, Yr. 4 = 2000-2001

5. Activity plan Country: Time Line Work Plan-Quarter

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Train, Orient and Utilize CB *Guidelines and Forms*	Bangladesh		→	→	→	→	→	→									
	Cambodia		→	→	→	→	→	→									
	Mexico			→	→	→	→	→	→	→	→	→	→	→	→	→	
	Morocco			→	→	→	→	→	→	→	→	→	→	→	→	→	
		Year 1				Year 2				Year 3				Year 4			

6. Activity plan Country: Time Line Work Plan-Quarter

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Train and equip doctors and nurses in case finding as necessary and feasible	Bangladesh					→	→	→	→	→	→	→					
	Cambodia					→	→	→	→	→	→	→					
	Mexico	→	→	→	→	→	→	→	→	→	→	→	→				
	Morocco	→	→	→	→	→	→	→	→	→	→	→	→				
		Year 1				Year 2				Year 3				Year 4			

7. Activity plan Country: Time Line Work Plan-Quarter

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Implement surgical protocol and institute follow-up measures	Bangladesh				→	→	→	→									
	Cambodia				→	→	→	→									
	Mexico	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
	Morocco	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
		Year 1				Year 2				Year 3				Year 4			

8. Activity plan Country: Time Line Work Plan-Quarter

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Develop low-vision capacity at each center train staff & work with low-vision kids & parents	Bangladesh		→	→	→	→	→	→	→								
	Cambodia		→	→	→	→	→	→	→								
	Mexico					→	→	→	→	→	→	→	→	→	→	→	
	Morocco					→	→	→	→	→	→	→	→	→	→	→	
		Year 1				Year 2				Year 3					Year 4		

9. Activity plan Country: Time Line Work Plan-Quarter

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Evaluate outputs: case finding, surgery visual outcomes and customer satisfaction using CB forms	Bangladesh								→								
	Cambodia								→								
	Mexico									→							→
	Morocco													→			
		Year 1				Year 2				Year 3					Year 4		

CHILDHOOD BLINDNESS
FORMS AND GUIDELINES
APPENDIX III

Forms and Guidelines

Childhood Cataract Surgery

developed by

Childhood Blindness Technical Advisory Group (CB-TAG)
Helen Keller International

March 1994
Revised April 1995
Forms Revised, in Draft, March 1997

Contents

1. GUIDELINES FOR SELECTION OF CHILDREN FOR SURGERY

1.1. Selection Criteria:

- children from birth to fifteen years of age
- visual acuity ≤ (equal to or worse than 0.1)
- potential for improvement with surgery (initially limited to cataract surgery)

1.2. Locating Children:

- screening of populations of the appropriate age group (especially schools for the blind) by auxiliary health personal who have received essential training in primary eye care. (Components of that screening are found in **Appendix 1.**)

1.3. Referral for Ophthalmic Exam:

Criteria:

1. If the child is found to have vision of worse than or equal to 0.1

2. If untestable for visual acuity
   a) white pupil in either eye
   b) perception of poor vision

1.4. Examination by Ophthalmologist:

The ophthalmologist is asked to obtain a history and examine the child using the diagnostic instruments available to him or her. It is important for the ophthalmologist to be familiar with the examination techniques used for children. The form to be completed by the ophthalmologist is found in **Appendix 2.**

If the ophthalmologist determines that surgery is indicated or that further diagnostic testing must be done to determine the need for surgery, then the patient is referred to the **Childhood Surgery Center (CSC)** which has been designated for that area.

Children examined by the ophthalmologist who are found to have other conditions not reversible by surgery should be treated by the doctor. For instance, glasses may be provided or referral made to a blindness rehabilitation program.

2. GUIDELINES FOR SCREENING CHILDREN FOR VISUAL PROBLEMS

2.1. Visual Acuity Testing

2.1.1. Children 5 and older:

- Test each eye separately using Snellen chart at 6 meters.
- The technique is described in HKI Primary Eye Care Manual. (relevant page attached as **Appendix VII.**
- Children should be tested with glasses on if they have glasses.
- Vision of worse than 0.1 in both eyes are referred.

2.1.2. Children under 5 years old

Children under 5 or those who are unable to perform the Snellen test are examined by the auxiliary and asked to follow objects. The person with the child can also be asked how the child sees. The auxiliary will determine if the child has difficulty seeing. Those children who appear to have difficulty seeing are and children who have a white pupil in either eye, are referred.

3. CRITERIA FOR PATIENTS TO UNDERGO CATARACT EXTRACTION

1) Bilateral blindness with visual acuity of 0.1 or less either due to cataract in both eyes or with cataract in one eye and the fellow eye with poor vision due to other causes.
2) Ability to undergo general anesthesia.
3) Clear indication that improved sight would benefit the general well-being of the patient.
4) Willingness and ability to return for follow up care.
5) Consent and understanding of the procedure by the child's parents or guardian.
6) Absence of periocular infection.
7) Adequate corneal clarity to see the pupil and lens during surgery and to assure healing.
8) Absence of glaucoma tested via tonometry or megalocornea with corneal diameter > 13 mm.
9) Corneal diameter < 9 mm.
10) Operate on fixing eye first if abnormal eye alignment is present.
11) Optic atrophy precludes surgery.
12) If patient is candidate for bilateral surgery, surgery on second eye should be performed one month after the first eye.
13) Pupil response normal. Presence of an afferent defect precludes surgery.

4. SURGICAL PROCEDURE CATARACT EXTRACTION

1) General anesthesia, unless child is able to cooperate for local anesthesia.
2) Pupil to be dilated preoperatively with Cyclogyl 1% solution to be instilled every 5 minutes X 3 starting one hour preop. Atropine 1% ointment x 2 the day before surgery.
3) Antibiotic drops instilled every 5 minutes times 3 beginning 30 minutes prior to surgery.
4) Ocufen drops to the operated eye one drop every 5 minutes times three 30 minutes prior to surgery.
5) Betadine prep to face prior to surgery.
6) Drape with sterile sheets.
7) Superior rectus bridle suture placed.
8) Infusion system available to use with vitrectomy set and use Ringer's lactate with 0.3 cc of 1:1000 epinephrine (preservative free) added to 500 cc of solution.
9) Limbal incision appropriate to vitrectomy unit.
10) If pupil is not adequately dilated, perform sector iridectomy.
11) Simple anterior capsulotomy and removal of anterior capsule using vitrectomy unit. Capsulorrhexis is an alternative.
12) Aspiration of the lens cortex as completely as possible.
13) Removal of the posterior capsule by posterior capsulotomy or capsulorrhexis, or optimally, with a shallow anterior vitrectomy.
14) Instill Miochol into the anterior chamber or place Pilocarpine 4% drops into the conjunctival sac.
15) Once the pupil is small, assure that the anterior chamber is free of vitreous.
16) If sector iridectomy has not been performed, proceed to do a 1 mm peripheral iridectomy at this time.
17) Close the wound with 10-0 suture.
18) Reform anterior chamber with Miochol or infusion solution.
19) Subconjunctival injection of 0.25 cc Celestone and 0.25 cc garamycin.
20) Instill atropine 1% ointment and available antibiotic/steroid ointment into the conjunctival sac.
21) Place patch (sterile) and shield over operated eye.
22) Patient is taken for appropriate post anesthesia monitoring.

5. POSTOPERATIVE PROCEDURE

1) Patient may be discharged on the day of surgery if living nearby or may be kept in hospital (Surgical Note: **Appendix III**).

2) Eye is to be examined on the first, third and fifth post op days by qualified personnel to monitor for complications including infection, wound leak or hemorrhage (**Appendix VI**).

3) Instruction given at the first post operative day about the of medications and appropriate precautions.

4) Begin use of atropine 1% ointment and antibiotic/steroid ointment twice a day to the operated eye.

5) Patient to be seen by the operating surgeon on the 30th post-op day. Complete the form in **Appendix V**.

- Presence of surgical complications.
- Compliance with the post op medications, namely the pupil should be dilated.
- Cycloplegic refraction.
- Provision of glasses. (Distance correction plus 1.50 diopters.)
- Examination of the vitreous and retina.
- The decision to proceed with surgery on the fellow eye if results in the first eye are at least 0.3. If worse please contact HKI New York with full report before proceeding. If satisfactory results are obtained on the first eye, surgery on the fellow eye can be done within one week.
- The decision to stop the atropine and antibiotic/steroid only if the eye is quiet. If there is any sign of inflammation, then continue the medications and recheck in one month. Continue medications until eye is quiet.

6) Next examination to take place at 6 months. To complete 6 month report form. (**Appendix VI**).

7) Examinations yearly until age 5 or two years postop.

8) Patients are encouraged to be seen every year for life.

Appendix I

Form to be completed for
all children who are referred
to the ophtholmologist

Data Summary Form
Childhood Blindness Project
Helen Keller International
Draft, March 1997

PERSONAL DETAILS OF CHILD

Country _____ Address _____

Last Name _____ First Name _____ Sex ☐

ID number _____ Bilateral Blindness? ☐

Year of Birth 19___ Month and day of birth ___/___

Age of child ☐☐

If child is less than one year
Age of infant ☐☐

SURGERY AND OUTCOME

RIGHT EYE		LEFT EYE	
Preop Acuity	☐	Preop Acuity	☐
Previous Surgery?	☐	Previous Surgery?	☐
Date___/___/___		Date ___/___/___	
Surgical procedure	☐	Surgical procedure	☐
Date ___/___/___		Date ___/___/___	
Complications	☐	Complications	☐
Additional Complications	☐	Additional Complications	☐

POST OPERATIVE FOLLOW-UP

RIGHT EYE		LEFT EYE	
Visual Acuity, time 1	☐	Visual Acuity,time 1	☐
If unable to obtain Visual Acuity Ophthalmologist's Assessment	☐	If unable to obtain Visual Acuity Ophthalmologist's Assessment	☐
Strabismus?	☐	Strabismus?	☐
Length of time since surgery (time 1)	☐	Length of time since surgery (time 1)	☐
Visual Acuity, (time 2)	☐	Visual Acuity, (time 2)	☐
Length of time since surgery (time 2)	☐	Length of time since surgery (time 2)	☐
Visual Acuity, (time 3)	☐	Visual Acuity, (time 3)	☐
Length of time since surgery (time 3)	☐	Length of time since surgery (time 3)	☐
Visual Acuity, (time 4)	☐	Visual Acuity, (time 4)	☐
Length of time since surgery (time 4)	☐	Length of time since surgery (time 4)	☐
Nystagmus?			☐

For children without IOLs only:

Is child in possession of a pair of glasses? ☐

Action needed ☐

Name of person filling form; _____ Date_____

Draft, March 1997

Code Sheet for Data Summary Form

Childhood Blindness Project

Helen Keller International

PERSONAL DETAILS OF CHILD

Country	Fill in name of country
Address	Give name of city where child resides and address if known
Last Name (s)	Give last name (s)
First Name (s)	Give first name (s)
Sex	**M** = male
	F = female
	If unknown, mark "x"
ID Number	Fill in hospital ID or chart number if available. Otherwise leave blank
Bilateral Blindness?	**Y** = yes, child is/was originally blind in both eyes
	N = no, child only blind in one eye.
	If unknown, mark "x"
Year of Birth	YY
	If unknown, mark "xx"
Month and Day of Birth	MM/DD
	If unknown, mark "xx/xx"
Age of Child	Record age at time of surgery of interest in completed years [INFANT = O]
	If unknown or not applicable, mark "x"
Age of Infant	FOR INFANTS ONLY, record age in completed months. If unknown or not applicable, mark "x"

90

SURGERY AND OUTCOME

Note: The following information is to be filled out on each eye.

Preop Acuity	**1** = 6/18 or better [20/60 (3/10) or better] **2** = Worse than 6/18 to 6/60 [worse than 20/60 to 20/200 or worse than 3/10 to 1/10] **3** = Worse than 6/60 to 3/60 [< 20/200 to 20/400 or < 1/10 to 1/20] **4** = Worse than 3/60 [or < 20/400 or < 1/20] to light perception **5** = No light perception **6** = Uncooperative/unable to measure. If unknown, mark "x"
Previous Surgery?	**Y** = Yes, this eye was operated upon before time [If yes, give date of previous surgery MM/DD/YY] **N** = No, this eye was never operated upon. If unknown, mark "x"
Surgical Procedure	**1** = Irrigation aspiration (IA) only (lens extraction) **2** = IA +IOL **3** = IA anterior vitrectomy **4** = IA anterior vitrectomy + IOL **5** = IA posterior capsulotomy **6** = IA posterior capsulotomy + IOL **7** = other_____ If unknown or unapplicable, mark "x" [Give date of surgery, MM/DD/YY]

Complications	**1** = no complications **2** = hemorrhage **3** = loss of vitreous **4** = corneal opacity **5** = vitreous opacity **6** = posterior capsule opacification **7** = loss of eye **8** = other [write in] If unknown or unapplicable, mark "x"
Additional Surgical Complications	Use above numbering system if more than one complication was experienced.

POST OPERATIVE FOLLOW-UP

Note: The following information is to be filled out on each eye.

Visual Acuity, time 1	Use numbering system for pre-op acuity If unknown, mark "x"
Ophthalmologist's Assessment	If visual acuity cannot be assessed (due to young age, lack of cooperation, etc.) Enter: **1** = eye shows steady fixation and following **2** = eye unsteady and following **3** = no fixation of the eye observed If unknown, mark "x"
Strabismus?	**1** = esotropia **2** = exotropia **3** = other **4** = no strabismus present If unknown, leave blank

Length of Time Since Surgery, time 1	Enter number of completed **weeks** (preferably one week after surgery) If unknown, mark "x"
Visual Acuity, time 2	Use numbering system for pre-op acuity If unknown, mark "x"
Length of Time Since Surgery, time 2	Enter number of completed **months** If unknown, mark "x"
Visual Acuity, time 3	Use numbering system for pre-op acuity If unknown, mark "x"
Length of Time Since Surgery, time 3	Enter number of completed **months** If unknown, mark "x"
Visual Acuity, time 4	Use numbering system for pre-op acuity If unknown, mark "x"
Length of Time Since Surgery, time 4	Enter number of completed **months** If unknown, mark "x"
Nystagmus?	**Y** = yes **N** = no If unknown, mark "x"
For Children Without IOLs Only: Is child in possession of a pair of glasses?	**Y** = yes **N** = no If unknown, mark "x"

Action Needed	**1** = prescription for glasses **2** = assistance in obtaining glasses **3** = prescription for medication **4** = assistance in obtaining medication **5** = needs medical intervention **6** = needs transport **7** = needs follow-up with social worker **8** = amblyopia therapy **9** = other [write in] If unknown, leave blank
Name of Person Filling in Form	Fill in name each time form is filled out
Date	Fill in date each time form is filled out

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CURRICULA VITAE
APPENDIX IV

9/94

CURRICULUM VITAE

NAME: Richard Moore Robb

ADDRESS: [redacted]

PLACE OF BIRTH: [redacted]

EDUCATION:

1956 A.B. Princeton University
1960 M.D. University of Pennsylvania Medical School

POSTDOCTORAL TRAINING:

Internship and Residencies:

1960-1961 Intern, Hospital of University of Pennsylvania
1962-1965 Resident in Ophthalmology, Massachusetts Eye and Ear Infirmary

Research Fellowships

1961-1962 Research Fellow, Howe Laboratory of Ophthalmology, Boston, MA.
1972-1973 Special Research Fellow, Laboratory of Vision Research, National Eye Institute, National Institute of Health, Bethesda, MD

LICENSURE AND CERTIFICATION:

1961 Massachusetts License Registration No. 28624
1966 Diplomate - American Board of Ophthalmology

ACADEMIC APPOINTMENTS:

1964-1965 Teaching Fellow in Ophthalmology, Harvard Medical School
1965-1967 Assistant in Ophthalmology, Harvard Medical School
1967-1969 Instructor in Ophthalmology, Harvard Medical School
1969-1978 Assistant Professor of Ophthalmology at The Children's Hospital, Harvard Medical School
1978-present Associate Professor of Ophthalmology at The Children's Hospital, Harvard Medical School

HOSPITAL APPOINTMENTS:

1965-1969 Associate in Ophthalmology, Children's Hospital, Boston, MA
1969-present Ophthalmologist-in-Chief, Children's Hospital

1965-1972	Assistant in Ophthalmology, Massachusetts Eye & Ear Infirmary, Boston, MA
1972-1983	Assistant Surgeon, Massachusetts Eye & Ear Infirmary
1983-present	Associate Surgeon, Consulting Staff, Massachusetts Eye & Ear Infirmary
1968-present	Associate Surgeon (Ophthalmology), Brigham & Women's Hospital, Boston, MA
1986-1993	Courtesy Staff, Franciscan Children's Hospital & Rehabilitation Center, Brighton, MA

AWARDS AND HONORS:

1956	Phi Beta Kappa
1960	Alpha Omega Alpha
1985	Robb-Petersen Lectureship in Pediatric Ophthalmology at the Children's Hospital
1990	Honor Award, American Association for Pediatric Ophthalmology and Strabismus

MAJOR COMMITTEE ASSIGNMENTS:

National

1979-1985	Scientific Advisory Board, Children's Eye Care Foundation, Washington, D.C.
1986-present	American Orthoptic Council - Instruction Committee, Chairman - Training and Accreditation Committee, Chairman
1986-1994	Data and Safety Monitoring Committee NIH CRYO-ROP Study EY 05874
1988	Chairman, Ad Hoc Evaluation Committee, Department of Ophthalmology, University of Pittsburgh and Pittsburgh Children's Hospital
1994-present	Helen Keller International, Technical Advisory Group on Childhood Blindness

Hospital

1967-1969	Staff Representative to Medical Executive Committee, Children's Hospital
1969-present	Member, Medical Staff Executive Committee, Children's Hospital
1977-1979	Steering Committee, Children's Hospital
1974-1987	Operating Room Committee, Children's Hospital
1980-present	Surgical Executive Committee, Children's Hospital
1986	Member, Fair Hearing Committee on Medical Staff Conduct.
1990-1991	President, Children's Hospital Staff Association

Medical School

1988	Member, Subcommittee of the Faculty Conduct Committee investigating Vitamin A Research.
1991-present	Member, Admissions Committee, Subcommittee III

Editorial Boards

1980-1985	Editorial Board, Journal of Pediatric Ophthalmology and Strabismus

1980-present Ad hoc Reviewer: N. Engl. J. Med., Ophthalmology, Am. J. Ophthalmology.

MEMBERSHIPS IN PROFESSIONAL SOCIETIES:

1964-present Member- Association for Research in Vision and Ophthalmology
1967-present Fellow- American Academy of Ophthalmology and Otolaryngology
1967-present Member- New England Ophthalmology Society
1974-present Charter Member- American Association for Pediatric Ophthalmology and Strabismus
- Board of Directors, Member at large
- Nominating Committee
- Costenbader Lecture Committee
- Representative to American Ophthalmological Society
- Training and Accreditation Committee
1975-present Member- American Ophthalmological Society
- Thesis Committee 1990-1993, Chairman 1992-1993
1976-present Member- Massachusetts Society of Eye Physicians and Surgeons

MAJOR RESEARCH INTERESTS

1. Clinical and experimental eye pathology

2. Developmental abnormalities of the eye

3. Clinical studies in pediatric ophthalmology

RESEARCH FUNDING INFORMATION

Past

1975-1978 NEI, Principal Investigator: Histochemistry of Phosphodiesterase in the Retina.
1980-1983 NEI, Co-Investigator: Retinal and Visual Development in the First Year

PRINCIPAL CLINICAL AND HOSPITAL SERVICE RESPONSIBILITIES:

1965- Attending Physician, Eye Clinic, Children's Hospital
1969-present Chief of Ophthalmology Department, Children's Hospital
1970-1987 Director, Eye Pathology Laboratory, Children's Hospital

SELF REPORT OF TEACHING:

1. Local Contributions

a. Medical School courses

1965-1972 Preceptor, General Ophthalmology Elective, Harvard Medical School
1979 Director, Postgraduate course: Ophthalmology for Pediatrician, Harvard MedicaL School
1978-present Director, Introduction to Pediatric Ophthalmology, Harvard Medical School Elective #503M.7. One month elective for 3rd and 4th year Harvard (or other) medical students. Approximately 6 students per year.
1967-present Lecturer, Children's Hospital's Postgraduate Course in Pediatrics, Harvard Medical School. Usually 1-2 hour lecture to 25 CME students.
1978-present Lecturer, Postgraduate Ophthalmology Course: Basic Science and Clinical Review, Harvard Medical School. Usually 4 hour lecture to 100 CME students.

b. Hospital Courses

1974-1987 Lecture Series in Eye Pathology, Children's Hospital, Department of Pathology. 4-6 lectures per year.
1965-present Medical Grand Rounds presentation on pediatric ophthalmology. 1 hour presentation yearly.
1967-present Seminars in Pediatric Ophthalmology. Conduct 1 hour seminar on various subjects, approximately 10 times per year for departmental staff and house officers.

c. Supervisory Responsibilities

1967-present Responsible for ophthalmology residency and fellowship training at Children's Hospital. Residency rotation from Massachusetts Eye & Ear Infirmary since 1967 and from Boston University Hospital since 1973. One year fellowship in pediatric ophthalmology at Children's Hospital since 1974.

2. Regional, National or International Contributions

a. Invited lecturer/visiting professor

1970 University of Kentucky Medical School, Lexington, KY
1974 Italian Ophthalmological Society, University of Parma, Italy
1975 Rochester Ophthalmological Society, Rochester, NY
1979 Eastern New York Ophthalmological Society, Albany, NY
1984 King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia
1987 The Royal Victorian Eye & Ear Hospital, Melbourne, Australia.
1987 Manhattan Eye, Ear & Throat Hospital, New York, NY.
1987 Eastern Maine Medical Center, Bangor, ME.
1990 Scheie Eye Institute, University of Pennsylvania School of Medicine, Philadelphia, PA
1991 Washington Hospital Medical Center, Washington, D.C.
1994 Temple University School of Medicine, Philadelphia, PA
1994 Children's Hospital National Medical Center, Washington, D.C. - Angeline Parks Memorial Lecture

BIBLIOGRAPHY

Original Reports:

1. Robb, RM and Kuwabara, T. Corneal wound healing. I. The movement of polymorphonuclear leukocytes into corneal wounds. Arch. Ophthalmol. 1962; 68: 636-642.

2. Robb, RM and Kuwabara, T. Corneal wound healing. II. An auto- radiographic study of the cellular components. Arch. Ophthalmol. 1964; 72: 401-408.

3. Robb, RM. Modification of May ophthalmoscope for the determination of monocular fixation. Am. J. Ophthalmol. 1966; 62: 164-165. Reprinted as Chapter 6 of Clinical Studies in Ophthalmology: Strabismus and Amblyopia, F.W. Newell (Ed.) Publishing Sciences Group, Inc. Acton, MA. 1975, p. 35.

4. Duffy, FH, Robb, RM and Lombroso, CT. Visual evoked response to plain and patterned light in amblyopia ex anopsia. Trans. Am. Neurol. Assn. 1967; 92: 227-229.

5. Robb, RM and Petersen, RA. Cycloplegic refractions in children. J. Ped. Ophthalmol. 1968; 5: 110-115.

6. Petersen, RA, Petersen, VS and Robb, RM. Vitamin A deficiency with xerophthalmia and night blindness in cystic fibrosis. Am. J. Dis. Child. 1968; 116: 662-665.

7. Lombroso, CT, Duffy, FH and Robb, RM. Selective suppression of cerebral evoked potentials to patterned light in amblyopia ex anopsia. Electroenceph. Clin. Neurophysiol. 1969; 27: 238-247.

8. Robb, RM and Watters GV. Ophthalmic manifestations of subacute sclerosing panencephalitis. Arch. Ophthalmol. 1970; 83: 426-435.

9. Walton, DS and Robb, RM. Optic nerve hypoplasia: A report of 20 cases. Arch. Ophthalmol. 1970; 84: 572-578.

10. Robb, RM. Cataracts acquired following varicella infection. Arch. Ophthalmol. 1972; 87: 352-354.

11. Robb, RM. Periodic alternation of null point in congenital nystagmus. Arch. Ophthalmol. 1972; 87: 169-173.

12. Robb, RM and Kuwabara, T. The ocular pathology of type A Neiman-Pick Disease. Invest. Ophthalmol. 1973; 12: 366-377.

13. Robb, RM. Histochemical evidence of cyclic nucleotide phospho- diesterase in photoreceptor outer segments. Invest. Ophthalmol. 1974; 13: 740-747.

14. Robb, RM. Electron microscopic histochemical studies of cyclic 3', 5' - nucleotide phosphodiesterase in the developing retina of normal mice and mice with hereditary retinal degeneration. Trans. Am. Ophthalmol Soc. 1974; 72: 650-669.

15. Curran, RE and Robb, RM. Isolated foveal hypoplasia. Arch. Ophthalmol. 1976; 94: 48-50.

16. Robb, RM. Refractive errors associated with hemangiomas of the eyelid and orbit in infancy. Am. J. Ophthalmol. 1977; 83: 52-58.

17. Shih, VE, Abroms, IF, Johnson, JL, Carney, M, Mandall, R, Robb, RM, Cloherty, JP and Rajagopalan, KV. Sulfite oxidase deficiency. Biochemical and clinical investigations of a hereditary metabolic disorder in sulfur metabolism. N. Engl. J. Med. 1977; 297: 1022-1028.

18. Walton, DS, Robb, RM, and Crocker, AC. Ocular manifestations of group A Neiman-Pick disease. Am. J. Ophthalmol. 1978; 85: 174-180.

19. Sheridan,, SJ, and Robb, RM. Optic nerve hypoplasia with diabetes insipidus. J. Ped. Ophthalmol. 1978; 15: 82-84.

20. Robb, RM, Silver, J and Sullivan, RT. Ocular retardation (or) in the mouse. Invest. Ophthalmol. 1978; 17: 468-473.

21. Robb, RM. Histochemical demonstration of cyclic guanosine 3', 5' monophosphate phosphodiesterase activity in retinal photoreceptor outer segments. Invest. Ophthalmol. 1978; 17: 476-480.

22. Robb, RM and Marchevsky, A. Pathology of the lens in Down's syndrome. Arch. Ophthalmol. 1978; 96: 1039-1042.

23. Robb, RM, Irvin,LD, and Sallan, SE. A pathological study of eye involvement in acute leukemia. Trans. Am. Ophthalmol. Soc. 1978; 76: 90-101.

24. Petersen, RA and Robb, RM. The natural course of congenital obstruction of the nasolacrimal duct. J. Ped. Ophthalmol. 1978; 15: 246-250.

25. Denslow, GT, and Robb, RM. Aicardi's syndrome: a report of four cases and review of the literature. J. Ped. Ophthalmol. 1979; 16: 10-15.

26. Silver, J, and Robb, RM. Studies on the development of the eye cup and optic nerve in normal mice and in mutants with congenital optic nerve aplasia. Dev. Biol. 1979; 68: 175-190.

27. Robb, RM, Ervin, LD, and Sallan, SE. An autopsy study of eye involvement in acute leukemia of childhood. Med. and Ped. Oncol. 1979; 6: 171-177.

28. Robb, RM. Cyclic nucleotide phosphodiesterase activity in normal mice and mice with retinal degeneration. Invest. Ophthalmol. 1979; 18: 1097-1100.

29. Bajart, AM, and Robb, RM. Internal ophthalmoplegia following inferior oblique myectomy. A report of three cases. Ophthalmology. 1979; 86: 1401-1404.

30. Boger, WP, Petersen, RA and Robb, RM. Keratoconus and acute hydrops in mentally retarded patients with congenital rubella syndrome. Am. J. Ophthalmol. 1981; 91: 231-233.

31. Magoon, EH and Robb, RM. Development of myelin in human optic nerve and tract. A light and electron microscopic study. Arch. Ophthalmol. 1981; 99: 655-659.

32. Kroll, AJ, Ricker, DP, Robb, RM and Albert, DM: Vitreous hemorrhage complicating retinal astrocytic hamartoma. Surv. Ophthalmol. 1981; 26: 31-38.

33. Angell, LK, Robb, RM and Berson, FG: Visual prognosis in patients with ruptures in Descemet's membrane due to forceps injuries. Arch. Ophthalmol. 1981; 99: 2137-2139.

34. Robb, RM. Increase in retinal surface area during infancy and childhood. J. Ped. Ophthalmol. & Strabis. 1982; 19: 16-20.

35. Robb, RM and Boger, WP. Vertical strabismus associated with plagiocephaly. J. Ped. Ophthalmol. & Strab. 1983; 20: 58-62.

36. Wright, JD, Robb, RM, Dueker, DK, and Boger, WP. Congenital glaucoma unresponsive to conventional therapy: a clinicopathological case presentation. J. Ped. Ophthalmol. & Strab. 1983; 20: 172-179.

37. Jaafar, MS, and Robb, RM. Congenital anterior polar cataract: a review of 63 cases. Ophthalmol. 1984; Vol. 91 No.3.

38. Robb, RM, Dowton, S, Fulton, AB, and Levy, HL. Retinal degeneration in vitamin B12 disorder associated with methylmalonic and sulfur amino acid abnormalities. Am. J. Ophthalmol. 1984; 97: 691-696.

39. Robb, RM. Treatment of congenital nasolacrimal system obstruction. J. Ped. Ophthalmol. & Strabis. 1985; 22: 36-37.

40. Robb, RM. Regional changes in retinal pigment epithelial cell density during ocular development. Invest. Ophthalmol. & Vis. Sci. 1985; 26: 614-620.

41. Sebag, J, Shillito, J, and Robb, RM. Transorbital penetrating injuries to the frontal lobe. Ophthalmic Surgery. 1986; 17: 631-634.

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42. Robb, RM. Probing and irrigation for congenital nasolacrimal duct obstruction. Arch. Ophthalmol. 1986; 104: 378-379.

43. Robb, RM, and Rodier, DW. The broad clinical spectrum of early infantile esotropia. Trans. Am. Ophthalmol. Soc. 1986; 84: 103-106.

44. Robb, RM, Mayer, DL, and Moore BD. Results of early treatment of unilateral congenital cataracts. J. Ped. Ophthalmol. & Strabis. 1987; 24: 178-181.

45. Robb RM, Rodier DW: The variable clinical characteristics and course of early infantile esotropia. J. Ped. Ophthalmol. & Strabis. 1987; 24:276-281.

46. Hoover DL, Robb RM, Petersen RA: Optic disc drusen in children. J. Ped. Ophthalmol. & Strabis. 1988; 25:191-195.

47. Nevares RL, Mulliken JB, Robb RM: Ocular dermoids. Plast. Reconstr. Surg. 1988; 82:959-964.

48. Hoover DL, Robb RM, and Petersen RA: Optic disc drusen and primary megalencephaly in children. J. Ped. Ophthalmol. & Strabis. 1989; 26:81-85.

49. Mayer DL, Robb RM, and Moore B: Assessment of vision and amblyopia by preferential looking tests after early surgery for unilateral congenital cataracts. J. Ped. Ophthalmol. & Strabis. 1989; 26:61-68.

50. Robb RM: Idiopathic superior oblique palsies in children. J. Pediatr. Ophthalmol. Strabis. 1990; 27:66-69.

51. Hertle RW and Robb RM: Pinealoblastoma metastatic to the optic nerve. J. Clin. Neuro-ophthalmol. 1990; 10:95-99.

52. Robb RM: Grand rounds #19: A case of traumatic lateral rectus paresis associated with a small vertical deviation of unknown etiology. Binocular Vision Quarterly 1990; 5:140-143.

53. Robb, RM: Management of posterior lenticonus; discussion. J. Pediatr. Ophthalmol. Strabis. 1991; 28:150.

54. Fredrick, DR and Robb RM: Ophthalmic manifestations of Setleis Forceps Marks Syndrome: A case report. J. Pediatr. Ophthalmol. Strabismus 1992; 29: 127-129.

55. Robb, RM and Petersen, RA: Outcome of treatment for bilateral congenital cataracts. Trans. Am. Ophthalmol. Soc. 1992; 90.

56. Liberfarb RM, Jackson AH, Eavey RD, Robb RM: Unique hereditary sensory and autonomic neuropathy with growth hormone deficiency. J Child Neurol 1993; 8:271-276.

57. Robb RM: Strabismus and strabismic amblyopia before and after surgery for bilateral congenital cataracts. Binoc Vision Eye Muscle Surg Qtrly 1994; 9:183-188.

REVIEWS

1. Robb, RM. Amblyopia in children. N. Engl. J. Optom. 1966; 17: 240-245,

2. Robb, RM. Observations on a child's eyes. Sight-saving Rev. 1970; 67-71.

3. Robb, RM. The role of optokinetic nystagmus in assessing vision in infants. Proceedings of the Symposium on Pediatric Ophthalmology, Parma, Italy. 65-67, October, 1974.

4. Robb, RM. Developmental defects of the eye causing poor vision in childhood. Proceedings of the Symposium on Pediatric Ophthalmology, Parma, Italy, 378-380, October, 1974.

5. Robb, RM and The Department of Health Education, The Children's Hospital, Boston, MA. A Child's Eyes: A joy to have and a responsibility to keep. The Children's Hospital, Boston, MA. 1975.

6. Robb, RM. Children's ophthalmologic problems. Hospital Practice. 1977; 12: 107-115,

BOOKS AND BOOK CHAPTERS

1. Robb, RM. When should one operate for congenital strabismus? In Brockhurst, Boruchoff, Hutchinson, and Lessell (Eds.) Controversy in Ophthalmology. Saunders, Philadelphia, 1977, pp. 431-433.

2. Robb, RM. Ophthalmic considerations in the developmentally disabled child. In AP Scheiner and IF Abroms (Eds.) The Practical Management of the Developmentally Disabled Child. CV Mosby, St. Louis 1980, pp. 269-280.

3. Robb, RM. Ophthalmology for the Pediatric Practioner. Little, Brown. Boston, 1981.

4. Fulton, AB, Robb, RM: Special diagnostic and therapeutic modalities in pediatric ophthalmology. In LJ Martyn (ed.) Pediatric Ophthalmology. Pediatr. Clin. N. Am. 1987; 34:1543-1553.

5. Robb, RM: Tearing Abnormalities. In S. Isenberg (Ed.) The Eye in Infancy. Yearbook Medical Publishers, Chicago, 1989, pp. 209-214.

6. Robb, RM: Vitamin B_{12} Disorders. in DH Gold & TA Weingeist (Eds.) The Eye in Systemic Disease. J.B. Lippincott, Philadelphia, 1990, pp. 681-682.

7. Robb, RM: Ocular abnormalities in childhood metabolic diseases and leukemia. In Nelson LB, Calhoun JH, and Harley RD: Pediatric Ophthalmology, 3rd Edition. WB Saunders Company, Philadelphia, 1991 pp. 444-468.

8. Anglade, E, McKeown, CA, Robb, RM: Brown's syndrome. In: Pediatric Ophthalmology. Jakobiec FA, Azar D (Eds.) Internat. Ophthalmol. Clinics 32:63-70, 1992.

9. Robb, RM: Surgical Management of Congenital Obstruction of the Lacrimal Collecting System. In: Tasman W, Jaeger EA (eds). Duane's Clinical Ophthalmology. JB Lippincott Co., Philadelphia, 1993, vol. 6, chap. 105, pp. 1-5.

10. Robb, RM: Ophthalmology. Section 20 In: Avery ME, First LE (eds). Pediatric Medicine, Second Edition. Williams & Wilkins, Baltimore, 1994, pp. 1357-1376.

11. Robb, RM: Tearing Abnormalities. Chap. 19 In: Isenberg SJ (ed). The Eye in Infancy, Second Edition. Mosby, St. Louis, 1994, pp. 248-253.

12. Robb, RM. Strabismus in Childhood. In: Albert DM, Jakobiec FA (eds). Principles and Practice of Ophthalmology. WB Saunders Co., Philadelphia, 1994, pp. 2730-2736.

13. Robb, RM. Congenital and Childhood Cataracts. In: Albert DM, Jakobiec FA (eds). Principles and Practice of Ophthalmology. WB Saunders Co., Philadelphia, 1994, pp. 2761-2767.

14. Robb, RM. Developmental Abnormalities of the Eye Affecting Vision in the Pediatric Years. In: Albert DM, Jakobiec FA (eds). Principles and Practice of Ophthalmology. WB Saunders Co., Philadelphia, 1994, pp. 2791-2798.

OPHTHALMIC CONSULTANT:

1. The New Child Health Encyclopledia. Boston Children's Hospital. FH Lovejoy, Jr. and D. Estridge, (Eds.) Delacorte Press, New York, 1987.

2. Pediatric Medicine. Eds. ME Avery, LR First. Williams & Wilkins, Baltimore, 1989.

CURRICULUM VITAE

JAMES BAIRD SPRAGUE, M.D.

[redacted]
fax (703) 356-1492

Date of Birth- [redacted]
Citizenship- American
Martial status-Married

EDUCATION

Phillips Academy, Andover, MA	1958-61	
Harvard College, Cambridge, MA	1961-65	B.A. with honors in general studies
University of Pennsylvania, Philadelphia, PA	1966-69	M.D.

POST GRADUATE TRAINING

Internship and Junior residency	1969-71	Internal Medicine-Presbyterian St. Luke's, Chicago, IL
Military	1971-73	Epidemiology-Center for Disease Control, Atlanta, GA
Residency	1973-76	Ophthalmology-University of Colorado, Denver, CO
Fellowship	1976-77	Pediatric Ophthalmology Children's' Hospital, Washington; Columbia Presbyterian St. Luke's, New York; Indiana University, Indianapolis.

POSITIONS HELD

1977-81 Assistant Chief of Ophthalmology, Denver General Hospital, Denver, CO

1981-84 Chief of Ophthalmology, Denver General Hospital, Denver, CO
Assistant Professor of Surgery, 1977-84; Assistant Professor of Preventive Medicine, 1977-84, Associate Professor of Ophthalmology, 1984-85 University of Colorado, Denver

1984- Private practice of pediatric ophthalmology, Mc Lean, VA
Associate professor of Clinical Ophthalmology, Georgetown University, Washington, D.C.

PROFESSIONAL MEMBERSHIPS

American Academy of Ophthalmology
Fellow, 1977
Public Health Committee, 1985-89
Government and Regulation Committee, 1992-
Committee on International Ophthalmology, 1991-

Honor Award, 1990
American Association of Pediatric Ophthalmology and Strabismus
Fellow, 1978
Education Committee, 1984-86
Policy Committee, 1991-94; Chairman, 1994-
American Medical Association
Northern Virginia Academy of Ophthalmology
Treasurer, 1992-94; Vice President 1994-
Fairfax County Medical Society
Credentials Committee, 1990-92; Chairman, 1992-
Virginia Society of Ophthalmology
Virginia Medical Society

LANGUAGE ABILITY

French	speak and write well
German	speak fair, write poorly

INTERNATIONAL EXPERIENCE

Western Europe-vacations-1959,1961,1967,1970,1975,1983,1984,1987,1993
French North Africa-vacation 1965
India- 1963-independent study
1977-USAID training in xerophthalmia
Bangladesh-1972 United Nations Relief Operation, Dacca. First and Second national nutrition surveys. 6 months
1981-83 Helen Keller International, New York. Xerophthalmia prevalence survey-3 trips.
Afghanistan-1977-78 Helen Keller International, New York Xerophthalmia prevalence survey. 3 trips.
Pakistan-1978-79. Helen Keller International, New York. Xerophthalmia prevalence survey. 3 trips.
Guatemala-1981. Children's Eye Care Foundation, Washington, D.C. Children's eye surgical services.
Nepal-1982. Helen Keller International, New York. Xerophthalmia prevalence survey.
Yemen-1993. Private medical consultant.

USAID consultant on PVO projects:
1984 Malawi; Phillippines
1986 Morocco
1989 Sri Lanka, Phillippines
1992 China
1993 Bulgaria
1995 Morocco

PUBLICATIONS-on request

MAYNARD B. WHEELER, M.D.

Director of Pediatric Ophthalmology
Newington Children's Hospital
Newington, Connecticut 06111 USA

CURRICULUM VITAE

Personal Data:

Born: [redacted]
Married; two daughters.

Education:

1953-57 Phillips Exeter Academy, Exeter, NH
1957-61 Dartmouth College, Hanover, N.H.; Chemistry B.A.

Columbia University, New York City, NY
1961-62 Graduate School: Medical Cell Biology of the Eye.
1962-66 College of Physicians & Surgeons; M.D. Degree.

Internship: General Medicine

1966-67 St. Luke's Hospital Center, New York City, NY

Military Service: United States Public Health Service.

1967-69 Detailed to U.S. Peace Corps; Stationed in PERU.
Rank: Senior Assistant Surgeon.

Residency: Ophthalmology.

1969-72 Edward Harkness Eye Institute, Columbia-Presbyterian Medical Center, New York City, NY
Director: A. Gerard DeVoe, M.D.

Fellowship: Pediatric Ophthalmology and Strabismus.

1972-73 Wills Eye Hospital & Temple University, Philadelphia, PA
Director: Robison D. Harley, M.D.
National Children's Hospital, Washington, D.C.
Director: Marshall M. Parks, M.D.

Board Certification:

National Board of Medical Examiners (087486) - March, 1967.

American Board of Ophthalmology - May 1974.

Maynard B. Wheeler, M.D., F.A.C.S.
Curriculum Vitae (cont.)

Awards & Grants:

1963-65	Sloan Foundation Fellowship for Eye Research.
1972-73	Special Research Fellowship, National Institutes of Health, Washington, D.C.
1978-82	Children's Eye Care Foundation Grant. Topic: Developmental Effects of Surgical Correction in Congenital Esotropia.
1986-88	Efficacy of Prism Adaptation in Acquired Esotropia, National Institute of Health multicenter grant.
1986	Honor Award,American Academy of Ophthalmology.
1990	Honor Award,American Association for Pediatric Ophthalmology and Strabismus.
1991	Community Service Award, Hartford County Medical Society.
1994	Polk Award - for volunteer service, Connectict Society to Prevent Blindness.

Publications: (on request or appended)

Medical Licensure: Connecticut

Hospital Appointments:

Newington Children's Hospital - Active Staff 1974 - .
Director, Department of Special Surgery, 1978 - 89.
Director, Division of Ophthalmology, 1978 - 89.
Director, Department of Ophthalmology, 1989 - .
Medical Advisory Board, 1978 - .
Operating Room Committee, 1978 - , Chairman 1985 - .
Long Range Planning Committee, 1979 - .
Hartford Hospital Merger Task Forces: 1. Governance, 2. Surgery, 1986 - 89.
Wise Scholarship Review Committee - 1993 - .

Hartford Hospital - Senior Attending Staff, Ophthalmology.

Dempsey Hospital - Attending Staff, Surgery (Ophthalmology) & Pediatrics.

St. Francis Hospital - Courtesy Staff, Ophthalmology.

Mt. Sinai Hospital - Courtesy Staff, Ophthalmology.

Hospital for special Care (formerly, New Britain Memorial Hospital)-
Courtesy Staff, Ophthalmology

University Appointment:

University of Connecticut Health Center
Assistant Clinical Professor of Surgery (Ophthalmology) & Pediatrics.

Maynard B. Wheeler, M.D., F.A.C.S.
Curriculum Vitae (cont.)

Medical Societies:

American Academy of Ophthalmology, Fellow 1975 - .
Representative to American Orthoptic Council, 1984 - 90.
Low Vision Rehabilitation Committee, 1991 - .

American Association for Pediatric Ophthalmology & Strabismus, 1975 - .
Education Committee 1981 - 87, Chairman 1983-87.
Member-at-Large 1982-83.
Ad Hoc Committee on Training and Accreditation, 1987-93.
Long Range Planning Committee, Chairman 1990 - 92.
By-laws committee, Chairman 1993 - .

American Academy of Pediatrics, Fellow 1978 - .

Hezekia Beardsley Chapter Connecticut Pediatric Society.
School Health Advisory Committee, 1978 - .

American College of Surgeons, Fellow 1976 - 92.
Connecticut Credentials Committee, 1985 - 90.

American Medical Association.

New England Ophthalmological Society.

Connecticut State Medical Society.

Connecticut Society of Eye Physicians.

Hartford County Medical Association.

Hartford Medical Society.

International Strabismus Association.

Pan-American Association of Ophthalmology.
Committee for Allied Health, Chairman 1993 - .

Peruvian Society of Ophthalmology, corresponding member, 1986 - .

National Society to Prevent Blindness.

Connecticut Society to Prevent Blindness.
Medical Advisory Committee 1978 - 93, Chairman 1982-93.
Long Range Planning Committee, Chairman 1985 - 87.
Board of Directors; Vice-President 1983-86.
President 1986-88.
Delegate to National Society to Prevent Blindness, 1988 - 1989.
Honorary Member 1994

Helen Keller International, 1982 - .
Consultant for Peru, 1982 - ; Bolivia, 1986.

Maynard B. Wheeler, M.D., F.A.C.S.
Curriculum Vitae (cont.)

American Orthoptic Council, 1984 - .
Committee on Continuing Education, 1985 - 86.
Committee on Ethics, 1985 - 86.
Committee on Publications & Exhibits, 1985 - 86.
Committee on Training and Accreditation, 1985-86, Chairman 1985-86.
Executive Committee, 1986 - 92.
Secretary-Treasurer, 1986-89.
President, 1989 - 92.

Joint Commission on Allied Health Personnel in Ophthalmology.
Commissioner, 1986 - .
Examination Committee, 1986 - ; Chairman 1989 - 91.
Manpower Committee, 1986 - 88.
Finance Committee, 1989 - ; Chairman 1992 - 93.
Certification Committee, 1987 - ; Chairman 1992 - 93.
Executive Committee, 1992 - .
Long Range Planning Committee, Chairman 1992 -
Board of Directors: Education & Research Foundation, 1990 -
Vice President - 1993
President 1994 - 95.

Connecticut Health Systems
Professional Advisory Committee 1989 - 92.

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