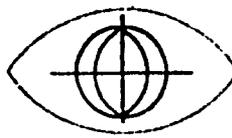


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PRIMARY EYE CARE DELIVERY  
AND TRAINING PROGRAM

MATCHING GRANT ANNUAL REPORT

July 1, 1982 - June 30, 1983

May 19, 1983

the  
International  
Eye Foundation

INTERNATIONAL EYE FOUNDATION

MATCHING GRANT NUMBER PDC-0174-G-SS-1102-00

ANNUAL REPORT

The following report provides information relevant to activities from July 1, 1982 through June 30, 1983, under the terms of the International Eye Foundation's Matching Grant, providing for a primary eye care delivery and training program.

Historical Background

The IEF was founded in Washington, D.C. in 1960 by Dr. J. H. King, Jr., an internationally known corneal surgeon. Responding to needs expressed by Dr. Tom Dooley and others, Dr. King organized the IEF as a non-profit charitable institution primarily aimed at providing donor eye tissue from America for use in developing countries. In addition, Dr. King developed travelling teams of eye surgeons to teach local eye physicians how to perform the corneal transplants, thus restoring the sight of thousands of curably blind in many countries.

As data was gathered on the cause, extent, and socio-economic impact of blindness in the less developed countries, it became evident that a program entailing a wider outreach was called for.

Accordingly, the IEF program was expanded to encompass ... "the promotion of peace through the prevention and cure of blindness... through a program of fellowships, surgical teaching missions, research, and distribution of ocular tissue... and other educational, scientific, and charitable projects..."

In 1972, the IEF was registered as a private voluntary organization with the United States Department of State, and

began receiving significant grants for the development and implementation of programs for the prevention and cure of blindness in developing countries, stressing the provision of such services to the rural poor populations.

Throughout the years, the IEF has given assistance to many countries in the assessment of the cause and extent of eye disease and blindness. Once this data is gathered, assistance is given the government in developing a logical, affordable program to include preventive and curative eye health care as an integral component of the general health services.

### Eye Health Care Delivery Systems

#### INTRODUCTION

The term Eye Health Care (EHC) reflects a comprehensive, integrated system to provide promotive, preventive, and therapeutic services to prevent loss of vision from eye disease and injury.

A National Eye Health Care Delivery System (EHCDS) should consist of a continuous system of training, supervision, support, and referral services extending from the level of the most rural villages up to the central referral hospital(s). Promotive, preventive, and therapeutic eye health services should be integral components of the general health services provided.

#### GOAL

The goal of an eye health care delivery system is to reduce the prevalence and incidence of preventable and/or curable visual loss to a level acceptable by the community and the country.

#### EYE HEALTH SERVICES COMPONENTS

Promotive:

- to assist communities to recognize the extent of visual

loss present and its socio-economic impact.

- to increase awareness that eye disease and visual loss can usually be prevented or cured.
- to encourage early self-referral to proper care for patients suffering from eye disease, injury or visual loss.
- to stimulate community desire to take positive action in the prevention of avoidable blindness.

Preventive:

- to assess the nature, extent, and cause of eye disease, blindness, and visual loss at the national and local community level (community diagnosis).
- to educate the community in those individual and group practices and actions necessary to eliminate or reduce avoidable eye disease and visual loss. The proposed activities must be simple, practical, affordable, and culturally acceptable to the community.
- to assist the community in planning a program of intervention in accordance with the wishes, goals, and priorities of the community.
- to provide appropriate training for a member of the community who will coordinate and direct the group effort aimed at reducing or eliminating avoidable vision loss.

Therapeutic:

- to train a member selected by the community in the recognition, simple treatment, or appropriate referral of common eye diseases, injury, and visual loss.
- to provide basic supervision, support, and referral services by the staff of the first referral facility.

- to ensure adequate "secondary" specialty eye services as a referral source within the larger administrative or geographic regions of the country. In addition to providing an appropriate range of specialty eye care (therapeutic) services, such secondary level eye health workers also provide training, supervision, and support to the staff of the peripheral health facilities, by means of regularly scheduled local clinics and teaching seminars.
- to provide definitive medical and surgical care as close as possible to where the need is greatest. The rural areas usually contain the vast majority of the population, but only a small fraction of the medical manpower and facilities. Patients with eye problems are thus faced with traveling long distances to compete for eye care in crowded central facilities at a relatively enormous cost in time and money for the patient and his family.
- to provide adequate "tertiary" specialty care at more central locations by properly qualified eye specialists (ophthalmologists). The central referral hospitals provide regular supervision, support, and refresher training for staff at the secondary level facilities by means of regularly scheduled consultation visits.

Training:

- to assist in the development and utilization of appropriate training aids and curricula to train general and specialized health workers in eye health care.

Advisory:

- to advise the Ministry of Health as to the needs and resources available in the field of eye diseases and visual loss.

- to assist the Ministry of Health in the development, implementation, and ongoing administration of a national blindness prevention and treatment program integrated into the general health services.
- to stimulate involvement by political, business, social, and other leaders in the national program by the establishment of Blindness Prevention Committees or other non-governmental organizations.

#### LEVELS OF EYE HEALTH CARE

Eye health care consists of four levels; primary, first referral level, secondary, and tertiary.

##### Primary Eye Care:

Primary Eye Care refers to practical recognition, simple treatment, and appropriate referral provided by a member of the community who has undergone a short training course. Such a primary health worker is taught to recognize and treat simple infections such as conjunctivitis and foreign bodies, and to recognize and refer all cases with significant eye disease, injury, or visual loss to the nearest static or mobile health facility.

##### First Referral Level:

Eye Care is provided by local health centers or clinic staff, frequently medical auxiliary personnel who have had a practical course in recognition, more advanced treatment of a wider range of eye disorders, and referral of more severe cases to a secondary level facility providing specialty eye care. These personnel provide the training, supervision, support, and referral for the primary eye care worker.

### Secondary Eye Care:

Suitably-trained general physicians or ophthalmic medical auxiliaries stationed in district or provincial hospitals conduct routine eye clinics, provide mobile consultation visits to rural clinics and villages, and gather patients needing surgery to be operated on by or with the supervision of the attending ophthalmologist. In their mobile "rounds," the consultation clinics are utilized as training opportunities. In addition, the secondary level staff assist first referral level staff in the proper training and supervision of the primary health workers responsible for primary eye care. The secondary level staff also are responsible for the preventive activities in their area of responsibility. Typical ophthalmic services provided at the "secondary" level would include definitive management for conditions such as trauma, cataract, corneal ulcers, pterygium, intraocular infections, glaucoma, and the complex lid disorders, especially as related to treatment failures for previous procedures done for trachoma.

### Tertiary Eye Care:

Tertiary Eye Care units are usually established in major urban or capital areas and may be associated with a medical school. These centers provide a wide range of sophisticated diagnostic and therapeutic services in addition to providing routine eye care for the immediate urban area. This latter function may detract seriously from the ability of tertiary centers to provide necessary referral services, unless the routine clinics are assigned to less highly-trained eye health workers. The ophthalmologists in the tertiary care facilities should be intimately concerned

with the supervision and recurrent training of health workers in the secondary and first referral level clinics. Close cooperation and communication between all levels of eye health care delivery helps to ensure that the coordinated program makes available diagnosis, treatment, and referral services appropriate to the needs and resources of the country.

In addition to the full range of services of a secondary level center, the tertiary centers may provide such sophisticated services as corneal transplantation, retinal and vitreous surgery, oculoplastics, and ocular oncology (cancer treatment). In addition, research into the nature and extent of eye disease and blindness should be developed and coordinated by the tertiary centers. Once the problems causing visual loss are identified, priorities can be set for applied research and strategic interventions as an integral component of overall health services.

#### PERSONNEL

In order to appropriately staff various levels of eye health care delivery points, certain considerations should be kept in mind. While ophthalmic specialists are necessary to provide central consultative services, a national PBL program may, in fact, be coordinated administered, and supervised by a non-ophthalmologist. This may be a general physician or a specially trained medical auxiliary.

The success of a national PBL program depends on a continuous chain of training, supervision, support, and referral services, extending in an unbroken fashion from the central referral hospitals, through provincial and district hospitals, through the first referral level clinics, into the most rural villages.

The role of the various cadres of health care workers may be summarized as follows:

Tertiary Level

Ophthalmologists:

Ophthalmologists stationed in central referral and provincial level hospitals must be oriented toward the appropriate utilization of either general physicians or specially trained ophthalmic auxiliaries (OMA's) to provide care for the bulk of the cases presenting for eye care both in the central hospitals and in the more peripheral health units.

In addition to providing specialty consultation, the ophthalmologists must teach, supervise course delivery and curriculum development, advise the Ministry as to needs and program objectives and accomplishments, and provide overall supervision of the eye health care workers peripheral to the referral centers.

Support Personnel:

The non-ophthalmologist eye health workers in the referral hospitals should be given the responsibility to handle the routine eye clinics, in the same fashion as those in secondary facilities. All too frequently, ophthalmologists in central referral settings spend more than 50% of their time conducting routine eye clinics which should, in fact, be delegated to others. Under supervision, the ophthalmic medical auxiliaries in these central facilities should diagnose, treat, follow and, when necessary, refer for consultation the majority of patients presenting for care. Well-qualified non-ophthalmologist eye health workers should also assist in surgery and provide the routine postoperative care of these patients. When rotated to the field, they will be more qualified to arrange for definitive

surgery during the ophthalmologist's supervisory training, and referral visits to the peripheral facility. Under special circumstances and with proper training and supervision, they may be given authority to perform routine cataract surgery and other procedures.

### Secondary Level

#### General Physicians or Ophthalmic Medical Auxiliaries:

General physicians and/or well-qualified ophthalmic medical auxiliaries may provide specialty eye care in more peripheral health facilities. For simplicity of discussion, this category will be referred to in this paper as Ophthalmic Medical Auxiliaries (OMAs).

In the more peripheral facilities, OMAa conduct routine eye clinics. Cases beyond their capability are either referred to the central hospital or held for the regularly scheduled visits of the supervising ophthalmologist. Surgical candidates are gathered and operated on either by the visiting ophthalmologist or by the OMA under his supervision.

The OMA visits the peripheral static health facilities to conduct regular eye clinics, utilizing the opportunity to continually train and retrain the staff in recognition, treatment, and appropriate referral of patients with eye disease or injury. In conjunction with the staff of the peripheral units, the OMAs assist in the practical training of village health workers in primary eye care.

The OMAs also conduct regular in-service training for the staff of the "secondary" facility in which they are stationed. This will include such other workers and disciplines as Maternal and Child Health Teams (MCH), immunization teams, specific

disease-control teams, nutritionists, agriculture extension workers and others. The health staff serving in the general outpatient clinics should receive regular seminars on recognition, treatment, and appropriate referral of patients with eye problems.

Support Personnel:

The OMA will usually require assistance in the form of a nursing assistant, eye orderly, or clerk who will be responsible for cleaning, logging in patients for clinic, keeping records, checking visual acuity, and performing specific treatments under supervision. Stocking and re-ordering of needed supplies is best done by the OMA to ensure timely replenishment.

In the mobile clinics conducted in the peripheral facilities, the local clinic staff should be involved to the maximum extent possible so the occasion may be used as a teaching practical session as well as a referral clinic. The vehicle driver can also be taught to assist in testing visual acuity and orderly conduction of the clinic.

First-Referral Level Clinics

Physicians, Medical Auxiliaries:

The physicians, medical assistants, clinical officers, and nurses staffing the most peripheral static clinics should be given practical training in the recognition, treatment, and appropriate referral of patients presenting for care or referred by the village health worker. Simple, clear visual aids to augment and refresh the training received should be available for constant reference.

The village health workers supervised by the staff should be given a short, practical course in primary eye care with the

assistance of the visiting OMA. The VHW's basic medications should be routinely checked and resupplied. Problem cases should be examined together on the regular supervisory visits of the clinic staff.

It is important that rural clinic staff know and understand the referral network for patients with eye problems beyond their capability to handle.

#### Primary Level

##### Village Health Workers:

As detailed in previous publications, the VHW should be given a short, practical course in primary eye care. This course should have two main objectives. The first is to teach the VHW and the villagers what the root causes of eye disease and blindness are in their community. If the community so desires, assistance should be given to tackle these specific problems. The second objective is to train the VHW to recognize and provide basic treatment for common simple eye problems and to recognize and refer serious eye problems.

##### Support Personnel:

In conjunction with the supervising staff from the first-referral level clinic and such other trainers as appropriate, the entire community should be encouraged to recognize eye problems and to consult the VHW for proper care. It is important to include the traditional medical practitioners in health planning and even utilize them as VHWs in order to ensure community acceptance and compliance.

#### VERTICAL VS INTEGRATED PROGRAMS

In the foregoing discussion, it should be noted that the

eye health workers peripheral to the central specialty hospitals may, in fact, be general duty physicians and medical auxiliaries who receive additional training to enhance their capability to handle ocular injury, disease, and visual loss.

The routine treatment of patients presenting with eye complaints is still the responsibility of the regular health workers, integrated into the care of the "whole patient." Only patients with eye problems beyond their capability are referred to more specialized facilities.

If special intervention is required, as in areas with blinding trachoma or nutritional eye disease, the health care staff in frequent contact with the population must be involved in the provision of preventive and curative measures.

So-called "vertical" programs are characterized by usually highly-trained eye health workers providing all eye care and functioning rather independently of the overall health care system. Such a program requires a large number of eye health care specialists, provides for only intermittent coverage, and traditionally excludes local clinic staff from the "mobile" visits of the specialist teams. In the absence of the team, eye patients are either ignored or simply told to return when the "specialists" team is due to arrive, without any screening or basic treatment being given.

As the root cause of many of the blinding conditions encompasses multiple disciplines (agriculture, water supply, sanitation, nutrition, etc.), it is important that the health care services be integrated into the overall health sector services and coordinated with related disciplines.

## Activities

In the past twenty years, over 1,200 eye specialists, members of the Society of Eye Surgeons, the medical supporting arm of the IEF, have contributed their time, talents, and in many cases their own travel and support funds to provide surgical teaching and humanitarian services throughout the world. Some of the volunteers have spent literally years living and working in developing countries. Working under sometimes harsh conditions, these dedicated men and women have brought a new concept, that of prevention of disease at the community level, to many countries.

The Society of Eye Surgeons has convened five World Congresses dedicated to upgrading the ophthalmic knowledge of medical and paramedical personnel. Prominent specialists from around the world give of their time to provide refresher and clinical up-date training for health workers in various developing countries. The last such meeting was held in Nairobi, Kenya in 1980, with participants representing 32 countries attending.

Beginning in 1978, the IEF began working with the World Health Organization, the Francis Proctor Foundation, and others to provide worldwide planning for maximum impact of scarce development assistance and humanitarian resources.

The IEF collaborated in the production of the first internationally recognized treatise on the development of blindness prevention and treatment programs in developing countries.

This was followed by a similar booklet on the assessment of avoidable and curable blindness--a text which is now recognized as the authoritative source of such information. This booklet, produced in conjunction with the WHO and others, is used extensively by researchers and clinicians in the establishment of the

data base necessary for the logical planning of National blindness prevention and treatment programs.

In 1979, the IEF began working closely with WHO to share experience and resources in the promotion, development, and implementation of such National programs. The IEF in collaboration with the Government of Mali and the WHO conducted a planning meeting to address the overwhelming socio-economic and humanitarian problem of preventable and curable blindness in Africa.

To follow up this planning meeting, a second sub-regional meeting was conducted by the IEF, WHO, and the Government of Malawi. Participating in this meeting were representatives of the governments of Botswana, Lesotho, Malawi, Swaziland, Zambia, and Zimbabwe. This meeting, convened to discuss National and Sub-regional problems relating to preventable and curable blindness, resulted in a series of action programs in each participating country as well as regionally.

The IEF, acting as a consultant source for the WHO, provided technical assistance to each country to assess the nature and extent of eye disease and blindness. With this information in hand, assistance was given the Ministries of Health in planning and formulating National programs of prevention and cure of blindness, stressing the primary health care approach and the methodology developed by the IEF (vide supra).

In order to provide trained medical and medical auxiliary personnel to implement these National programs, assistance was given the Government of Malawi in the further development of their Ophthalmic Medical Auxiliary training program, making it suitable as a training center for health workers from the participating countries.

This overall program, starting with "global" planning followed by sub-regional and National development assistance has been accepted as the world standard in the field of blindness prevention and treatment.

The University of London has named the IEF as a collaborating training institution, and IEF staff are appointed Visiting Lecturers to provide both didactic instruction in the University and practical experience in IEF field projects for University post-graduate students in Preventive Ophthalmology.

Concomitant with technical assistance in development and implementation of outreach blindness prevention programs, the IEF has continued to provide surgical teams to provide both teaching and curative services, including the establishment of eye banks in developing countries around the world. Fellowships and scholarships have been provided to train physicians from developing countries in the skills needed to provide a full range of preventive and curative eye health services in their home countries. These trained ophthalmologists then frequently serve as advisors to the Ministries of Health to integrate eye health care activities into the overall health services of the country.

#### Program Activities-General

Each of the countries participating in the IEF Primary Eye Care matching grant program stands in a unique position regarding the development and implementation of their National program. Thus, the program activities for each country will vary according to the needs, resources, interests, and capabilities. Some programs are broad-based, including regional training for health manpower personnel, stressing technical cooperation between

the developing countries. Such regional programs are commonly done in conjunction with the World Health Organization and its affiliates, other PVOs from America and other countries, and the governments of participating countries.

#### Program Activities-Specific

##### 1. Honduras

The purpose of this program has been to assist in the training of nurses, nurse auxiliaries, and their tutors to provide suitably-trained health personnel at the first-referral level, who would in turn be able to train, supervise, support, and provide referral for primary health workers providing primary eye care. In addition, central referral services were strengthened to provide for central provision of curative services and professional training of medical and medical auxiliary personnel.

Under the terms of the Matching Grant, the following activities have been taken to date: 1) In conjunction with the Ministry of Education, a training program for secondary school directors was developed and 210 directors trained to perform visual acuity screening in school children; 2) Four hundred and thirty nurses and nurse auxiliaries were trained in primary eye care. This training enables the nurses to recognize eye disease at an early stage, and provide appropriate therapy or to refer the patient to central eye services as required. In addition, nurses are trained in those individual and community measures aimed at preventing eye disease in rural areas; 3) Nurse supervisors and tutors were trained in the central nursing schools and in each province who serve as sources of continuing medical education for other nurses trained in the program; 4) Thirty-six

peace corps volunteer nurses were trained to act as counterpart instructors in each of the regions of the country and to provide ongoing instruction in the nursing schools; 5) Professional seminars were given to train 14 ophthalmologists and 16 general practitioners in various levels of eye health care delivery. Three visiting professors have been provided by the International Eye Foundation to conduct training seminars in the University Hospital in Tegucigalpa. At the seminars, ophthalmologists and general practitioners from all over the country participated, learning both basic and advanced eye health care. Equipment was provided to the Ministry of Health in order that physicians so trained may then provide the eye health care services necessary. The need for such eye health services has increased dramatically as a result of training the nurses in the rural area recognition of eye disease and the need for appropriate referral for cases beyond their capability to handle locally.

The program continues actively to date with training of Honduran physicians both locally and in short-term training fellowships in the U.S. in areas requested by the Ministry of Health as the need is identified. In addition, continuing medical education seminars will be conducted for nurse tutors and nurses trained under this project in order to ensure continued delivery of both preventive and curative eye health services throughout the rural areas of Honduras. The IEF paramedical instructor was withdrawn from Honduras in October 1982, as the nurses training and the visual acuity screen projects had been fully implemented. The paramedical instructor is available for short-term consultancies during the remainder of the Matching Grant period, and anticipates serving with the Joint Evaluation Team.

The continuing education of ophthalmologists through the provision of basic science training in Puerto Rico for residents in ophthalmology has taken place, with great success.

2. Puerto Rico

The Matching Grant program of the IEF in Puerto Rico has been to provide training for health care professionals (doctors and nurses) in order to provide suitably-trained personnel for the Spanish-speaking countries of the Americas and Caribbean. The training program supported in collaboration with the University of Puerto Rico is unique in providing a complete course of training in basic science, blindness prevention, and National program development in Spanish.

Seventeen physicians from selected countries of the Americas are currently undergoing training at the University of Puerto Rico Basic Science Course in Ophthalmology. A late entry into the program was a physician from Honduras complementing the training activities noted in the section on Honduras.

The establishment of the Carrigan Endowed Fellowship in Ophthalmology at the University of Puerto Rico under the supervision of former IEF Fellow, Dr. William Townsend, a corneal specialist, will commence in June of this year. In addition, Dr. Townsend travelled to Tegucigalpa, Honduras in December to provide consultant expertise and continuing medical education to the local ophthalmologists.

See Appendix A for the complete list of fellows who are undergoing training in the Basic Science Course this year.

3. Guinea

The program in Guinea has as its goals: 1) The development of central curative and teaching services to serve as the

initial step in the development of a national blindness prevention and treatment program; and 2) To assist the Ministry of Health in long-range planning for delivery of eye health care services in areas outside of the capitol city, stressing eye health care, both preventive and curative, in rural areas.

Eye health care in Guinea has lagged behind the delivery of other health care services as there has been available only one ophthalmologist for a population of over 5 million. At the request of the Ministry of Health, the International Eye Foundation began a program to train general practitioners in the delivery of eye health care services appropriate to the needs and resources of the country with the training being done in the local medical facilities assuring that the physicians are trained to recognize, treat and begin the development of preventive services for those conditions causing eye disease and blindness in Guinea.

As eye health care services have in the past only been available in Conakry, it has been necessary to develop a cadre of personnel capable of providing curative services in the outlying hospitals as the first step toward national program development. As these personnel are trained and begin providing eye health care services in the rural areas, they will then be given assistance in the training of physicians and nurses working in the rural areas to enable this latter category of worker to recognize and treat eye disease at an early stage, referring those who require specialty care to the local hospitals. As a subsequent phase, there will be training given to the preventive health teams who are scheduled to work in each arrondissement.

To date, four general practitioners and two "majors" (clinical officers who have served for at least 10 years and who

have passed a written examination which then promotes them to the level of a physician in pay and prestige) have been trained in the provision of specialty eye health care services. In addition, two ophthalmic nurses have been trained to assist in the clinic and operating rooms.

The first IEF consultant ophthalmologist, Dr. Samir Saleeby, completed his tour in December of 1982 and was replaced by Dr. Jean-Paul Heldt who will remain for a further two years to provide the long-term technical assistance requested by the Ministry of Health. As the program develops, more instruction will be given to participating Ministry of Health workers in the philosophy and implementation of preventive services in the rural areas.

The President of Guinea has dedicated a two-story building as a new center for the delivery of eye health care services and for training of physicians, nurses and health technicians in prevention and treatment program. Currently this building is nearing completion with all cost to date being borne by the Ministry of Health with the exception of the cost of plans and ceramic tile for the operating theater which were provided by the IEF. With the completion of this building, adequate space will be available for the acceleration of the training of health care workers to provide rural eye health care services based out of hospitals in the major population concentrations of the country.

While the orientation of this program at first glance appears to be mainly in the curative services, it is important to recognize that heretofore there have been basically no eye health care services available in the rural areas and that in order to base a preventive program in a specific rural area, curative eye health care services must be available. It has been

shown in other projects that it is futile to mount a blindness prevention campaign unless problems identified during the preventive activities can be provided with direct curative services in a timely fashion. It is with this thought in mind that the Ministry of Health has developed, in conjunction with the IEF, this logical progressive development of the national program.

Diagnostic and therapeutic equipment and commodities have been provided to enable the physicians-in-training to provide eye health care services in the central hospital facilities. Further assistance is contemplated in equipping the new teaching and treatment center when it is completed. C.B.G. Conakry has provided lodging and food for IEF project personnel from the onset of this program as well as administrative support incountry and shipping of all commodities and equipment on C.B.G. vessels at no charge. In addition, a project vehicle including repairs and maintenance have been provided by C.B.G.

All activities described above are currently being carried out, with the second management trip of this fiscal year currently scheduled for the third week of May 1983, by Dr. Lawrence M. King, Deputy Medical Director, International Eye Foundation. In addition to technical and administrative support during this visit, Dr. King will provide professional expertise as a retina specialist, and assist in the continued training of the Guinean counterpart ophthalmologists. Dr. King will be hand-carrying with him an additional selection of operating equipment, sutures, drugs, and equipment (See Appendix B for inventory list).

#### 4. Malawi

The purposes of this program are to: 1) Provide eye health care delivery and training in the central hospitals; 2) To train

ophthalmic medical auxiliaries to provide preventive and curative services in the rural areas; and 3) To supervise the activities of eye health care workers at all levels throughout the country.

The International Eye Foundation currently has two ophthalmologists stationed in Malawi. Dr. Teferra Tizazu is located in Lilongwe at the Kamuzu Central Hospital and Dr. Larry Schwab is at the Queen Elizabeth Central Hospital in Blantyre. In both hospitals the functions of the ophthalmologist are to: 1) Provide specialty eye health care; 2) Train ophthalmic medical auxiliaries to serve in the rural areas of Malawi; and 3) To supervise the activities of ophthalmic medical auxiliaries in the areas for which they are responsible (See Appendix C for job description).

Diagnostic and therapeutic equipment was provided to equip the Central Hospitals to provide specialty eye health care services and basic instrumentation was made available for the ophthalmic medical auxiliaries working in the rural areas. The Rotary Club of Blantyre has donated to the International Eye Foundation funds to purchase motorcycles for use by the ophthalmic medical auxiliaries to extend their reach into the most rural areas of the country. There, the ophthalmic medical auxiliaries conduct eye clinics and provide training of local health care workers in blindness prevention activities and in recognition, treatment, and appropriate referral of patients suffering from eye disease.

Currently, plans are underway for a collaborative study of nutritional eye disease in children and blinding eye disease in adults between the International Eye Foundation, the Ministry of Health, the Government of Malawi, Johns Hopkins University, Helen Keller International, and the World Health Organization. The study will be conducted in the Lower Shire Valley of Malawi,

and project personnel are presently working with all participants to develop the necessary framework of the study and plan the actual implementation in September, October, and November of 1983 (See Appendix D for survey protocol). Data gathered during this initial study will be utilized to further plan the strategy against the important causes of blindness in Malawi. This strategy will include nutrition education, the study of nutritional practices in the area, and a program of training both health workers and non-medical personnel to recognize nutritional eye disease and to develop and implement individual and community actions to prevent this cause of blindness.

The President of Malawi continues to maintain his interest in the newly revived eye care services in the country, and has given great political support to the activities of this project.

5. Egypt

The purposes of the Matching Grant activities in Egypt are as follows: 1) To upgrade the Ministry of Health Central Eye Health Care Delivery facilities; 2) To provide direct services to the overwhelming number of curable blind; 3) To upgrade the capabilities of Egyptian physicians, both to deliver eye health care services and to train ophthalmic health workers from outlying areas in modern techniques of blindness prevention and curative eye health care delivery; and 4) To provide a physician exchange program in which U.S. physicians work in Egypt and Egyptian physicians work in Egypt and Egyptian physicians are brought to the United States for short-term fellowship training in areas of need as identified by the Ministry of Health.

Since the beginning of the program in Egypt, Central Ministry of Health facilities were first upgraded at the Giza Memorial

Research Institute of Ophthalmology and then at Rod-El-Farag Hospital--at the request of the Ministry of Health. Sufficient diagnostic and therapeutic equipment was provided to equip two outpatient examining lanes and to instrument one operating room. Assistance was given to the hospital in developing a fluorescein angiography laboratory in order to adequately diagnose and provide preventive care to patients suffering from diabetic eye disease. In addition, assistance was given in the development of a contact lens facility adequate to provide "bandage lenses" to patients suffering from corneal disease requiring this special form of therapeutic or preventive intervention. In addition, a micro-surgical operating room capability was developed and the technology made available to the Egyptian physicians. A large amount of commodities were provided in the form of suture material, medications, bandages, and expendable diagnostic equipment.

Three U.S. physicians were continually incountry working at Rod-El-Farag Hospital providing direct curative patient services in conjunction with counterpart Egyptian ophthalmologists with each U.S. physician seeing an average of 500 outpatients and performing 40 to 50 surgical procedures during their three-month rotation. In addition, each U.S. physician prepares and delivers a series of lectures on various subjects in ophthalmology to assist in the training program for Egyptian physicians studying to become eye specialists.

Since the beginning of this program, six Egyptian physicians have been trained in various areas of sub-specialty in ophthalmology to provide those areas of professional expertise identified by the Ministry of Health and the Director of the Hospital as being necessary for their program of blindness

prevention and treatment.

International Eye Foundation staff made multiple trips to Egypt providing technical assistance and program formulation and implementation and in addition, have served as consultants to the Ministry of Health in developing a national program to implement an urban blindness prevention and treatment program and are currently assisting in the development of a plan designed to bring eye health care to the rural areas of Egypt as well.

With the consent of the Ministry of Health, Matching Grant activities will terminate with the provision of the final fellowship for Ministry of Health eye specialists in the summer of 1983. An OPG has been approved by the Mission and the Ministry of Health under whose terms the IEF will assist the Ministry in the development and implementation of blindness prevention and treatment activities in the Khalifa district of Cairo, expanding the program to cover all districts of Cairo as suitable methodology and training aids are developed. As a follow-up to this pilot program, the Ministry of Health has requested further assistance in the planning and implementation of a similar program in the rural areas of Egypt.

6. IEF Headquarters Bethesda

A. The IEF staff attended the International Agency for the Prevention of Blindness Second World General Assembly held in Washington, D.C. in late October at which time the Medical Director delivered a paper entitled "Eye Health Care Delivery Systems." In addition, the IEF seconded its Administrative Director to the International Agency for the Prevention of Blindness to serve as the Treasurer and Coordinator for the meeting. The following week, IEF staff attended the American Academy of Ophthalmology

Annual Meeting which was a conjoint AAO meeting and international meeting of ophthalmology held in San Francisco.

Due to the fact that both these meetings attracted a great number of international leaders in ophthalmology, it was felt that it would be an invaluable experience for IEF staff members from the various projects overseas to attend these meetings. Therefore, representatives from the Kenya Project, the Malawi Project, the St. Lucia Project, the Dominican Republic Project, the Puerto Rican Project, and the Egyptian Project were brought to the U.S. to attend one or both of these meetings, depending upon their time availability. This further enabled the IEF to provide opportunities for discussion between project directors and staff in a cross-fertilization of ideas and philosophies concerning the conduct of blindness prevention programs in the various settings in which the IEF operates.

The IEF is a scientific exhibitor annually at the American Academy of Ophthalmology Annual Meeting and provides an educational display and take-home materials concerning blindness prevention worldwide to this gathering of over 14,000 ophthalmologists, nurses, ophthalmic technicians, and other health professionals. Also, at the time of the AAO meeting, the IEF held its annual Society of Eye Surgeons Meeting, this year expanded to a full afternoon session at which scientific papers were presented and opportunity for discussion of various approaches to the prevention of blindness around the world were held. The addition of IEF's project personnel from abroad greatly enhanced this meeting and the exchange of ideas.

B. The IEF continued its participation in the Combined Federal Campaign as a member of the International Service Agencies.

Informational materials were refined and supplied to provide prospective donors with background on the blindness prevention activities of the IEF.

C. In October of 1982, the Executive Director of the IEF resigned, and was replaced on April 1 by a new Executive Director (See Appendix E for Press Release on new Executive Director). Also, a new Secretary was hired to assist in the increased workload brought about by the Matching Grant activities. In January of 1983, the Paramedical Instructor from the Kenya O.P.G. completed her duties and returned to the home office where she now serves as Director of Training for paramedical activities based in Bethesda, but travelling widely to other O.P.G. activities as well as Matching Grant activities. It is planned to bring the Director of Field Operations from the Kenya Project back to the home office in January of 1984 when he has completed his duties in Kenya. The IEF feels that the addition of this individual to IEF staff is critical in the continued management of Matching Grant activities as well as in developing a more career oriented potential for IEF employees in the field to rotate through headquarters where their expertise can be utilized in the better management of programmatic efforts.

## 7. Finances

It is projected that the IEF will spend a total of \$200,000 of private monies during this second year of Matching Grant. This will be matched by the \$200,000 available under the terms of the Matching Grant activities, and brings us to full budget for the Amendment for Year 2 (See Appendix F for financial statement delineating in broad terms the expenditures of funds for this second year).

8. Fund Raising

The IEF has made significant strides in involving the private sector in funding development assistance and humanitarian activities. Corporate support for IEF programs has been developed to an all-time high. Each of the Matching Grant programs has been supported in part by direct corporate support, both financial and in-kind.

Participating governments have committed significant resources and personnel to the collaborative programs, thus becoming directly involved in the planning, implementation, and management leading to host-country institutionalization.

As previously noted, the International Eye Foundation continues to participate in the Combined Federal Campaign. As one of the charitable organizations under the International Service Agencies group, the IEF is approved by the Office of Personnel Management to receive contributions from both the domestic and overseas campaigns. Total contributions for this year are in excess of \$130,000 from both the overseas and domestic campaigns.

Significant support from foundations was provided by the Public Welfare Foundation (\$30,000), Barzine Foundation (\$11,000), The Charles T. Campbell Foundation (\$60,000), the MacArthur Foundation (\$15,000), the Sellars Foundation (\$2,000), and over \$10,000 in small private foundation awards.

Total corporate cash contributions were in excess of \$151,000, with additional corporate in-kind donations of ophthalmic medications, sutures, and medical equipment well in excess of 2 million dollars.

Other individual contributions and regular supporters of the IEF provided over \$30,000 in cash. The annual charity dinner dance, the Eye Ball, scheduled for late May of 1983 is being underwritten so that the total receipts of \$50,000 can also be matched.

The Carrigan Endowment, established in late 1981, thus far has a fund balance of some \$40,000.

The Society of Eye Surgeons of the IEF provided \$12,000 in dues and fees during this past year for the purpose of providing training for the treatment and prevention of eye disease.

9. Lessons Learned

In the implementation of Matching Grant activities in the past year, it is as apparent as it was last year, that the greatest successes have been those involving close cooperation with and participation in program activities by host governments. By assuming a significant portion of the costs of such programs, the host governments are committing themselves to a process of institutionalization ultimately.

Likewise, the provision of technical assistance in developing the support structure necessary for the proper function of a primary eye care system is critical. Primary health care of any sort can only exist when there is a system of training, support, supervision, and referral for the most peripheral village workers.

Project activities are consistent with the fundamental tenants of the IEF's integrated blindness prevention program which include: 1) The training of village level health workers in the public health aspects of blindness prevention; 2) The

recognition and treatment of eye disease at an early stage; and

- 3) The appropriate referral to other cadres of health workers who cannot only treat but who can also serve to train, support, and supervise these village health workers. The four functional types of interrelated activities which are carried out by the Eye Foundation are: 1) Surveying the extent and causes of blindness and the availability of resources as well as the planning and design of delivery systems in order to increase service delivery in an effective manner. 2) Upgrading the ophthalmic skills in prevention and treatment of blindness by personnel delivering primary eye care as well as secondary and tertiary level personnel for supervisory roles and referral capabilities. 3) Training the trainers of primary health care personnel to deliver courses in prevention of blindness and primary eye care. 4) Designing primary eye care infrastructures which may be expanded to include a broader range of primary health care activities where no such primary health care infrastructure exists.

What has become very clear in the operation of a Matching Grant program over the past nearly two years is that the key to a successful project is the selection of well-qualified, competent, dedicated, concerned, realistic, and motivated personnel. Unfortunately, criterion has not been, or perhaps cannot be, set down in black and white for the selection and recruitment of such an individual, but rather during the interview process one gains a sense of the nature of the individual and whether or not the qualities as noted earlier are present in this individual. Not a very scientific nor quantifiable way of determining who shall be selected to work abroad, but nonetheless a methodology which has been employed by the IEF over the years with a great deal of success.

10. Plan of Work - July 1, 1983 through June 30, 1984

Egypt

1) Provision of final fellowship training for the remaining Egyptian ophthalmologist selected by the Ministry of Health. 2) Continue plans to hold the World Congress of the Society of Eye Surgeons in Cairo in February 1984. This will not only include scientific updating for eye specialists from developing countries, but will provide an opportunity for course participants to learn about and visit an ongoing blindness prevention and treatment program under actual field conditions.

Honduras

1) Provide consultant specialists to upgrade the tertiary care facilities and better educate specialists in the management of the national program. 2) Provide fellowship training abroad in appropriate settings for Honduran specialists who will then return and share their knowledge with contemporaries. 3) Conduct refresher training for tutors and supervisors and the nurses manning the first-referral and secondary facilities. 4) Coincident with #3 above, participate in an evaluation of the Honduras project by the Joint IEF/AID evaluation team.

Puerto Rico

1) Provide specialty training in primary and advanced eye health care for physicians from the Spanish-speaking Americas and Caribbean. These physicians will then provide eye health care and training for medical and medical auxiliary personnel in their home countries. 2) Provide fellowship training in the surgical cure of blindness due to corneal and "anterior segment" disease, a major cause of curable blindness in Latin America and the Caribbean.

Malawi

- 1) Provide professional and technical assistance in the training, supervision, support, and provision of referral services for medical and medical auxiliary personnel.
- 2) Provide direct curative and preventive services both centrally in tertiary and secondary facilities, and in first-referral and primary levels through the supervised activity of trained ophthalmic medical auxiliaries.
- 3) Participate in the ophthalmic medical auxiliary training course, augmenting didactic lectures with practical field experience for students from Malawi and other participating South-east Africa. This component is done in conjunction with the World Health Organization, the Royal Commonwealth Society, the Malawi Council for the Handicapped, the University of London, and consultants from Johns Hopkins and Helen Keller International.
- 4) Carry out a scientific study of blindness and eye disease in the Lower Shire Valley in conjunction with the named collaborating agencies above. This study will ascertain the casual factors in what is perceived as a public health problem of staggering proportions: blindness among children, related to measles, nutritional eye disease, trachoma, and the use of traditional medicines harmful to the eye. The Government of Malawi will use this data to mount a campaign to prevent such blindness through a program of public education, training of primary health workers, coordination with the agriculture and nutrition sections of the appropriate ministries, and other actions as shown to be necessary.

Guinea

- 1) Provide continued training of tertiary and secondary level medical and paramedical personnel to provide central curative and

preventive services and to institute eye health care in first-referral level facilities. As the country's primary health program begins, these health workers will be able to provide the training, support, supervision, and referral services for primary health workers providing primary eye care. 2) Assist the Ministry of Health in long-range planning for the further training and utilize of available health personnel in an integrated health care system.

Bethesda Home Office

1) Continue to assist in the development and implementation of field projects. 2) Continue management and backstopping the field projects. 3) Continue collaboration with WHO, International Agencies, and other PVO's in prevention of blindness strategies and resource development. 4) Continue to obtain in-kind donations of equipment and pharmaceuticals. 5) Continue and expand fund raising activities from the private and corporate sector.

11. New Activities

The International Eye Foundation intends to delete Egypt from Matching Grant activities early in the next Grant period as previously discussed. This program has led into an OPG-supported program designed by the Ministry of Health and the IEF to institute preventive as well as curative services in the overall health care system, beginning with an urban program.

New additions to Matching Grant program activities will include the following:

Kenya

The Kenya Rural Blindness Prevention Program has matured

to a point commensurate with progressive "Kenyanization," the Ministry of Health now assuming increasing responsibility for program management.

As a result of the professional and technical assistance provided by Dr. Randolph Whitfield and the other IEF staff assigned to the Program, the Ministry of Health has come to recognize the socio-economic impact of avoidable blindness in the rural areas of Kenya. Acting on recommendations made by IEF project personnel following extensive studies, the Ministry began a training program to develop a cadre of Kenyan eye specialists.

These physicians, trained in central tertiary facilities both in Nairobi and abroad, are now to be trained in the administration and implementation of preventive as well as curative rural eye health programs, stressing the primary health approach. This training is to be given by means of rotations through the long-standing and effective programs being conducted by Dr. Whitfield.

The local USAID Mission, due to a funding shortage, will be unable to provide the resources necessary to complete this crucial turn-over activity. Consequently, the IEF proposes to do the following under the Matching Grant program:

- 1) Second Dr. Whitfield to the Ministry of Health to coordinate the training of eye specialists in the administration and implementation of rural blindness prevention programs, drawing on his experience of over 11 years work in the rural areas of Kenya.

- 2) Provide technical and professional assistance and liaison between the Kenya Society for the Blind, the Royal Commonwealth Society for the Blind, and the Ministry of Health.

3) Provide advisory assistance to the Ministry of Health in long-range planning for eye health care services integrated into the overall health care plans of the country.

4) Begin the necessary studies and planning to institute a demonstration trachoma-control project among the Pokot tribe, a group whose socio-economic development is severely hampered by the preventable blindness due to this disease.

5) Continue the training of ophthalmological residents up-country in the principals of rural eye care in conjunction with the Masters of Medicine Training Program conducted at Kenyatta National Hospital.

The IEF believes that it is essential that Dr. Whitfield's activities be continued to bring the Kenya Rural Blindness Prevention Project closer to institutionalization, and to permit the fruition of the plans which have been nurtured for over seven years. Without this additional time for Dr. Whitfield to serve as the reference point for blindness prevention activities within the structure which he has developed, the probability of the Ministry of Health losing interest just as the time of most critical need, is great. The Ministry has made great contributions to the blindness prevention activities in Kenya, but in order to provide the latest graduates of the training program in-country with more advanced techniques, all have been sent to Europe for two or three years of additional training. During the period that they are out-of-country, it is critical that Dr. Whitfield be present to maintain pressure, and ensure continuity of program services.

Caribbean (St. Lucia)

As part of the long-term programmatic activities of the IEF in the Caribbean, it is proposed that under the general rubric of the Caribbean, St. Lucia in particular be included as a part of the Matching Grant activities.

Since late 1981, the IEF has conducted a combination national and regional blindness prevention activity from St. Lucia, which included the provision of referral level care, as well as training activities for nurses both from St. Lucia and the surrounding islands. The IEF has provided technical and professional assistance to the Government of St. Lucia by seconding full-time and short-term volunteer IEF consultants to provide direct curative services and help to plan and implement a program of blindness prevention in rural St. Lucia. To date over 15,000 patients have been examined, with approximately 900 sight-restoring surgical procedures being performed. Over 100 Saint Lucian nurses have been trained in the principles of primary eye care delivery, and 38 nurses from the region have received training in Intermediate Eye Care and Public Health Ophthalmology.

As a vital component of this program, a Saint Lucian physician was identified who is undergoing additional appropriate training to enable him to become a locally-certified eye specialist. On completion of his training, he is to work for a given period of time under the supervision of the IEF consultant seconded to the Government of Saint Lucia.

Owing to a scheduling delay in implementing his training, this physician will commence the last half of training in late 1983 after the expiry date of the mission-supported OPG currently in force.

In order to provide an appropriate professional environment to allow this physician to assume responsibility for the implementation and management of a comprehensive blindness prevention and treatment program integrated with the overall health services, the IEF proposes specific actions under the Matching Grant. They are as follows: 1) To provide a full-time consultant ophthalmologist to continue the provision of specialty eye care and teaching, and to maintain the momentum achieved by the Ministry of Health in developing a successful program to be taken over by the Saint Lucian physician now in training. 2) To provide consultative services to other Caribbean Basin countries in the development of similar programs, stressing the use of regional training programs for health care personnel. 3) To provide small amounts of equipment, expendable supplies, and training material to the National and Regional program.

#### Ecuador

In order to be responsive to a specific request of a corporate donor to the IEF, it is our intention in Ecuador to carry out a needs assessment activity which will be expanded at a later date into an appropriate programmatic activity. During the past two years, the International Eye Foundation has been successful in attracting substantial cash contributions from corporations, by eliciting interest in our projects. At this time, however, one of the major corporate donors has requested us to expand our activities into South America in an area which matches with their own development interests. As a partner in this Matching Grant arrangement, the International Eye Foundation believes that this corporate request should be taken into account and is in total agreement

with beginning such an activity in South America. Therefore, the IEF requests that AID concur with this request to begin working in Ecuador.

12. Evaluation

Evaluation of the Matching Grant activities will be undertaken by the Joint AID/Management for Health Sciences Evaluation Schema currently under development. The IEF has been requested, and has agreed to participate in this evaluation schema, and will assist in any way possible to ensure a valuable experience for the three parties involved in the evaluation activity. The various reporting mechanisms which have been utilized by the IEF will be made available to the evaluation team including all monthly reports which are submitted to the home office from each country project. At this time, it is planned for the evaluation to be carried out in two countries--Honduras and Malawi, with the final timing to be determined later in May, 1983.

APPENDIX A  
PUERTO RICO BASIC SCIENCE COURSE

1983

<u>Name</u>	<u>Country</u>
Dr. Hector Pineda	Honduras
Dr. Enrique A. Urrets-Zavalía	Argentina
Dr. Patricia Z. Paladini	Argentina
Dr. Luis F. Bernardes	Brazil
Dr. Juan Florez	Colombia
Dr. Zuly Segovia	Venezuela
Dr. Jose Meriuvia	Bolivia
Dr. Victor H. Rivera	Ecuador
Dr. Therese A. Basile	Haiti
Dr. Eduardo Mendoza	Peru
Dr. Zenadia Jimenez	Dominican Republic
Dr. Adrian Antes	Uruguay
Dr. Maria Winkler	Chile
Dr. Rudi O. Gutierrez	Guatemala
Dr. Jacinto Barrios	Paraguay
Dr. Euz Disla	Dominican Republic
Dr. Jose Posada	El Salvador
Dr. Margarita Bolla	Paraguay

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APPENDIX B

INVENTORY OF BOX PACKED FOR DR. HELDT AND HAND CARRIED BY DR. KING:

1. Trial Lens Case
2. Atlas of Ophthalmology
3. Welch Allen Ophthalmoscope and Finoff Transilluminator
4. CBG Award Placque
5. Zeiss Loupe
6. 21 dz assorted Ethicon Ophthalmic sutures
7. Selection of instruments per attached list

41'

## INSTRUMENTS

- 6 Graefe Cataract Knives - new
- 4 Cataract Knives Graefe Kirby - new
- 1 Angulated Spatula Iris Kirby
- 2 Forceps Iris Graefe 1x2 Teeth
- 1 Utility Forceps Bondgalto Medium
- 1 Forceps Suturing Castroviejo 0.5 mm Teeth
- 1 Hook-Muscle Von Graefe
- 1 Knife Needle Ziegler 6m
- 1 Forceps Suturing Manhattan
- 1 Knife Ziegler 6m
- 1 Hook Iris Blunt
- 1 Keratome-Jaeger HO - 8m x 9 1/2m - new
- 1 Keratome-Jaeger HT - 9 1/2 - new
- 1 Scissors Iris Curved Light
- 1 Scissors-Corneal Section McGuire
- 1 Scissors-Corneal Aebli Straight
- 1 Hook Tenotomy Stevens Pilling
- 1 Capsule Forceps Terson
- 1 Forceps Ptosis Berke
- 1 Scissors Tenotomy Stevens Curved
- 1 Lid Plate Jaeger
- 1 Needle Holder Castroviejo - Heavy Jaws
- 1 Speculum Maumane-Park
- 1 Needle Holder Green 9.5cm - straight jaws
- 1 Scissors Strabismus - strong curve
- 1 Scissors Iridectomy/Iridotomy - Castroviejo

- 112'

1 Forceps Capsule - Maumanee  
1 Forceps Tying McCullough - Smooth Jaws  
1 Scissors Iridectomy/Iridotomy - Castroviejo  
1 Lid Clamps - Castroviejo  
1 Forceps Fixation - Lester 2 x 3 Teeth  
1 Scissors Tenotomy - Stevens  
2 Forceps Iris Gill - Teeth Down  
1 Capsule Forceps - Verhoeff  
2 Cautery - Wadsworth-Todd  
1 Forceps Capsule - Arruga  
1 Dilator Lachrymal - Ziegler - Double Ended  
1 Scissors Iridectomy/Iridotomy - Castroviejo  
1 Retractor Globe - Arruga  
1 Forceps Fixation - Graefe - With Lock  
2 Trephine Chalazion - Searcy - 2mm - Dull  
1 Hook Muscle - Kirby - Double Ended - 9mm  
1 Forceps Utility - McCullough - Cross-Separated  
1 Forceps Harms with Tying Platform  
1 Enucleation Scissors  
1 Speculum - Knapp - Non-Magnetic  
1 Scissors Iris - Straight  
1 Serrefine - Diffenbach - Large  
1 Cautery - Wills Eye Hospital  
6 Graefe Cataract Knives - New  
3 Larymal Probes  
5 Assorted Lacrymal Dilators  
5 Assorted Serrefines  
1 Lid Retractor  
2 Sable Brushes

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## APPENDIX C

FROM: Larry Schwab, M.D., Ophthalmologist, Q.E.C.H.  
TO: The Senior Medical Superintendent, Q.E.C.H.  
SUBJECT: Job Description

As requested, I am submitted a job description for the post which I now hold at Q.E.C.H.

### I. GENERAL

As a Malawian civil servant, I am seconded by the International Eye Foundation of the U.S.A. to the Malawi Ministry of Health. My salary and international transportation are provided by the International Eye Foundation, as an ophthalmologist for the Malawi Blindness Prevention and Training Project.

### II. RESPONSIBILITIES

#### A. Local

1. Responsible for all medical and surgical eye care at Queen Elizabeth Central Hospital.
2. Serve as ophthalmic consultant for specialty and general medical staff, and all non-physician ophthalmic personnel at Q.E.C.H.
3. Teach basic eye care to all general clinical officer students.
4. To research the problem of Zerophthalmia-keratomalacia and measles blindness in children admitted to Q.E.C.H. As such, I will be collaborating with the International Center for Preventive and Epidemiologic Ophthalmology.

#### B. Regional

1. Serve as coordinator and supervisor for all ophthalmic activities in Malawi's Southern Region.
2. Provide ongoing support for the six ophthalmic medical assistants and clinical officers working at the district level in the Southern Region by monthly visits for consultation clinics and surgery to hospitals at Zomba, Mangochi, Ngabu, Nsanje, Thyolo and Mulanje.
3. Supervision of two mobile eye units in Mangochi and Ngabu, and one mobile eye unit for the Southern Region funded by the Royal Commonwealth Society for the Blind.
4. Plan, develop, and implement, together with Dr. Tizazu, ophthalmologist of the International Eye Foundation posted to Kamuzu Central Hospital in Lilongwe, and WHO, the International Center for Preventive and Epidemiologic

Ophthalmology, the International Eye Foundatin, and Helen Keller International, a major survey on the causes of blindness, especially nutritional blindness, in the Lower Shire Valley from September-November, 1983.

5. Plan and coordinate periodic ophthalmic seminars for the Southern Region.

C. National

1. Serve as lecturer and teacher in the newly established International Ophthalmic Training Center in Lilongwe. (The first calss of twenty students from five southern African countries is presently in Lilongwe and the course will open April 25. Ten of the students will come to Q.E.C.H. for training).
2. Serve as a member of the Prevention of Blindness Committee for Malawi, when established.
3. Serve as ophthalmic advisor for the Southern Region to the Senior Medical Officer in the Ministry of Health for Malawi.

D. International

1. Serve as consultant for the International Eye Foundation and other agencies working in the field of blindness prevention; consultant work to be in other countries of southern Africa and Saudi Arabia.

APPENDIX D

Lower Shire Blindness Survey

"Definitions of Terms"

## "Definitions of Terms"

### Village Data Form (Shire Form 1)

<u>Item Number</u>	<u>Term</u>	<u>Definition</u>
1	District	As defined in the Malawi Population Census 1977.
2	Traditional Area	As defined in the Malawi Population Census 1977.
3	Village/Place	As defined in the Malawi Population Census 1977.
4	Trading Center	Place of major weekly market and/or place where buying and selling of foods, clothes, household goods, etc. takes place on a routine basis.
	ADMARK Market	Agricultural Development and Marketing Corporation commercial outlet.
4.c.	Enterprises	A commercial activity in which goods and/or services are sold for money (e.g., cigarette making, production of household implements, clothing or other textile manufacture, etc.)
6	Principal House-wall Construction	Material with which more than 50% of the house-walls are constructed in the village.
8	Health Care Center	A permanent facility in which health care is provided through the government system.
9	Traditional Medicines	
11	Households	"Household" comprises those individuals living within the same compound who share a common cooking pot at the fire each day.

11

Household Data Form (Shire Form 2)

<u>Number</u>	<u>Term</u>	<u>Definition</u>
1	Households	"Household" comprises those individuals living within the same compound who share a common cooking pot at the fire each day.
	Head of Household	Adult member of the household who, during the past year, has provided more than 50% of the support (including money and/or food) for the members of the household. The head of household does not necessarily have to be living on the compound at the time of the survey.
1.a.	Principal Occupation	Occupation of the head of household which comprises the major source of support, either in monetary or bartering terms, with a total household.
6	Hut	A household structure which boards one or more members of the household (does not include sheds strictly used for animals).
8	Latrine	An improved (e.g., with a squat plate) or unimproved (e.g., a dugout pit) facility with basic wall construction around its parameter.

Child History Form (Shire Form 3)

<u>Number</u>	<u>Term</u>	<u>Definition</u>
3	Mother/Mother Substitute	This person is always the biological mother of this child if the mother is alive and has lived in the household at some time during the past month. If the biologic mother is dead or has not lived in the household during the past month, the mother substitute is the adult woman in the household who is responsible for the child's care.
7.a.	Diarrhea	Four or more loose, watery stools per 24 hour period.
7.b.	Fever	A rise in body temperature above normal.
7.c.	Cough	A persistent cough accompanied by mucous production.



8. Distance to the nearest health care center:

- 1 km . . . . . ( 1 )
- 1-4 km . . . . . ( 2 )
- 4 km . . . . . ( 3 )

9. What traditional medicines are typically used to treat eye disease?

- \_\_\_\_\_ . . . . . ( 1 )
- \_\_\_\_\_ . . . . . ( 2 )
- Other (specify) \_\_\_\_\_ ( 3 )
- None/don't know . . . . . ( 4 )

10. What is the major constraint to growing vegetable gardens within the growing season?

- Poor soil . . . . . ( 1 )
- Animals would eat . . . . . ( 2 )
- \_\_\_\_\_ . . . . . ( 3 )
- Other (specify) \_\_\_\_\_ ( 4 )
- \_\_\_\_\_

11. Approximate number of households in this village.

\_\_\_\_\_

12. Distance to Shire River . . . . . km

13. Elevation of village. . . . . m

14. Person completing this form:

- a. Name: \_\_\_\_\_
- b. Code: . . . . .
- c. Team: . . . . .

15. Date form completed: \_\_\_ - \_\_\_ - \_\_\_  
                                  Day   Month   Year

Village Code: \_\_\_ - \_\_\_ - \_\_\_ - \_\_\_



5. Where are young children in the household usually bathed?
- At the borehole . . . . . ( 1 )
- At the river. . . . . ( 2 )
- At home/compound. . . . . ( 3 )

6. Total number of huts on the household compound. . . . . \_\_\_

7. Is there a latrine on the compound?  
 . . . . . (1 ) ( 2 )  
   Yes    No

7.A. Is it used by most household members?  
 . . . . . ( 1 ) ( 2 )  
   Yes    No

8. Are flies present on the faces of any household member during the interview?  
 . . . . . (1 ) ( 2 )  
   Yes    No

9. Types of animals owned by household:

- |                      |       |       |
|----------------------|-------|-------|
|                      | Yes   | No    |
| a. Cows. . . . .     | (1 )  | ( 2 ) |
| b. Goats. . . . .    | ( 1 ) | ( 2 ) |
| c. Pigs. . . . .     | (1 )  | ( 2 ) |
| d. Chickens. . . . . | (1 )  | ( 2 ) |

If YES,

10.A. How are foods dried?  
 Direct sunlight. . . ( 1 )  
 Indirect sunlight. . ( 2 )

10.B. What kinds of foods are dried?    10.C. Are any on hand today?

a. Fruits	( 1 )	( 2 )	( 1 )	( 2 )
b. DGLV	( 1 )	( 2 )	( 1 )	( 2 )
c. Other	( 1 )	( 2 )	( 1 )	( 2 )

10. Does the household dry any vegetables or fruits for consumption later during the year?  
 . . . . . (1 ) ( 2 )  
   Yes    No

11. Has any member of the household been treated for eye disease at a health facility during the past year?  
 . . . . . (1 ) ( 2 )  
   Yes    No

Village Code: \_\_\_ - \_\_\_ - \_\_\_ - \_\_\_ - \_\_\_

Household Code: \_\_\_ - \_\_\_ - \_\_\_

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12. List the names of all members of the household and their sex, age, and education status (start with head of household, then mother/mother substitute).

ID No.	Name	Sex		Age Year	Ever in school	
		Male	Female		Yes	No
01	_____	( 1 )	( 2 )	___	( 1 )	( 2 )
02	_____	( 1 )	( 2 )	___	( 1 )	( 2 )
03	_____	( 1 )	( 2 )	___	( 1 )	( 2 )
04	_____	( 1 )	( 2 )	___	( 1 )	( 2 )
05	_____	( 1 )	( 2 )	___	( 1 )	( 2 )

ID. No.	Name	Sex		Age Year	Ever in School	
		Male	Female		Yes	No
06	_____	( 1 )	( 2 )	___	( 1 )	( 2 )
07	_____	( 1 )	( 2 )	___	( 1 )	( 2 )
08	_____	( 1 )	( 2 )	___	( 1 )	( 2 )
09	_____	( 1 )	( 2 )	___	( 1 )	( 2 )
10	_____	( 1 )	( 2 )	___	( 1 )	( 2 )
11	_____	( 1 )	( 2 )	___	( 1 )	( 2 )
12	_____	( 1 )	( 2 )	___	( 1 )	( 2 )
13	_____	( 1 )	( 2 )	___	( 1 )	( 2 )
14	_____	( 1 )	( 2 )	___	( 1 )	( 2 )
15	_____	( 1 )	( 2 )	___	( 1 )	( 2 )

14. Person completing this form:

- a. Name: \_\_\_\_\_
- b. Code: . . . . . \_\_\_\_\_
- c. Team: . . . . . \_\_\_\_\_

15. Date form completed: \_\_\_ - \_\_\_ - \_\_\_  
                                   Day   Month   Year

Village Code: _____
Household Code: _____

54'

10. How many other children sleep with this child?

.....

11. How does child clean his nose?

Clothes of mother. . . . .(1 )

Clothes of child . . . . .(2 )

Other rag/handkerchief . . . . .(3 )

Into air/hand. . . . .(4 )

12. Person completing this form:

a. Name: \_\_\_\_\_

b. Code: . . . . .

c. Team: . . . . .

13. Date form completed: \_\_\_\_ - \_\_\_\_ - \_\_\_\_  
                                  Day    Month    Year

Village Code: ____ - ____ - ____ - ____
Household Code: ____ - ____ - ____
Child Code: ____ - ____

For data entry use only  
0  
V

CHILD HISTORY FORM

Village Code: \_ \_ \_ \_ \_  
Household Code: \_ \_ \_ \_  
Child Code: \_ \_

1. Child's name:  
.....

2. Name of head of household:  
.....

3. Child's Mother/Mother Substitute:  
a. Name: \_\_\_\_\_  
b. Code: \_\_\_\_\_

4. Child's age: ..... months

5. Age verified by (check highest ranked source):  
Birth/Baptismal certificate ..... (1 )  
Under 5 card. .... (2 )  
Events calendar ..... (3 )  
Other (specify) \_\_\_\_\_ (4 )  
Not verified. .... (5 )

6. Person providing child's history:  
Parent/step parent. .... (1 )  
Grandparent ..... (2 )  
Some other adult. .... (3 )

7. During the past 7 days, has this child had:  
Yes No  
a. Diarrhea ..... (1 ) (2 )  
b. Fever. .... (1 ) (2 )  
c. Cough. .... (1 ) (2 )

If YES,  
7.A. How long did it last?  
    <7 days >7 days  
a. Diarrhea  
    ≥ 4 day . . . (1 ) (2 )  
b. Fever. . . . (1 ) (2 )  
c. Cough. . . . (1 ) (2 )

8. Has this child ever had measles?  
..... (1 ) (2 )  
Yes No

If YES,  
8.A. How long ago did the child have the rash?  
    < 1 week. . . . . (1 )  
    1-3 weeks . . . . . (2 )  
    1-12 months . . . . . (3 )  
    > 12 months . . . . . (4 )

9. Does this child have any difficulty moving around the house at night compared to other children of the same age?  
..... (1 ) (2 )  
Yes No

For data en-  
try use only

OCULAR AND PHYSICAL  
EXAMINATION FORM

Village Code: \_ \_ \_ \_ \_  
Household Code: \_ \_ \_  
Person Code: \_ \_

1. Subject identification

a. Name: \_ \_ \_ \_ \_  
b. Age: . . . . . \_ \_ years

2. Name of head of household:

. . . . . \_ \_ \_ \_ \_

3. If child, mother's name:

. . . . . \_ \_ \_ \_ \_

4. Measles rash? . . . . . (1 ) (2 )  
Yes No

5. Pedal edema? . . . . . (1 ) (2 )  
Yes No

6. Goitre?

Stage 0 . . . . . (1 )  
Stage 1 (a or b) . . . . . (2 )  
Stage 2 . . . . . (3 )  
Stage 3 . . . . . (4 )

7. Visual Acuity (Best corrected vision) 6 yrs. and older

	RIGHT EYE	LEFT EYE
6/18 or better . . . . .	(1 )	(1 )
6/19 - 6/60 . . . . .	(2 )	(2 )
6/61 - 3/60 . . . . .	(3 )	(3 )
3/61 - 1/60 . . . . .	(4 )	(4 )
1/61 - LP . . . . .	(5 )	(5 )
NLP . . . . .	(6 )	(6 )

8. Pinhole correction performed?

. . . . . (1 ) (2 )  
Yes No

8.A. Best PI:  
RE LE  
. . . . . \_ \_

9. Trachoma inflammation:

	RIGHT EYE	LEFT EYE
No papillae/no follicles . .	(1 )	(1 )
0-2 papillae/follicles 1-2 .	(2 )	(2 )
0-2 papillae/follicles 3 . .	(3 )	(3 )
3 papillae/follicles 1-3 . .	(4 )	(4 )

10. Trachoma, sequelae:

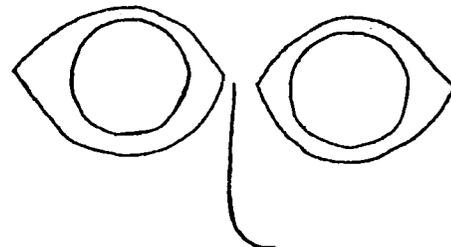
	RIGHT EYE	LEFT EYE
No scars/no trichiasis . . .	( 1 )	( 1 )
Scar no triachiasis. . . . .	( 2 )	( 2 )
Scars 2-3/no trichiasis. . .	( 3 )	( 3 )
Trichiasis . . . . .	( 4 )	( 4 )

11. Trachoma, lids:

Inturned lashes with or without inturned lid margin. ( 1 )	( 1 )
Notching or other deformity preventing gentle closure of lids . . . ( 2 )	( 2 )

Conjunctiva:

	RE		LE	
	Yes	No	Yes	No
12. Generalized inflammation. ( 1 ) ( 2 )	( 1 )	( 2 )	( 1 )	( 2 )
13. Purulent discharge. . . . . ( 1 ) ( 2 )	( 1 )	( 2 )	( 1 )	( 2 )
14. Vernal catarrh. . . . . ( 1 ) ( 2 )	( 1 )	( 2 )	( 1 )	( 2 )
15. Xerosis (XIA) . . . . . ( 1 ) ( 2 )	( 1 )	( 2 )	( 1 )	( 2 )
16. Bitot's spots (XIB)				
a. Temporal. . . . . ( 1 ) ( 2 )	( 1 )	( 2 )	( 1 )	( 2 )
b. Nasal . . . . . ( 1 ) ( 2 )	( 1 )	( 2 )	( 1 )	( 2 )



Cornea: Active (draw all lesions)

17. Pterygium . . . . . ( 1 ) ( 2 )	( 1 )	( 2 )
18. Keratitis (including dendritic). . . . . ( 1 ) ( 2 )	( 1 )	( 2 )
19. Xerosis (X2). . . . . ( 1 ) ( 2 )	( 1 )	( 2 )
20. Ulcers, necrosis, fresh descemetocele or perfora- tions . . . . . ( 1 ) ( 2 )	( 1 )	( 2 )

20.A. Number of lesions:

	RE	LE
.....	—	—

20.B. Area involved:

≤ 1/3 cornea . . ( 1 ) ( 2 )

> 1/3 cornea . . ( 1 ) ( 2 )

Village Code: \_ \_ \_ \_ \_

Household Code: \_ \_ \_ \_

Person Code: \_ \_

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21. Cornea: Scars (draw all scars)

	<u>RE</u>		<u>LE</u>	
	Yes	No	Yes	No
a. Maculae/nebulae . . .	(1 )	(2 )	(1 )	(2 )
b. Leukoma . . . . .	(1 )	(2 )	(1 )	(2 )
c. Advanced leukoma . . .	(1 )	(2 )	(1 )	(2 )
d. Staphyloma . . . . .	(1 )	(2 )	(1 )	(2 )
e. Phtisis bulbi . . . . .	(1 )	(2 )	(1 )	(2 )
f. Absent globe . . . . .	(1 )	(2 )	(1 )	(2 )

22. Uveitis

a. active . . . . .	(1 )	(2 )	(1 )	(2 )
b. sequelae . . . . .	(1 )	(2 )	(1 )	(2 )

23. Lens exam indicated?

..... (1 ) (2 )  
 Yes No

24. Macula/Retina exam indicated?

..... (1 ) (2 )  
 Yes No

25. Optic Nerve exam indicated?

..... (1 ) (2 )  
 Yes No

21.A. Age scarring or loss of eye occurrence:

	<u>RE</u>	<u>LE</u>
< 1 month . . . . .	(1 )	(2 )
1-11.9 months . . . . .	(1 )	(2 )
1-2.9 years . . . . .	(1 )	(2 )
3-4.9 years . . . . .	(1 )	(2 )
≥ 5 years . . . . .	(1 )	(2 )
Unknown . . . . .	(1 )	(2 )

21.B. Events 4 weeks prior to eye changes:

	<u>RE</u>			<u>LE</u>		
	Yes	No	Unk.	Yes	No	Unk.
a. Trauma . . . . .	(1 )	(2 )	(3 )	(1 )	(2 )	(3 )
b. Measles . . . . .	(1 )	(2 )	(3 )	(1 )	(2 )	(3 )
c. Infection (eye) . . . . .	(1 )	(2 )	(3 )	(1 )	(2 )	(3 )
d. Severe PEM . . . . .	(1 )	(2 )	(3 )	(1 )	(2 )	(3 )
e. Diarrhea . . . . .	(1 )	(2 )	(3 )	(1 )	(2 )	(3 )
f. Fever . . . . .	(1 )	(2 )	(3 )	(1 )	(2 )	(3 )
g. Worms . . . . .	(1 )	(2 )	(3 )	(1 )	(2 )	(3 )
h. Night blind . . . . .	(1 )	(2 )	(3 )	(1 )	(2 )	(3 )
i. Treated with local eye medicines . . . . .	(1 )	(2 )	(3 )	(1 )	(2 )	(3 )
j. Treated at Health Center . . . . .	(1 )	(2 )	(3 )	(1 )	(2 )	(3 )

23.A. Findings:

	<u>RE</u>	<u>LE</u>
Normal . . . . .	(1 )	(1 )
Cataract, immature . . . . .	(2 )	(2 )
Cataract, mature . . . . .	(3 )	(3 )
Aphakia . . . . .	(4 )	(4 )
After-cataract . . . . .	(5 )	(5 )
Other (specify) . . . . .	(6 )	(6 )
Unknown . . . . .	(7 )	(7 )

24.A. Findings:

	<u>RE</u>	<u>LE</u>
Normal . . . . .	(1 )	(1 )
Macular degeneration . . . . .	(2 )	(2 )
Other (specify) . . . . .	(3 )	(3 )
Unknown . . . . .	(4 )	(4 )

25.A. Findings:

	<u>RE</u>	<u>LE</u>
Normal . . . . .	(1 )	(1 )
Glaucomatous cupping . . . . .	(2 )	(2 )
Non-glaucomatous atrophy . . . . .	(3 )	(3 )
Unknown . . . . .	(4 )	(4 )

Village Code: \_ \_ \_ \_ \_  
 Household Code: \_ \_ \_  
 Person Code: \_ \_





6. During this season of the year, how frequently does this child usually eat:

Food	Daily	1-6x/ Week	1-3x/ Month	1x/ Month	Never
a. Ground nuts. . . .	(1 )	(2 )	(3 )	(4 )	(5 )
b. Fresh DGLV . . . .	(1 )	(2 )	(3 )	(4 )	(5 )
c. Dried DGLV . . . .	(1 )	(2 )	(3 )	(4 )	(5 )
d. Fish, small-fresh	(1 )	(2 )	(3 )	(4 )	(5 )
e. Fish, small-dried	(1 )	(2 )	(3 )	(4 )	(5 )
f. Eggs . . . . .	(1 )	(2 )	(3 )	(4 )	(5 )
g. Mango/pawpaw . . .	(1 )	(2 )	(3 )	(4 )	(5 )

G.A. If NEVER EATEN, then why?

	Not available	Child dislikes	Child too young
a.	(1 )	(2 )	(3 )
b.	(1 )	(2 )	(3 )
c.	(1 )	(2 )	(3 )
d.	(1 )	(2 )	(3 )
e.	(1 )	(2 )	(3 )
f.	(1 )	(2 )	(3 )

7. Where does this child usually spend the day when the mother/mother substitute is away from the house?

- With mother/mother substitute . (1 )
- At house compound . . . . . (2 )
- Neighbor's house. . . . . (3 )
- Other . . . . . (4 )

PART III. Household questions

8. During this season of the year, how often does the household usually buy:

Item	> 1x/week	1-3x/month	<1x/month	Never
a. Sugar	(1 )	(2 )	(3 )	(4 )
b. Salt (c)	(1 )	(2 )	(3 )	(4 )
c. Veg. Oil	(1 )	(2 )	(3 )	(4 )
d. Maize flour	(1 )	(2 )	(3 )	(4 )
e.	(1 )	(2 )	(3 )	(4 )

Village Code: \_ \_ \_ \_ \_  
Household Code: \_ \_ \_ \_  
Child Code: \_ \_



11. Who is providing this information?

a. Name: \_\_\_\_\_

b. Code: . . . . . \_\_\_\_\_

c. Relationship to this child:

Mother/father. . . . . ( 1 )

Grandparent. . . . . ( 2 )

Other adult. . . . . ( 3 )

12. Person completing this form:

a. Name: \_\_\_\_\_

b. Code: . . . . . \_\_\_\_\_

c. Team: . . . . . \_\_\_\_\_

13. Date form completed: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_  
Day Month Year

Village Code: _____
Household Code: _____
Child Code: _____



May 4, 1983

JOHN R. BABSON APPOINTED PRESIDENT AND EXECUTIVE DIRECTOR OF THE  
INTERNATIONAL EYE FOUNDATION

The appointment of John R. Babson as President and Executive Director of the International Eye Foundation, Bethesda, MD, was announced by Mr. George M. Bunker, Chairman of the 21-year-old agency.

In his new position, Mr. Babson will be responsible for the overall guidance of current programmatic activities, as well as developing new avenues of assistance in which the IEF will become involved. Of primary importance will be his duties in the area of eliciting corporate interest and support in the area of blindness prevention worldwide.

Mr. Babson was a Corporate Vice President of Ingersoll-Rand Company, where he was responsible for all company activities relating to Federal state, and local government. He has been active in promoting international trade and in business communities both in the U.S. and abroad. He brings with him extensive experience in international matters, as well as in-depth knowledge of the inner workings of corporations.

Mr. Babson's philosophy concerning his role with the IEF is that he looks forward to applying sound business practices to a charitable organization in a way which will strengthen its development assistance capabilities, and which will further its goal of "The promotion of peace through the prevention and cure of worldwide blindness."

Mr. Babson is a member of the Congressional Country Club, the International Club, The University Club, The Greenwich Country Club, The Capitol Club, the 1925 F Street Club, and Burning Tree Country Club.

the  
International  
Eye Foundation

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Matching Grant PDC-0174-G-55-1102-00  
 Work Sheet - Bethesda Expenses  
 FY-84

		USAID	IEF	TOTAL	
1	Salaries + Fringe Benefits	11618	29624	41242	1
2	Temporary Help	-0-	2500	2500	2
3	Consultants	7398	4800	12198	3
4	Professional Fees	-0-	2500	2500	4
5					5
6	Stipends and Fellowships	-0-	5000	5000	6
7	Book, Pubs, Dues + Reg. Fees	-0-	5000	5000	7
8	Duplicating, Printing	-0-	5000	5000	8
9	Travel, Per Diem + Meetings	9365	23450	32815	9
10					10
11	Telephone + Telegraph	2500	2500	5000	11
12	Shipping	1500	1500	3000	12
13	Postage	1000	1000	2000	13
14	Miscellaneous	-0-	3000	3000	14
15					15
16	Medical Supplies + Equipment	-0-	19876	19876	16
17					17
18					18
19	Sub-Total	33381	105750	139131	19
20					20
21	G + A (19%)	57000	57000	114000	21
22					22
23	TOTAL	90381	162750	253131	23
24					24
25					25
26					26
27					27
28					28
29					29
30					30
31					31
32					32
33					33
34					34
35					35
36					36
37					37
38					38
39					39
40					40

APPENDIX G

KENYA OPHTHALMIC PROGRAMME-

FIVE YEAR DEVELOPMENT PLAN

1982 -- 1987

TABLE OF CONTENTS

- A. Confirmation of Approval of the Draft Five Year Plan for the period 1982 to 1987.
- B. Kenya Ophthalmic Programme - Five Year Development Plan, 1982 - 1987
- C. Policy Implementation Documents
  - I. Proposed Constitution, Prevention of Blindness Committee  
REF: PBC/PID/I82
  - II. Guidelines for Development of Eye Care in Rural Kenya  
REF: PBC/PID/II82
  - III. Blindness Prevention Education  
REF: PBC/PID/III82
  - IV. Instructions on the Administrative Control of MEUs  
REF: PBC/PID/IV83
  - V. Drug Supply REF: PBC/PID/V83

A.

CONFIRMATION OF APPROVAL OF THE DRAFT FIVE YEAR PLAN

FOR THE PERIOD 1982 TO 1987

Telegrams: "MINIHEALTH" Nairobi  
Telephone: Nairobi 27381  
When replying, please quote  
Ref. No. KOP/JJT/53  
.....

AFYA HOUSE  
CATHEDRAL ROAD  
P.O. Box 30016, Nairobi

14 October, 1982

Mr. J.M.N. Moss,  
Executive Officer,  
Kenya Society of the Blind,  
P.O. Box 46656  
NAIROBI

Dear Mr. Moss,

RE: KENYA OPHTHALMIC PROGRAMME-  
FIVE YEAR DEVELOPMENT PLAN 1982 - 1987

The five year draft plan was discussed in detail with the Permanent Secretary and the Director of Medical Services. The plan is now approved and accepted and it is requested you should now proceed and inform members of the reconstituted committee to attend the final meeting of the National Prevention of Blindness committee in the Committee Room of the Afya House, Ministry of Health on the 18th of November, 1982 at 9.00 a.m.

The National Prevention of Blindness committee members are as follows:

Government:

SDDMS(C) Curative  
SDDMS (Training)  
Chief Ophthalmic Surgeon  
Principal Finance and Establishment Officer  
Chief Pharmacist  
Officer-in-Charge - Central Medical Stores  
The Dean - Faculty of Medicine

Non-Government Organizations:

Kenya Society of the Blind  
International Eye Foundation  
A.M.R.E.F.  
Royal Commonwealth Society of the Blind  
Sight by Wings  
Christofel Blinden Mission  
Lions Clubs of Kenya

...../2

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The Agenda for the final meeting is as follows:

1. Introductions of new members of the committee
2. Introductions of the Five year Development plan  
1982 - 1987 and its implementation
3. Any other Business

(signed)

DR. J.J. THUKU  
CHAIRMAN  
NATIONAL PREVENTION OF  
BLINDNESS COMMITTEE

B.

KENYA OPHTHALMIC PROGRAMME

FIVE YEAR DEVELOPMENT PLAN

1982 -- 1987

P.S.  
D.M.S.

RE: KENYA OPHTHALMIC PROGRAMME -  
FIVE YEAR DEVELOPMENT PLAN 1982 - 1987

We propose to extend the Rural Blindness Prevention Programme to all the District Hospitals of Kenya during the next five years.

As at present, the following District Hospitals are covered at Provincial Centre by an Eye Surgeon and at District hospital by a Clinical Officer (Ophthalmic).

1. Central Province

Nyeri  
Kiambu  
Kirinyaga  
Thika and  
Murang'a

We propose to extend this to Nyandarua and Ol Kalou Districts during the coming 5 years.

2. Coast Province

The following District Hospitals are covered, that is, Mombasa, Kilifi and Voi. We propose to cover the remaining Districts, that is, Hola, Malindi, Taita Taveta, Msambweni, Kwale, and Lamu.

3. Eastern Province

Machakos, Embu, Kitui, and Meru are currently covered. We propose to extend the coverage to the remaining hospitals within the Province, that is, Kangundo, Makueni, Marsabit, Chuka and Isiolo.

4. North Eastern Province

At present Garissa and Wajir are covered. We propose to extend coverage to Mandera.

5. Nyanza Province

All hospitals in this Province are covered.

6. Rift Valley Province

The following hospitals are covered, that is,

Nakuru  
Kabarnet  
Kajiado  
Kericho  
Narok  
Lodwar  
Eldoret  
Kapenguria  
Loitokitok

We propose to cover the remaining hospitals, that is, Molo, Naivasha, Nanyuki, Kapsabet, Nandi Hills, Londiani, Maralal, and Tambach.

7. Western Province - All hospitals are covered.

We propose to do this by: --

1. Training

We propose to train 4 to 5 District Eye Surgeons and 10 Clinical Officers every year over the next five years. The idea is to have a District Eye Surgeon and a Clinical Officer manning the static Clinic at the District Hospital and a Clinical Officer doing the mobile Eye Unit under the supervision of the District Eye Surgeon.

2. Mobile Eye Services

At present there are 12 mobile Eye Units. We propose increasing this number to 30. To be able to do this we hope to get assistance for this from A.M.R.E.F., Professor Weve Foundation and Operation Eyesight Universal. It is hoped that they will meet the cost for purchase and maintenance of these vehicles during this period through the Kenya Society for the Blind. We hope the Government will waive import duties for the importation of these vehicles.

3. Standardization of Equipment and Drugs

These have already been worked out for the Eye Surgeons and Clinical Officers. We shall need 4 to 5 sets of these equipments every year at the cost of about 6,000 pounds each.

4. Central Control and Organisation

(National Prevention of Blindness Committee)

The national policy, its goal and strategies must remain with the Ministry of Health through the National Prevention of Blindness Committee. This responsibility has been given to me to be the Chairman of this Committee. The composition of this National Prevention of Blindness Committee should be: -

..../3

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Government

SDDMS (C) - Chairman  
SDDMS (Training) -  
Chief Ophthalmic Surgeon  
Principal Finance & Establishment Officer  
Chief Pharmacist  
Officer in Charge - Central Medical Stores.

Non-Government Organisations

Kenya Society for the Blind  
International Eye Foundation  
A.M.R.E.F.  
Sight by Wings  
Professor Weve Foundation

This is submitted for your consideration. I intend calling the first meeting of the Committee before I proceed on my annual leave.

Your early comments and directive will be appreciated.

(Dr. J.J. Thuku)  
S.D.D.M.S. (C)

29 July, 1982

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C.I.

PROPOSED CONSTITUTION

PREVENTION OF BLINDNESS COMMITTEE

REF: PBC/PID/I82

PROPOSED CONSTITUTION

Prevention of Blindness Committee

1. The Prevention of Blindness Committee is a policy making executive organ of the Ministry of Health with regard to preventive and therapeutic eye services in Kenya. The terms of reference shall be:
  - a) to determine the causes, prevalence, incidence, and distribution of blindness and eye disease in Kenya;
  - b) to establish priorities, plan and supervise the implementation of cost-effective programmes for the prevention and cure of blindness and eye diseases;
  - c) to allocate, within the context of available resources, static and mobile facilities, manpower, and equipment;
  - d) to effect constructive co-operation between the Government and voluntary sectors and to mobilise resources within and outside Kenya;
  - e) to undertake such other activities as the Committee may from time-to-time deem appropriate.
  
2. Membership
  - a) The Committee shall have the following members:
    - i) The Senior Deputy Director of Medical Services in charge of Ophthalmic Programmes --- CHAIRMAN
    - ii) The Senior Deputy Director of Medical Services (Training) or his representative
    - iii) The Chief Ophthalmic Surgeon or his representative
    - iv) Principal Finance and Establishment Officer, Ministry of Health, or his representative
    - v) The Chief Pharmacist or his representative
    - vi) The Officer-in-Charge, Central Medical Stores, or his representative
    - vii) The Head of the Ophthalmic Programme, Faculty of Medicine, University of Nairobi, or his representative
    - viii) Executive Officer, Kenya Society for the Blind or his representative -- ACTING AS SECRETARY TO THE COMMITTEE
    - ix) A representative of the Lions Clubs of Kenya
    - x) Manager, Sight by Wings, or his representative
    - xi) A representative of the African Medical & Research Foundation
    - xii) Director, International Eye Foundation (Kenya) or his representative
    - xiii) Africa Representative, Christoffel Blindenmission, or his representative
    - xiv) East Africa Representative, Royal Commonwealth Society for the Blind, or his representative
    - xv) A representative of the Professor Weve Foundation.

xvi) A representative of the Netherlands Society for Prevention of Blindness Overseas.

b) The Committee shall co-opt non-voting members as required.

### 3. Meetings

- a) The Secretary shall call regular meetings of the Committee for the first Monday in March, June, September, and December and at any other time at the instruction of the Committee.
- b) The Secretary shall prepare the Order of Business and circulate this at least 14 days in advance of regular meetings, together with the Minutes of the previous regular meeting.
- c) Nine members present and voting, including the Chairman or his designate, shall constitute a quorum.
- d) With the exception of 4, below, the Committee shall determine its own procedures.

### 4. Amendments

Any amendment to the above must be approved by a two-thirds majority of the Committee.

C. II.

GUIDLINES FOR DEVELOPMENT OF EYE CARE IN RURAL KENYA

REF: PBC/PID/II82

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## GUIDELINES FOR DEVELOPMENT OF EYE CARE IN RURAL KENYA

Based on ocular status surveys carried out in rural Kenya by the Ministry of Health and the Kenya Rural Blindness Prevention Project, the following findings and recommendations have been made to the Kenya Government:

1. The prevalence of blindness among rural Kenyans is high, ranging from six to 16 times that found in the USA. Seventy five percent (75%) of this blindness is preventable or curable.
2. Cataract is the major cause of blindness, accounting for over 40 percent of all blindness. As the most important cause of blindness and visual loss, cataract should become a major target for therapeutic action by the Ministry of Health. To eliminate the large backlog of those blind from cataract, three major actions should be taken:
  - a. Increase the number of Ophthalmic Clinical Officers so that many can be trained to perform cataract surgery;
  - b. Train enough ophthalmologists so that all of the Provincial Hospitals, and the larger District Hospitals will have their own eye surgeons who can train and supervise the Ophthalmic Clinical Officers in their work; and
  - c. Increase the number of beds available for eye patients.
3. Trachoma is the second most important cause of blindness, accounting for 16 percent of all blindness. As trachoma is preventable and is restricted to specific areas in rural Kenya, energetic and well-directed activities should be instituted by the Ministry of Health to address this problem. Three activities are recommended to be carried out by the Ministry of Health in those areas with a high prevalence of trachoma:
  - a. educational programmes for the people stressing the importance of personal and community hygiene and early seeking of medical care, in the prevention of blindness from trachoma;
  - b. effective therapeutic services must be made available to those at risk of blindness from trachoma, and these services must include:
    - i. general health workers trained to recognize and treat active cases of trachoma and to refer those needing further care.
    - ii. an adequate supply of medicines effective against trachoma, eg. TETRACYCLINE OINTMENT.
  - c. development of screening programs among high risk groups to detect early disease and refer those needing treatment.

Those districts where there is a high prevalence of trachoma include: northern Meru, Machakos, Kitui, Marsabit, Isiolo, Samburu, Tana River, Narok, Kajiado, Baringo, West Pokot,

Elgeyo Marakwet, Laikipia, Nakuru, Turkana, Garissa, Mandera, and Wajir.

The above areas have the highest rates of blindness in the country because the blindness from trachoma is an added burden to the already high prevalence of blindness from cataract.

When deploying limited resources, hard decisions must be made regarding the assignment of trained personnel to areas where there is a small population living in a large land area, who have a high prevalence of avoidable blindness. Although these areas are usually the most underserved, it remains a fact that the total number of curable blind is much smaller than the number of those similarly afflicted in highly populated (often much more accessible) areas which have a lower prevalence of avoidable blindness. Thus, cost-effectiveness must be balanced against humanitarian values.

In Kenya, there are two provinces which, although densely populated, are markedly underserved in terms of availability of eye care: Nyanza and Western.

The greatest need in Kenya today is not for more mobile eye units, but for competent ophthalmologists at the larger District Hospitals, and Ophthalmic Clinical Officers at those hospitals where there is now no static clinic.

With the remarkable improvement in transport and communications throughout much of rural Kenya, and the more recent dramatic increase in costs of vehicles and their upkeep, Mobile Eye Units have become a less reasonable method to deliver eye care to the rural population. In these areas, static eye clinics promise to be a much more cost-effective way to approach the problem.

It appears that static clinics, run by Ophthalmic Clinical Officers and visited regularly by Ophthalmologists stationed nearby will be the

most effective approach for the future. Certainly, the use of mobile units is a waste of limited resources when it is possible to do without them. However, there are areas of Eastern, North Eastern, Rift Valley, and Coast Provinces which are sparsely populated and difficult to reach which will probably continue to be in need of mobile services for the foreseeable future.

Ophthalmologists are needed at Bungoma, Busia, Homa Bay, Kisii, Kitui, Embu, Murang'a, Siaya, and a few others. Ophthalmic Clinical Officers are badly needed in Nandi, Elgeyo Marakwet, Trans Nzoia, Isiolo, Samburu, Kwale, and Nyandarua. In terms of the possible, Ophthalmic Clinical Officers will most probably be available long before ophthalmologists.

A most important fact to be kept in mind is that Ophthalmic Clinical Officers are of very little real value if they are not adequately supervised by ophthalmologists. Thus, it does little good to expand rapidly with paramedical eye workers if there is no adequate supervision for them. This is especially true in the case of Mobile Eye Units.

A final and most serious need in the development of eye care in Kenya is for a constant supply of appropriate, effective, inexpensive ophthalmic drugs. Lack of drugs has been a major constraint to the development of a rural ophthalmic program for many years. Cheap, harmless, and effective anti-infectives, such as sulfacetamide and tetracycline are typically not available, whereas expensive and potentially blinding steroid combinations such as dexamethasone/sotramycin, and tetracycline/hydrocortisone are often available, even at the dispensary level. Sulfacetamide drops should be available at all levels throughout rural Kenya; tetracycline, wherever trachoma is a problem. Steroid combinations should only be available where eye specialists are working.

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C.III.

BLINDNESS PREVENTION EDUCATION

REF: PBC/PID/III182

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## BLINDNESS PREVENTION EDUCATION

At present, there are three rural blindness prevention units engaged in regular prevention activities. These are in addition to the 14 Mobile Eye Units (MEUs). Among the activities undertaken are school screenings and lectures to school children and teaching sessions on primary eye care and blindness prevention for medical and para-medical staff at health centres and dispensaries. The former activity is now being phased out in favour of an increased emphasis on the latter.

Over the next five years, this shift in emphasis will be continued. In addition, the traditionally therapeutic MEUs will add activities with a preventive orientation, primarily through short training sessions for staff members at health centres/dispensaries where they hold clinics. All MEUs, including the current prevention units, will serve a dual therapeutic/preventive role.

Within the next year or so, one ophthalmologist will be sent to the United States to attend a post-graduate course in public health ophthalmology/epidemiology. Upon his return, he will lead a team responsible for blindness prevention education in the Ministry of Health.

Also, in 1983, an ophthalmic clinical officer will be sent to London, with sponsorship from the Royal Commonwealth Society for the Blind and WHO, to participate in a course on primary eye care and blindness prevention education (Community Eye Health) at the Institute of Ophthalmology. Upon her return to Kenya, this officer will serve as primary eye care/blindness prevention education officer, part of the team mentioned in the preceding paragraph. She will be responsible for encouraging the MEUs in their prevention activities and for organizing and conducting training sessions in primary eye care/blindness prevention for all cadres

of health workers within the ministry system. Initial financial and material support for these activities will come from the private (voluntary) sector. By the end of 1984, however, the Ministry of Health will have assumed responsibility for these activities.

Finally, a further ophthalmic clinical officer will be sent for training in Community Eye Health in 1984. The support for this training will be requested from the voluntary sector. This officer will, upon completion of training, work with the blindness prevention education team in the Ministry.

All of the above activities are seen to demonstrate the Ministry of Health's commitment to primary eye care and blindness prevention education as the key to development of effective therapeutic services. Without this emphasis on and commitment to primary eye care/blindness prevention education, the therapeutic services will not adequately meet the eye care needs of the rural population in the foreseeable future.

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C. IV.

INSTRUCTIONS ON THE ADMINISTRATIVE CONTROL OF MEUs

REF: PBC/PID/IV83

INSTRUCTIONS ON THE ADMINISTRATIVE CONTROL OF MEUs

1. Responsibility for the general supervision of Mobile Eye Units (MEUs) shall lie with the Provincial Eye Surgeons (PESs) in whose provinces MEUs are located unless such responsibility is delegated to a District Eye Surgeon (DES) or Medical Officer of Health (MOH) in writing by the PES with the approval of the Provincial Medical Officer (PMO) and the Kenya Society for the Blind (KSB). Persons responsible for the supervision of MEUs shall hereafter be referred to as the Officer Responsible (OR).
2. Each PES must submit immediately and subsequently every six months in writing to the PMO, the Prevention of Blindness Committee (PBC), and the KSB a list of each of the MEUs under his direct supervision and also a list of the ORs for the MEUs for which he is not the OR.
3. The OR, in consultation with the MEU clinical officer shall plan the work programme for each MEU, including fuel allocations, and submit this to the PMO, the PES (where the PES is not the OR), and the KSB for approval at least one month before the start of the programme. Work programmes shall take into account the efficient utilization of vehicles, population density variations within the MEU's field of operations, a rational division of fields of operation of MEUs working contiguously, and a balance between preventive/educative and therapeutic services.
4. No alteration to an approved work programme shall be made without the written consent of the OR, who shall copy such consent to the PMO, the PES (where the PES is not the OR), and the KSB.
5. The PBC shall, in line with its terms of reference, consider MEU work programmes and issue appropriate instructions where, in its view, MEUs are not being used to best advantage.

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6. The OR shall, from time to time, visit the MEUs and their COs and observe the field work of the units under his supervision.
7. Responsibility for the day-to-day execution of MEU activities as laid down in paragraph 3 (above) shall lie with the CO designated for this purpose by the OR in consultation with the PMO and the PES (where the PES is not the OR). Where more than one CO utilizes an MEU, one of them will be so designated.
8. The designated CO shall submit monthly to the OR (and the PES where they are not the same) a comprehensive report of the activities of his MEU with necessary supporting documentation, e.g., medical returns, schedule of preventive/educative activities, accounts, and receipts. The designated CO shall complete and sign the MEU log-book, to be countersigned by the OR, at least once per month.
9. On the basis of information received from the designated CO, the OR shall submit a comprehensive monthly report with full supporting documentation, of MEU activities to the KSB, with a copy of the report to the PMO and the PES (where the PES is not the OR).
10. MEU vehicle maintenance shall be carried out on a regularly scheduled basis. Repairs other than routine maintenance must be approved in advance by the KSB. Fuel Allocations for the vehicle, which will be made on the basis of work programme schedules, must not be exceeded without the prior approval of the KSB. The driver of the vehicle will be responsible for seeing that routine maintenance is carried out on schedule and fuel allocations are not exceeded.
11. The OR, or someone designated by the OR when the MEU is not located at the OR's main duty station, shall retain the key for the MEU and issue it as appropriate to the designated CO.

12. The MEU shall only be used for the provision of preventive/educative and therapeutic ophthalmic services and their administration except where the OR determines that an emergency situation has arisen which justifies its use for medical or humanitarian purposes. Where such a determination is made by the OR, only he (if he has a valid driver's license) or the authorized MEU driver may utilize the vehicle for such purposes. In such cases the KSB must be informed in writing with all details included, and copies sent to the PMO and the PES (where the PES is not the OR).
13. Where either the KSB or the PMO are dissatisfied with the operation of an MEU, each shall nominate a representative to carry out a joint on-the-spot investigation. The report of such an investigation shall be submitted to the PMO, the KSB, and the PBC.
14. With the exception of the emergency provision in paragraph 12 (above), each MEU will be driven only by an authorized driver who shall be a KSB employee. Of course, anyone driving the vehicle must have a valid driver's license. Any driver employed for this purpose by the KSB must first undergo the AA driving test and be passed as proficient before final appointment. Drivers will have the following responsibilities:
  - a. To drive in a safe and sensible manner;
  - b. To notify the OR through the designated CO in advance of the MEU's requirements with regard to insurance, licensing, and routine maintenance;
  - c. To check regularly the amount of fuel, oil, water, condition of the battery, tyre pressure, and to keep the vehicle in a clean and orderly condition.
15. When not being utilized for purposes set out in the work programme as in paragraph 3 (above), the vehicle shall remain in the hospital compound unless the OR has otherwise directed. In any case, the vehicle shall under no circumstances be used for private purposes, either by the driver, the designated CO, or the OR, and shall not be used for

the transportation of any goods not directly connected with the work programme. With the approval of the Ok, the MEU may transport other medical/health workers to the places to be visited as part of the work programme, as long as this does not disrupt the work programme.

16. Over and above those discretionary provisions made in the above paragraphs, no alteration of procedure shall be made, either temporarily or permanently, by the driver, the designated CO, the OR, or the PES (where the PES is not the OR), without the joint consent of the PMO, the KSB, and, where justified by its terms of reference, the PBC.

January 1983

C.V.

DRUG SUPPLY

REF: PBC/PID/V83

As mentioned in Policy Implementation Document II (1982), a major constraint in the development of eye care services in Kenya is the lack of an adequate supply of effective, appropriate, and inexpensive ophthalmic drugs.

The problem of ophthalmic drug supply can be divided into three major problem areas:

1. Maldistribution of badly needed and appropriate drugs

Often, health centres and small dispensaries are found to have large inventories of ophthalmic medications which they can not use before the indicated expiry dates, while Provincial and District Hospitals are, at the same time, completely lacking in those same drugs.

2. Insufficient quantities of simple, generic, inexpensive and effective drugs

Zinc sulfate eye drops, sulfacetamide drops, tetracycline ointment, etc., are too frequently not available.

3. Too large a supply of unrequested, proprietary, very expensive drugs

Such medications as antibiotic/steroid combinations and steroids alone are widely available, often in health centres and dispensaries, even though many of them can be dangerous if dispensed by non-ophthalmic personnel.

This problem has been debated frequently in the past by the Prevention of Blindness Committee, but has yet to be satisfactorily resolved. The Professional Sub-committee of the Prevention of Blindness Committee, which is composed of all Provincial Eye Surgeons under the chairmanship of the Chief Ophthalmic Surgeon, should examine this problem in the context of the three areas described above. They will then present recommendations for guidelines on distribution of ophthalmic drugs from the Central Medical stores and by medical personnel in the field, including a list of drugs that should be available at all times and at appropriate levels.