PD-ABA-450

INTERNATIONAL EYE FOUNDATION
kenya rural blindness prevention project

GRANT NO. A.I.D. 615-0203

QUARTERLY REPORT - July, August, September, 1981

This is the sixth in a series of Quarterly Reports submitted to U.S.A.I.D. covering the period 1st July to 30 September, 1981, outlining the activities and progress of the International Eye Foundation's Kenya Rural Blindness Prevention Project (Phase II).

I. GENERAL

Project activities continued uninterupted. In July and September, seminars on primary eye care and blindness prevention were conducted in Western and Central Provinces, respectively. Also in September, an evaluation of these seminars was undertaken by an outside consultant engaged for this purpose. In August, the eighth blindness prevalence survey was conducted in Kajiado District. These and other activities are described in some detail below.

II. PERSONNEL

No new personnel were added during the quarter under review. The possibility of adding a part-time counterpart to the Field Training Specialist to assist in the conduct of primary eye care/blindness prevention seminars is currently under consideration. It may be possible to arrange for one of the newly trained ophthalmic clinical officers to be assigned to the project in this capacity. As anticipated Mr. Dennis Ross-Degnan (Health Planner) left the project on completion of his contract in mid-September.

III. ACTIVITIES

Blindness Prevalence Surveys: The eighth in the series of blindness prevalence surveys was conducted in August in Kajiado District. Dr. Robert Meaders (Medical Director, IEF/Bethesda) and Dr. Larry Schwab (former Assistant Project Director, KRBPP (Phase I)) participated. It was planned that Dr. Sohab Derougar of the Institute of Ophthalmology, London, would participate, but due to visa difficulties this was not possible. Dr. Derougar, who is Director of the virology laboratories at the Institute of Ophthalmology was to have supervised the collection of conjunctival scrapping and tear specimens for laboratory confirmation

III. ACTIVITIES (cont'd.)

of the presence or absence of trachoma as recommended in the May, 1981 evaluation report.

There were two survey teams which covered six areas of the district. A total of 2,171 survey members were registered, of which 1,924 were examined. Of those examined, 7.6% were found to have significant visual loss (visual acuity less than 6/18 in the better eye), while 2.4% had severe visual loss (visual acuity less than 6/60 in the better eye), and 1.5% were blind (visual acuity less than 3/60 in the better eye). The major causes of visual loss were found to be, in order of prevalence, cataract, refractive error, trachoma, non-trachomatous corneal scarring, and glaucoma.

Seminars on Primary Eye Care/Blindness Prevention: The third and fourth series of seminars were held at provincial and district levels in Western Province in July and Central Province in September. Attendance, for the most part, was excellent, with the following breakdowns:

Western Provincial Seminar:	34 participants	(14 departments)
Kakamega District Seminar:	43 participants	(26 facilities)
Bungoma District Seminar:	47 participants	(20 facilities)
Busia District Seminar:	29 participants	(9 facilities)
Central Provincial Seminar:	22 participants	(9 departments)
Murang'a District Seminar:	28 participants	(9 facilities)
Kirinyaga District Seminar:	52 participants	(23 facilities)
Nyeri District Seminar:	50 participants	(19 facilities)
Nyandarua Distric Seminar:	54 participants	(19 facilities)
Kiambu District Seminar:	49 participants	(21 facilities)

In September, the IEF undertook to evaluate the primary eye care/blindness prevention seminars as recommended in the May, 1981 evaluation. Dr. Henry Matovu, a medical education specialist from the Department of Community Health, Faculty of Medicine, University of Nairobi, was asked to conduct the evaluation exercise. For this purpose, Dr. Matovu attended the Central Provincial Seminar and three district-level seminars (at Kirinyaga, Nyeri, and Nyandarua). Following his report, a "first-draft" copy of which is attached, a number of changes in both the organization and content of the seminars are expected.

IV. FINANCES

During the quarter under review, local expenditures by the Kenya office totalled K.Sh.399,568.35 (U.S.$44,863.52). Total local expenditure during the period 1 April 1980 through 30 September, 1981 has totalled K.Sh.2,424,036.50 (U.S.$308,286.75). Expenditures from the IEF/Bethesda office under this grant during the quarter totalled U.S. $80,603.00. The total expenditure from Bethesda during the period 1 April, 1980 through 30 September, 1981 has been U.S.$517,333.00.

An expenditure/budget review for the first eighteen months of Phase II is currently in progress to determine whether any line item shifts will be needed to cover the remaining eighteen months.

In September, the auditor's report for the year ending 30 June, 1981 for the Kenya office was received from Pannell, Bellhouse, Mwangi & Company. A copy of this report is attached.

V. PROJECT VEHICLES

During the quarter under review, three of the project Toyota Land Cruisers (KQY 371, 372, and 373) have undergone major repairs. Significant delays have been encountered because needed spare parts have not been available. The Subaru 4WD Stationwagon (KQY 742) is also off the road, also due to lack of spare parts. This problem of spares will no doubt continue for all project vehicles, with the possible exception of the Datsun Stationwagons. The Toyotas will be used as little as possible in order to conserve them for times/places where the other vehicles are unsuitable. In the future, it may be necessary to have the IEF/Bethesda office order spare parts in the United States and ship them to Nairobi. Repairs on the Land Rover (SWB) KVQ 963 were finally completed in July at a total cost of nearly K.Sh.80,000 (covered entirely by insurance).

VI. COMMUNITY-BASED PRIMARY EYE CARE PROJECTS

The community project in Ithima, Lare, Meru District was officially launched in late August. During the quarter, the Health Planner made arrangements for an appropriate technology specialist from UNICEF to visit the community twice to instruct community

VI. COMMUNITY-BASED PRIMARY EYE CARE PROJECTS (cont'd.)

members in construction of water storage tanks, fuel-efficient cooking stoves, and other matters. Preliminary plans are being made for a base-line survey of the community to be conducted after the current rains, probably in mid-January.

Also during the quarter, funds were made available to the Saradidi Rural Health Project to launch a scheme for protection of springs in the community. Initially, three to four springs are to be protected under the program. Part of this program will include instruction of community members in water-source protection techniques.

VII. RURAL BLINDNESS PREVENTION UNITS

In September, the fourth RBPU was put "on the road" in Kericho District. This unit will be operated by Mr. Longinus DeBondo, C.O.(Ophth.), and supervised by Dr. Steinkuller, the Assistant Project Director. The unit is expected to operate both as a RBPU and as a therapeutic MEU. The vehicle for this unit is the SWB Land Rover KVQ 963, which was formerly based at Machakos.

The fifth RBPU has not yet been assigned. It was to have been placed at Murang'a under the supervision of Dr. Whitfield, but the Clinical Officer who was to have run the unit was transferred to Kenyatta Hospital, Nairobi. Hopefully, this unit will be assigned after the first of the year, when the current round of transfers and new placements should be finished.

In September, it was decided to de-emphasize the school screening activities of the RBPUs in favor of a program whereby they would focus on visiting health centres and dispensaries, teaching clinical staff primary eye care/blindness prevention and conducting eye clinics. The project staff feels that this will be a more effective use of this resource and provide a valuable compliment to the seminars on primary eye care/blindness prevention. The school-screening programs will continue, however, on a reduced basis.

KENYA RURAL BLINDNESS PREVENTION PROJECT

Quarterly Financial Report, July, August, September, 1981

Grant Budget Line Items / Amount.	Total Exp. This Period July - September	Exp. Billed to AID This Period July - September	Cumulative Exp. Billed to AID April '80 - Sept. '81	Project Exp. To be Billed To AID Next Period October - December
1. Salaries/Fringe $ 767,980	Sh. 79,924.10 $ 8,992.01 $ *66,869.00*	Sh. 79,924.10 $ 8,992.01 $ *66,869.00*	Sh. 513,268.95 $ 65,617.36 $ *297,946.00*	Sh. 60,000.00 $ *65,000.00*
2. Travel & Transport $ 423,799	Sh. 111,576.00 $ 12,454.20 $ *-0-*	Sh. 111,576.00 $ 12,454.20 *-0-*	Sh. 686,631.65 $ 87.806.65 $ *100,658.00*	Sh. 110,000.00 $ *6,000.00*
3. Subsist. & P.D. $ 185,848	Sh. 123,116.30 $ 13,848.37 $ *3,282.00*	Sh. 123,116.30 $ 13,848.37 $ *3,282.00*	Sh. 671,338.50 $ 84,934.39 $ *5,377.00*	Sh. 120,000.00 *-0-*
4. Evaluation $ 18,000	-0- $ -0- $ *-0-*	-0- -0- *-0-*	Sh. 2,472.70 294.72 *6,940.00*	-0- -0- *-0-*
5. Surveys $ 19,410	Sh. 37,900.00 $ 4,290.53 $ *-0-*	Sh. 37,900.00 $ 4,290.53 *-0-*	Sh. 125,832.20 $ 15,693.34 *-0-*	-0- *-0-*
6. Surgical Equip. $ 5,280	Sh. 2,868.30 $ 324.61 $ *1,641.00*	Sh. 2,868.30 $ 324.61 $ *1,641.00*	Sh. 6,779.15 $ 781.54 $ *1,486.00*	Sh. 2,500.00 $ *3,500.00*
7. Teaching Materials $ 89,412	Sh. 6,504.00 $ 732.74 $ *-0-*	Sh. 6,504.00 $ 732.74 *-0-*	Sh. 84,711.55 $ 10,145.69 $ *455.00*	Sh. 7,000.00 $ *-0-*
8. Drugs & Medications $ 15,088	Sh. 599.60 $ 66.18 $ *55.00*	Sh. 599.60 $ 66.18 $ *55.00*	Sh. 15,257.30 $ 2,004.89 $ *(155.00)*	Sh. 1,500.00 $ *7,000.00*
9. Office Equipment $ 51,085	Sh. 31,132.30 $ 3,486.47 $ *-0-*	Sh. 31,132.30 $ 3,486.47 *-0-*	Sh. 289,486.90 $ 37,389.40 $ *990.00*	Sh. 30,000.00 $ *-0-*
10. Other Direct Costs $ 294,098	Sh. 5,947.75 $ 668.41 $ *8,756.00*	Sh. 5,947.75 $ 668.41 $ *8,756.00*	Sh. 28,257.60 $ 3,618.77 $ *103,636.00*	Sh. 5,000.00 $ *25,000.00*
TOTAL $1,870,000	Sh. 399,568.35 $ 44,863.52 $ *80,603.00*	Sh. 399,568.35 $ 44,863.52 $ *80,603.00*	Sh. 2,424,036.50 $ 308,286.75 $ *517,333.00*	Sh. 336,000.00 $ *106,500.00*

Kenya Shillings with Dollar conversions - Kenya Expenditures

Bottom Dollar figures - Bethesda expenditure

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INTERNATIONAL EYE FOUNDATION

FINANCIAL STATEMENT

FOR THE YEAR ENDED

30 JUNE 1981

PANNELL BELLHOUSE MWANGI & CO.

- 6 -

REPORT OF THE AUDITORS

to the

INTERNATIONAL EYE FOUNDATION

We have prepared the attached financial statement from the books and records of the Foundation which, in our opinion, have been properly kept. We obtained the information and explanations we required in respect of:-

(1) The review of documentation supporting disbursements that they are appropriate in nature, properly supported and approved and properly chargeable to Kenya grants.

(2) Confirmation of the cash balance at 30 June 1981 with the bank and reconciliation of the account.

(3) The review of supporting documentation surrounding cash receipts.

(4) The physical inspection of fixed assets purchased during the year costing the equivalent of US$ 3,000, or more.

In our opinion the statement presents fairly income received and expenditure incurred under the grant by the Agency for International Development to the Foundation, as far as the Kenya operation is concerned, for the year ended 30 June 1981.

Ramnee Buchanan Wangi & Co

NAIROBI.

16th September 1981

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INTERNATIONAL EYE FOUNDATION

FINANCIAL STATEMENT FOR THE YEAR ENDED 30 JUNE 1981

	K.Sh.	US$
CASH BALANCE AT 30 JUNE 1980		
Nairobi Kenya Branch of the First National Bank of Chicago.	117,965.75	15,728.78
CASH RECEIVED DURING THE YEAR		
Grants - USAID	1,596,892.55	201,160.43
	1,714,858.30	216,889.21
CASH DISBURSED DURING THE YEAR		
Salaries and fringe benefits	330,255.35	41,602.26
Travel and transportation	469,105.15	59,093.16
Subsistence and Per Diem	457,281.75	57,603.77
Evaluation	2,472.70	311.49
Surveys	84,380.80	10,629.45
Surgical equipment	3,910.85	492.65
Teaching materials	77,825.55	9,803.68
Drugs and medications	13,070.90	1,646.54
Office equipment	188,736.50	23,775.13
Other direct costs	15,139.75	1,907.15
Difference arising on translation to U.S. Dollars	-	1,766.36
TOTAL CASH DISBURSED	1,642,179.30	208,631.64
CASH BALANCE AT 30 JUNE 1981	72,679.00	8,257.57
CASH BALANCE AT 30 JUNE 1981 CONSISTS OF:-		
The First National Bank of Chicago	72,679.00	8,257.57

I approve the above financial statement and confirm that I have made available all relevant records and information for its preparation.

R Douglass Arbuckle

R. DOUGLASS ARBUCKLE. M. A.
DIRECTOR FIELD OPERATIONS

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INTERNATIONAL EYE FOUNDATION

KENYA RURAL BLINDNESS PREVENTION PROJECT

AN EVALUATION OF SEMINARS ON EYE CARE AND BLINDNESS PREVENTION

by

Henry L. Matovu, M.B.,Ch.B.; M.P.H.; M.Ed.

Nairobi, Kenya.

8th October, 1981.

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1. INTRODUCTION

1.1 TERMS OF REFERENCE FOR THE CONSULTANCY

The purpose of the consultancy was for me to attend one provincial seminar and three district seminars run by the International Eye Foundation (I.E.F.) so as to assess the seminars and advise the I.E.F. on:

(a) the format, content and timing of the seminars,
(b) the methods of evaluation.

The consultance was to be concluded by submitting a written report and by discussions with I.E.F. staff members.

1.2 BACKGROUND TO THE SEMINARS

The I.E.F. is required, as part of the activities of the Kenya Rural Blindness Prevention Project, to conduct a series of training seminars on primary eye care and blindness prevention at provincial, district and divisional levels.

At provincial level the seminars are essentially supposed to be information sessions aimed at provincial heads of departments from various ministries. These seminars are meant to stress the inter-sectoral nature of blindness prevention, i.e. what role the different ministries can play in blindness prevention and in health promotion as a whole.

The district seminars, on the other hand are aimed at health workers from government and non-government health services. These seminars are meant to provided the participants (who include doctors, nurses at all levels, clinical officers, other paramedical health workers and Ministry of Health district heads of departments) with information and skills they would need to treat or/and refer patients with eye complaints and to prevent blindness. It is further hoped that the participants will be able to pass on at least some of this knowledge to their colleagues who have not attended the seminars.

At present the majority of general-duty health workers are unwilling or unable to deal with eye problems and this results in overcrowding in the few eye clinic available.

The divisional seminars, not yet mounted at the time of this evaluation, will be similar to the district seminars but at a more simplified level.

The provincial and district seminars are conducted by the I.E.F. Field Training Specialist assisted by the Provincial Health Education Officers. Additional assistance is provided by Clinical Officers (Ophthalmology) and other I.E.F. staff members. Provisionally, it is hoped that the Provincial Health Education Officers will be able to conduct the divisional seminars on their own.

As the provincial seminars are different from the district seminars in terms of purpose, scope, and intended target groups, the two in many cases will be reported on separately.

2. CONDUCT OF THE SEMINARS

2.1. GENERAL

Preparation for the seminars starts a month or so before the date of the seminar. For provincial seminars, the Provincial Medical Officer (PMO) is the local coordinator who makes local arrangements including inviting participants and identifying the venue. The PMO is assisted by the Provincial Health Education Officer. The local coordinator for the district seminars is the District Medical Officer (DMO). Again, the Provincial Health Education Officer is supposed to assist the DMO.

Educational and operational resources are provided by the I.E.F. Thus the facilitators are IEF staff members. Also, educational materials lunch, tea and, when necessary, the seminar room hire are all provided through I.E.F. funding.

Although a specific starting time for the seminars is specified in invitations, many participants arrive late. The sessions start as soon as "enough" people have arrived, which sometimes means only half the eventual group size. This means that many of the announcements have to be repeated several times for the benefit of late comers.

The IEF does not take responsibility for participants' travel arrangements and expenses.

2.2. THE PROVINCIAL SEMINAR

2.2.1. Purpose of the Seminar:

The purpose of the seminar was alluded to in one of the hand-outs and, now and then, during the seminar, but was not clearly spelt out. The general aims of the seminar appeared to be the helping of participants to:

a) realize that blindness is a major health, social and economic problem in Kenya;

b) realize that many of the eye conditions which cause blindness in Kenya are treatable and even preventable;

c) realize that the prevention of blindness is a inter-sectoral responsibility and effort;

d) be motivated enough to contribute, in their own spheres of influence, towards the prevention of blindness.

2.2.2 Venue and Date of the Seminar:

The Central Provincial Seminar was held on 10th September, 1981 at the Green Hills Hotel, Nyeri, which had excellent facilities for such a gathering.

2.2.3 Participants:

The selection of participants was by invitation from the Provincial Medical Officer, Central Province. A total of 20 provincial heads or their representatives attended. They represented the ministries or departments of Health, Cooperative Development, Urban Development and Housing, Culture and Social Services, Agriculture and Livestock. In addition, the following non-governmental organizations were represented: Maendeleo Ya Wanawake, Family Planning Association of Kenya.

2.2.4 Conduct of the Seminar:

The seminar was planned to last the morning with starting time originally set for 8.30 a.m. But, due to the late arrival of many participants, the activities could not start until 9.30 a.m. Closure time was 12.40 p.m.

There was no rigid time schedule but according to a handout, the following topics were to be covered in the time available:

I. Introduction
II. Leading causes of Blindness in Kenya
III. Anatomy of the eye
IV. Nutritional blindness
V. Safety
VI. Hygiene and sanitation
VII. Educational materials

The timetable that ultimately emerged is shown in Annex 6.1.

In general, the method of work was as follows: A file containing educational materials was handed out at the very beginning of the seminar, (see Annex 6.3). After the opening address by Dr. Maneno, the Assistant Director of Medical Services (Rural Health), the scheduled content areas were dealt with, mainly through didactic presentations illustrated with slides and other aids. Some opportunity was also given for questions and limited discussion. At the end of the seminar the participants were asked to complete an evaluation form (Annex 6.4.) soliciting their opinions and suggestions. The P.M.O. then invited all participants to lunch at the hotel.

2.3 THE DISTRICT SEMINARS:

The three district seminars differed, predictably, in some details the general pattern is what is described here.

2.3.1 Purpose of the Seminar

In two of the seminars the purpose of the seminar was not spelt out but in the seminar outline handed out it appears the purpose is:

To give participants a better understanding about eye disease and prevention of blindness which will enable them

- to appreciate the size of the problem of blindness ;
- to understand that often something can be done to treat existing blindness;
- to know measures for preventing blindness;
- to train other health workers in the basic skills of primary eye care and blindness prevention.

3.3.2 Venue and Dates of the Seminars:

The venue and dates for the three seminars were the following:

- 22 September, 1981: Kirinyaga District Seminar at the Kerugoya Lodge.
- 23 September, 1981: Nyeri District Seminar at the Nurses Training School.
- 24 September, 1981: Nyadarua District Seminar at the Nyandarua County Council Hostel (Nyahururu)

3.3.3 Participants:

The participants included from Medical Officers, Clinical Officers, Nursing Officers, Public Health Officers, Pharmacist, Health Education Officer and lower level workers such as enrolled nurses, Family health educators and laboratory assistant, some of whom do not actually see patients.

Total registered attendances were 52, 50, and 53, at Kerugoya, Nyeri and Nyahururu respectively. At each seminar, the District Medical Officer was local coordinator and somewhat peripheral participant.

3.3.4 Conduct of the Seminars:

The district seminars were planned to last the whole day (roughly 9 a.m. to 4.30 p,m.), the starting time depending on the arrival of participants and the closing time on the conclusion of planned activities.

There was no rigid time schedule but, according to the seminar outline, the seminar schedule was supposed to be:-

1. Introduction
2. Anatomy of the Eye
3. Leading Causes of Blindness in Kenya
4. Tea Break
5. Common Eye Disorders
6. Sanitation, Hygiene, Safety
7. Lunch Break
8. Practical Skills
9. Teaching Materials
10. Review and Evaluation

The timetables ultimately emerged are represented by(Annex 6.2)which is a composite timetable representing the general pattern for the three district seminars.

In general the conduct of the seminars was as follows: The first activities, before any introductions, were to distribute the folders containing the seminar hand-outs (see Annex 6.3) and the pretest. Then, after brief introductory remarks on the day's work and the hand-outs, the scheduled topics would be dealt with. The instructional method for the morning and the first topic in the afternoon was the lecture illustrated with slides, the eye model and charts. At the same time participants had to refer frequently to various sections of the seminars Lecture notes (outline) and of the Primary Eye Care Manual. For the practical skills in the afternoon the approach was to demonstrate the procedure and to follow that by practice, (except for the eye shield which was only demonstrated). Some opportunity was given throughout for questions.

At the end of the seminar, the participants were asked to complete an opinions questionnaire (Annex 6.5) and a post-test which had the same content and format as the pretest (Annex 6.6.).

The day ended with a vote of thanks from the D.M.O. his representative among the participants and, finally, the C - Charts and the Red Eye Chart were distributed (one for each health facility represented).

2.4 SEMINAR FACILITATORS

The main facilitator was Ms. Victoria Sheffield, the Field Training Specialist, but assistance with some of the topics and the practical sessions was provided by the other available I.E.F. staff and other coopted for the purpose, (e.g. the Provincial Health Education Officer, Mr. Kariuki, for the lecture on "Preventive Action", and an Ophthalmic Clinical officer for the talk on "Common eye problems in the District."

3. GENERAL OBSERVATIONS

3.1 PREAMBLE

Before proceeding with comments and recommendations it is helpful to consider the following points or framers of reference.

3.1.1 Adult learning

Adult learning, unlike elementary education, is goal-directed. Motivation to learn is facilitated by a clear knowledge of the purpose and value of the learning. Emotions of the participants (and of the trainer) are involved in the learning process. The ad hoc encounter in a seminar brings together a diverse group, perhaps united only the "project" which the seminar tries to promote, otherwise "strangers" to one another.

This human reality results in a group which is formal and polite. In turn, and perhaps paradoxically, effective learning in stifled by the consequent lack of emotional involvement and the reduced capacity to share knowledge and experience among the group. Therefore, creating an atmosphere of learning demands consideration and management of all these human needs.

3.1.2 The Components of a Training Programme:

(a) Job description: Training for a job demands that we know what competences requires, i.e. what persons in that job are already doing and what they should be doing which they are yet not doing.

(b) Objectives: Once the job description is clear the general training objectives can easily be be formulated, closely, parallel the job description. The general objectives only indicate the general direction and the ultimate goal of the training. But one needs to specify the instructional objectives i.e. what the participants are expected to be able to do, to say, to describe, etc... when they have completed the training which they were not able to do before. Thus, objectives describe what the educational describe what the educational product is expected to be like.

(c) Content: This is, in a way, implicit in the statement of objectives. Before the final selection of the course/seminar content it is advisable to determine what must be learnt (vital content), what should be learnt (useful content) and what is of interest only. Sometimes there time only for the vital content.

(d) Instructional strategies: This refers to the whole process of helping the trainees achieve the objectives of the training. It includes a careful selection and use of teaching methods (or, better, learning experiences), audio-visual techniques and other learning resources.

(e) Evaluation: A training programme should include an arrangement for determining whether, and to what extent, the training objectives have been achieved. For the specific instructional objectives this assessment can be done at the end of the training. But for the general goals a follow-up, or an on-the-job evaluation is more valid. The results of the assessment can then be used not only for certification but also for modifying the programme as necessary.

In general, and explicit specification of objectives forms the basis for the selection of participants, content selection, the choice of learning strategies and what to evaluate.

3.1.3 The Role of a Trainer:

In the conduct of a training seminar, the trainer's role can be described/assessed along the following attributes.

(a) The Seminar Plan (call it "Lesson" Plan): This is a written guide as to what will be done when, how and for how long, during the seminar.

(b) Educational Objectives: A clear statement of both the general goal and the specific learning outcomes. It is tempting to state these in terms of what the trainer will do. But the right way is to state learning objectives in terms of what the learner will be able to do when he has learnt. The objectives should be communicated to the learner at the beginning, especially in adult education.

(c) Seminar Content:

- whether technically correct,
- appropriateness of level of difficulty and depth of coverage,
- amount planned for the available time,
- important omissions,
- irrelevant additions.

(d) Actual Presentation/Delivery:

- introduction,
- clarity of speech,
- arousing and sustaining interest,
- management of audio-visual resources,
- organization and tempo of presentation,
- feedback/interaction with participants,

- providing opportunity for practising what is being taught,

- periodic and final summary highlighting the salient, points,

- conclusion and carry-over activity,

- interpersonal management, group development skill,

- etc...

3.2 GENERAL OBSERVATIONS

It is not possible to list all the pertinent observations. Many can be deduced from the recommendations and others will perhaps be mentioned during the discussion of the report. But the following broad comments deserve mention.

(a) In general, the training programme does address itself to the educational aspects of the following project objectives:

Objective 2:	Initiation of teaching programmes for medical and community personnel and development of effective teaching materials.
Objective 3:	Switch emphasis in rural eye care from therapeutic to preventive.
Objective 4:	Strengthen therapeutic programmes.
Objective 5 and 6:	Communicate fundamentals of eye care and intersectoral aspects of blindness prevention to development personnel in health and related fields at provincial, district,....levels.

(b) The seminar facilitators were enthusiastic and shown great stamina, especially for the district seminars on three consecutive days including long driving. There was mastery of content and the sequence of topics, was mostly appropriate. Much emphasis was (correctly) placed or prevention.

(c) Educational goals and objectives are maybe implicit for it is difficult to find where and when they are explicitly stated and they are barely communicated to the participants. This directly or indirectly creates other problems cited below.

(d) The seminar format favours information giving. For most part there is no active involvement of participants. Opportunities to practise some of what is being taught are limited to the afternoon skill learning only.

(e) A number of sections of the seminar content are unnecessary as they do not seem to relate to what the participants need to know in order to fulfil the new roles (clinical or/and community) which the programme advocates.

(f) The selection of participants and the mix of different, widely-varying cadres of participants in the same seminar is not carefully thought out. Furthermore, it is not clear whether the selected people are compelled to attend or whether they come by choice.

. Group dynamic and development, a vital element in adult learning, is not given adequate attention. It was surprising that each morning the very first sentence to the participants was an instruction (to register and to work at the pre-test). There was nothing at the beginning to promote interaction so as to create a favourable atmosphere for learning.

. Mixed groups were treated as if they were homogeneous and the more able in the group tended to set the pace for the weaker ones, instead of the other way round. This often created the impression that the group as a whole knew or had learnt what was taught.

. Audio-visual and other elements of communication were frequently not effectively managed. For instance, people at the back of the room often could not see clearly what was being shown at the front.

. I was not able to discern the use made of the evaluation data. The evaluation formats do not yield information that can readily be utilized to improve the programme.

4. RECOMMENDATIONS

4.1 PLANNING

4.1.1 Goals and Objectives:

(a) The project staff should re-think and clearly specify the training objectives for the provincial, the district and eventually, the location level. Basically the question to be answered in that exercise is: "When we conduct this seminar, what do we want to accomplish immediately and ultimately?" In other words, "What do we expect the participants to be able to do immediately and ultimately which they were not able to do before the seminar?" It is also interesting to ask a collorary question, "What will be the likely consequencies of not having these seminars?"

This exercise is necessary before a rational modification of the programme can be undertaken. The specification of goals and intended learning outcomes will guide the seminar planners in the selection of participants, content (and scope), methods of instruction and content of evaluation.

(b) These written objectives should be circulated to the participants at the beginning of the seminar (or even some days before) and should be discussed and clarified before doing anything else.

(c) . For provincial seminars, the objectives should be policy oriented, focussing not only on informative elements but also going into constructive thoughts (what shall we do?) and executive framework (How shall we do it?).

. for district seminars, the focus should be on the technical aspects related to their job desription.

. for location seminars, emphasis should be educational/motivational goals.

4.1.2. Content:

(a) Looking at the content/scope for the provincial and district seminars, the question that readily comes to mind is "Why are we teaching this or that particular content to these people?" This question can be answered rationally only if the seminar objectives are clear. But even now, it seems necessary to review the content. For example, the provincial seminar has too much medical content when it is more important for these multi-sectoral heads of departments to discuss policy strategy. The provincial group might be more enlightened in general but it is less medically oriented than the district groups. Even for the district seminars, much of the content is theoretical areas of-interest-only, not very closely linked to what they are expected to be able to do in their duty stations.

(b) Some of the information given in the lectures can be sent to the participants for advance reading before the day of the seminar. This would leave more time for questions/discussions group work and practical skill learning.

(c) The level of difficulty was too high for many of the anxiliary health staff. This was not unexpected, considering the mix of the cadres in the groups. For suggestions on this, refer to sub-section 4.1.3.

(d) Conspicuously missing in the content/activities was a session to allow participants to talk about a strategy for action when they got back to their work situations. Discussing post-seminar plans has a positive influence on adult learning and should be considered in future, especially for the provincial seminars. Otherwise, after being "informed" about eye problems and their treatment and prevention, the participants simply return to the realities of their respective work environments without any follow-up action.

4.1.3 Selection of Participants:

If the seminars were designed around realistic objectives, it would be difficult to visualize how in a district seminar, for example, a medical officer could benefit from a seminar whose objectives are also intended to realistically meet the needs of a laboratory assistant, and vice versa. The point I am making here is that the mixing of persons from such widely different educational and establishment levels creates serious educational problems. Apart from the uneasy psychological climate that is inevitable within such a group, the seminar is either too high-powered for one or too simple for the other. The fact that a medical officer performs poorly on a pre-test does not mean that a seminar good enough for an enrolled

nurse is good enough for him. This is one example of the inadequate sensitivity to group dynamics.

I would like to propose the following attendance composition for the various seminars.

(a) Provincial seminars: (Main focus: Project objective No. 6):

- PMOs, DMOs, MOs from the district in the province.

- Provincial department heads and, maybe, District Commissioners.

The first part of the seminar to highlight the eye disease problems and the strategy for an inter-sectoral approach. The second part, for medical persons only, to be more technical, covering the detection, treatment and prevention of eye problems, at a level appropriate for general-duty medical officers.

(b) District seminars: (Main focus: Project objective No. 4):

- MOs who did not attend the provincial seminar.

- Clinical officer.

- Senior nurses with clinical responsibilities.

These people with clinical responsibilities will benefit from the large component on clinical aspects of eye problems. The seminar will, of course, still emphasize prevention.

(c) Location level: (Main focus: Project Objective No. 3):

- All other health workers.

- people involved in community development and educational activities in the location.

The emphasis at this level to be on:

- awareness of the problem,

- recognition of some eye problems,

- preventive action at community level.

N.B.:- Clinical aspects to be glossed over or even left out altogether.

When there is a sizeable number of medical officers attending, the project eye surgeons should play a greater role in the seminars than in the past, but the Field Training Specialist should remain the main coordinator.

4.1.4 Pre-seminar Preparation and Coordination:

(a) Many of the people outside the I.E.F. who are involved in the local preparations do not necessarily have a commitment to the seminars. Therefore a final check on them in person or by the telephone regarding the final arrangements will prevent many snags. Communication to the local coordinator should specify details such as what kind of room and resources are required.

(b) It is useful, if possible, to get the list of expected participants and their background descriptions so as to plan the seminar tailored to that particular group.

(c) To prepare participants for the seminar, advance materials should be prepared and sent to them through the local coordinator. These materials should include:

- A statement of purpose and objectives.
- Administrative arrangements made.
- A short problem-census questionnaire including also what they hope to gain from attending the seminar.
- Some of the basic seminar content, hitherto covered in lectures, can be included in advance reading materials.

4.2 CONDUCT OF THE SEMINARS

4.2.1 Group Development:

As stated in Sub-section 3.1.1, adult learning thrives on smooth group dynamics and human relations. Some time should therefore be invested at the beginning in getting acquainted. Attendance registration and the pre-test can wait a few moments. Anxiety and uncertainty should be alleviated right from the start by introducing all staff (whatever their status and role) and all participants in a genuine manner. Even the room arrangement can isolate or bring participants closer. The less homogeneous the group is the more difficult it is to remove the uneasy atmosphere. But until participants feel relatively free with one another learning remains hindered. Group activities are very effective in group development. One can start with a less serious activity, especially if it involves group interaction, to allow participants to settle in.

4.2.2 Outlining Seminar Strategy:

After the preliminary human relations and group process activities, the seminar should not proceed before the objectives and content are outlined, and the plan for the day explained. It is even possible to embrace suggestions from the participants. Only after these should the registration and the pre-test be started. By this time, hopefully, most of the participants would have arrived.

4.2.3 Methods of Teaching:

Teaching methods should be selected on the basis of the intended learning. For instance, we do not teach a skill by simply talking about it; it must be practised by the learner.

The lecture was a prominent method of instruction. For district seminars, mornings and sometimes part of the afternoon were filled with lectures, although the lectures were well-illustrated with slides, an eye model and written materials. Learning is more effective if the learner is actively involved, especially in group activities with ample opportunity to practise what is being learnt, even when it is not a mannal skill. Frequently, the participants should be organized in small groups and, since this is a technical subject, it should be easy to devise practical learning activities. Some of the skills practised in the afternoon should be brought forward to morning time to break the continous lectures. Additionally, small group work is a useful technique for influencing attitudes.

At appropriate intervals, there should be a summary of what has been covered so far and what is to follow next. At the end of the day there should be an overall summary, manipulated to end on a note of achievement.

4.2.4 Audio-Visuals:

(a) Software: The slides were adequately used to illustrate the lectures. Some of them, however, need replacements. The Eye Model is of high quality but the size is too small for people at the back of the class. The charts (Red Eye, C-chart, Rules of a Healthy Eye) were clear and large enough. They should continue to be used. The handouts (Seminar Outline and Primary Eye Care manual) are good but minor errors here and there should be corrected and some of the jargon should be simplified. Many of the technical terms can be replaced with simpler ones without loss of meaning. Others can be defined in a glossary at the end of the pamphlet. Some details can be left out altogther. The Macho ya Kenya magazine is simple enough for schools but too sophisticated in presentation for ordinary readers. Maiyeu Na Modooku (I don't want to be a blind man) is suitable for serious readers, not necessarily medical.

(b) Hardware: The slide projector is a useful tool with remote control and a portable screen. But conditions for satisfactory projection in upcountry places rarely exist. I would therefore like to make a strong case for the Overhead Projector (OHP). This one piece of equipment that should be procured. It is not expensive, it is light weight, it is easy to maintain and it has many advantages over the slide projector.

- simplicity and ease of operation,
- can be used with open curtains in day light,
- it is a projector but also it can be used instead of a chalk board. (This is a distinct advantage for people allergic to chalk and for places where a chalk board may not be available),

- preparation of impressive projection materials does not require much skill; materials can be prepared in advance at home,

- can superimpose transparencies to build up a story; can even "write" over or add to an illustration without spoiling the original,

- slide and other pictorial or literary material can be transferred to the transparency,

- etc...

(c) Selection of Audio-Visual Aids: In selecting and using audio-visual materials one should ensure that the material is simple, relevant to the educational intent, visible to all (not too small, not too faint, not carrying too much information at once), technically correct and in good physical state.

(d) Audio-Visual Technique: Even if the quality of an audi-visual aid is alright, poor showmanship can negate the value of using the aid. I would like to suggest that:

- The eye model (and any other movable aid) should be carried around the room for everyone to have a close look. Very often I could not see what was being demonstrated from the back of the room.

- Make sure that everyone sees what is being: the projector should not obstruct anyone's vision, the picture/word should not be faint or too small especially for people at the back, the picture should not be removed too soon, etc. One can even have enlarged colour prints parallel to the slides, or even actual Vitamin A capsules to pass around and to make available at break time for further viewing.

- If for any reason an illustration is not clear it should not be used. One can devise other ways of illustrating the point, especially if an OHP is available. In fact, often it is advisable to add to the basic illustration extra information. Again, the OHP is ideal for this.

- Changing the seating arrangement so as to bring everyone closer to the front instead of people sitting in a long column can solve some of the communication problems.

- The "Four Rules" poster is a good one: large lettering, short message, displayed for a long time as a constant message. Some of the other vital messages should be similarly put on posters to be used the same way.

4.2.5 Communication in General:

Language is a cultural as well as a personal characteristic. There are personal characteristics which cannot easily be changed. But being aware of them can help one towards managing them.

Most of the seminar participants were not raised in a technologically advanced environment and, also, comprehension of the English language (particularly with an American accent) is not as mastered as one might think. Therefore, many words and gadgets

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(like the camera) which are everyday things to a European or an American are unfamiliar to many of these people. Therefore, all "new" or important words should be written down and explained. Similarly, the eye should not simply be likened to a camera without explanation. The facilitator must also slow down a bit when new concepts are being introduced.

Although Ms. Sheffield's voice was loud, clear and generally not too fast, many words were used as if they were ordinary everyday words, particularly for the district groups. Even simple-looking words like "evert", "light reflex", "tumor" are not necessarily familiar to all the participants. It is amazing how much unfamiliar material an inhibited group can let go without asking any questions.

When questions are thrown open to the whole group usually it is the above-average participants who give answers. This can easily create a false impression that the group knows or has learnt. In mixed groups like those we had, the lesser persons tend to keep quiet even when they know or, worse, even when they have not understood. The target in such groups should not be the medical officer or the experienced clinical officer, it should be the lower cadres who could otherwise go through the seminar having learnt very little.

As a general rule, the facilitator should focus more on the most "disadvanged" participants:

- one who has the least prior knowledge or skill,

- on sitting at the back of the room, perhaps too far from the projection screen or from the eye model which is being demonstrated, or for whom the writing on the chalk board might be too low or too small.

Also, if a participant is aksing a question, the tendency is not to speak up for people at the other end of the room to hear. The facilitator should repeat the question or even paraphrase it for the benefit of the total group.

Often during the lectures, participants were asked to refer to sections in one or the other of the hand-outs. Th[illegible] would try to find the right text in the hand-out while at the same time they had to look at what was being shown, to listen to the speaker and to take notes, all at the same time. Some of them would look at the wrong section or even the wrong pamphlet.

I am sure they would miss what was being said while they were still trying to find "it" in the pamphlet. My suggestion here is that the hand-outs (such as the seminar outline) should be treated as lecture notes, referring to them only occasionally. Moreover, if a pamphlet is referred to, it is advisable to make sure that everyone is at the right text before speaking on.

4.3 EVALUATION

In evaluation the basic question: "When the seminar is over, how shall I know whether it was a success or a failure?" Once again, the reference point are the objectives. It should be remembered also that evaluation is valueless unless the information derived from it is utilized, e.g. to improve the programme.

(a) The pre-posttest items are well-designed but they test only simple recall of factual information. Items should be developed which measure problem-solving abilities and perhaps some which test attitudinal change.

Now that plenty of data is available on the pre-seminar knowledge (collected by pre-test from the several districts), that data should be taken to represent the general level of before-seminar knowledge. I am therefore saying that continued administration of the pre-test is now of academic interest only. Even the posttest can now be administered to selected seminar groups, just to keep up the monitoring.

(b) The idea of getting opinions and suggestions from participants through the evaluation form is a good one. But in its present form the opinion questionnaire does not yield data that is readily usable to improve the programme. Opinions on the relevance of objectives (not content) and whether they were adequately achieved, (i.e. what the participants think they are now able to do, describe, perform, etc... instead of simply the quantity of content given) and whether the format, learning activities and resources of the seminar were appropriate, should be added to the questionnaire. To make the analysis less arduous a structured questionnaire should be developed. In fact, the design of the present form confuses many participants.

(c) I would like to suggest that to the posttest and the opinion questionnaire be added some form of follow-up (on-the-job) evaluation to find out if the participants' practices after the seminar are in line with the general goal of the seminar.

In part preparation for this the participants should be asked to write down their post-seminar plans.

(d) Also useful for programme improvement is getting and utilizing opinions from all staff who participate in these seminars.

5. CONCLUSION

There are numerous minor observations or/and recommendations about the training programme which do not deserve a place in a report of this size. Hopefully some of these will come up during the discussion of the report.

A training programme is always a compromise between the ideal and what can realistically be accomplished. Not knowing all the constraints to the programme, I may have made, here and there, unrealistic suggestions. Furthermore, even if some changes in the programme were to be made now, objectives and strategies still have to be constantly reviewed on the basis of operational experience.

ANNEX 6.1

TIMETABLE - PROVINCIAL SEMINAR, NYERI

6. ANNEXES

Time

9.10 Attendance registration.
Introductory remarks, (V.Sheffield).
Welcoming remarks by Dr. Kulumba, PMO, Central Province.

9.15 Official opening address by Dr. Maneno, Assistant Director of Medical Services (Rural Health).

9.30 Role of IEF, (R.Whitfield).

9.35 Self-introduction by participants.

9.40 Lectures: (V.Sheffield):
- The problem of blindness in Kenya.
- Role of inter-sectoral effort in blindness prevention.
- Anatomy of the eye.
- Leading causes of blindness in Kenya.
- Eye safety.

11.00 COFFEE BREAK.

11.25 Lectures: (V.Sheffield):
- Hygiene and sanitation.
- Nutritional blindness.
- Educational materials, (Display).

12.00 Brief remarks, (topic not clear), (F.M.Mburu).

12.30 Concluding remarks, (V.Sheffield/R.Whitfield).
Completion of evaluation forms by participants.

12.40 Vote of thanks by Dr. Kulumba.

12.45 END OF SEMINAR.

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ANNEX 6.2

TIMETABLE - DISTRICT SEMINARS

Time

9.00 Distribution of seminar files.
Attendance registration.
Pre-test.

9.25 Welcoming remarks by the DMO.

9.30 Introductory remarks:
- The IEF and its activities in Kenya.
- Purpose of the seminar.
- Brief description of materials handed out.

9.40 Introduction of seminar staff.
Self-introduction by participants.

9.50 Lectures:
- Anatomy of the eye.
- Leading causes of blindness in Kenya.

10.30 COFFEE BREAK.

11.00 Lectures:
- Leading causes of blindness in Kenya, (cont'd).
- Other common eye diseases.
- Eye diseases commonly seen in the district clinics and the eye services available, (by clinical officer).
- Preventive actions: Safety,
  Hygiene,
  Sanitation.

12.50 LUNCH BREAK.

2.15 Lecture:
- The painful red eye.

2.30 Skills, (demonstration and practice):
- The eye shield, (demonstration only).
- Everting the eyelid.
- Application of eye drops/ointment.
- Measurement of visual acuity.

3.30 Completion of evaluation form by participants.
Post-test.

3.50 Distribution of C-Charts and Red Eye posters.

4.00 Vote of thanks by the DMO.
END OF SEMINAR.

ANNEX 6.3

AUDIO-VISUAL MATERIALS USED

A. PROVINCIAL SEMINAR

(i) Handed out:
- Seminar outline/lecture notes.
- Macho ya Kenya.
- Maiyeu Na Modooku (I don't want to be a blind man).
- Primary Eye Care for Health Workers.

(ii) Only used:
- Eye model.
- Colour slides.
- Red eye chart.
- Four signs of a healthy eye, (poster).
- C-chart.

B. DISTRICT SEMINARS

(i) Handed out:
- Seminar outline/lecture notes.
- Primary Eye Care for Health Workers.
- Macho ya Kenya.
- C-chart.
- Red eye chart.

(ii) Only used:
- Eye model.
- Colour slides.
- Four signs of a healthy eye, (poster).