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FINAL EVALUATION REPORT

AGENCY FOR INTERNATIONAL DEVELOPMENT MATCHING GRANT

PDC-0276-G-SS-6126-00

TO

THE AFRICAN MEDICAL RESEARCH FOUNDATION

FOR

DISTANCE TEACHING

AND

HEALTH PLANNING AND MANAGEMENT

PROGRAMS

Prepared by

Carolyn C. K. Brye, Ph. D., R.N.

Muthoni R. Kariuki, Dr.P.H.

Martin E. Gorosh, Dr.P.H.

Stephanie K. Nduba, MPH

New York, Nairobi, Kampala

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ACKNOWLEDGEMENTS

The authors wish to acknowledge the contributions of all those listed in Annex E, "Individuals Contacted and Organizations Contacted." The time they gave and their insights and perspectives facilitated the difficult task of evaluation.

The two external members of the evaluation team wish to thank the Heads and staffs of the Distance Teaching and Health Planning and Management Units. Their willingness to engage in a participatory evaluation process, their tireless efforts to document and analyze their programs, and their receptivity to suggestions are strong testimony to their deep professional and personal commitment to improving health care delivery systems in Africa.

Finally, the evaluation team would like to record its admiration and respect for the participants of the Distance Teaching and Health Planning and Management programs; dedicated health professionals who are motivated to seek new knowledge and skills to improve their service to the public.

EXECUTIVE SUMMARY

BACKGROUND AND PURPOSE

In 1986 AMREF was awarded a three year \$613,000 Matching Grant to carry out programs in Distance Teaching and Health Planning and Management. In 1989 AMREF was provided with a one year no cost extension for this grant. The programs supported under this grant are:

Health Planning and Management

A Health Planning and Management Unit (HPMU) was to be established in AMREF's operational headquarters in Nairobi to provide management assistance to health professionals in East Africa employed by NGOs as well as MOH staff at the local district, and regional levels. Training was to be available to organizations in East Africa requesting assistance and would address such topics as employee motivation (in the absence of incentive systems), conflict resolution, staff orientation and development, and linkages between project budgeting, planning, and implementation. Special training activities would also be developed that focussed on sustainable community-based child survival and family planning programs.

Distance Teaching

Funds were provided to improve and expand its Distance Teaching Unit (DTU), which prior to this grant had taught four courses to 800 health professionals throughout Kenya. The program is intended to reach health professionals delivering services in rural areas who have no access to continuing education through other mechanisms. AMREF's distance teaching at the time of the award of the grant was characterized by students learning at their own pace through written assignments (which are reviewed by trained instructors and returned to students) supplemented by radio broadcasts and assigned readings. Improvements through this project were to include: training of DHMTs (District Health Management Teams) to organize clinical practice sessions in the field for course participants; development and production of additional radio training programs; distribution of Afya (a quarterly health publication) to all health centers and dispensaries in Eastern Africa (approximately 5000); and provision of technical assistance to distance teaching units in other countries.

The purpose of this evaluation was to assess the accomplishments and impact of health activities in countries in East Africa funded under this Matching Grant; and to evaluate AMREF's headquarters performance in providing oversight and support to field activities. Project performance and effectiveness was measured against the goals and objectives established in cooperative agreement PDC-0276-G-SS-6126-00 (from 9/86 to 9/90).

GENERAL FINDINGS AND RECOMMENDATIONS

The goals and objectives of the Matching Grant have been met, and in some cases, exceeded. Supervisory, management, and service delivery skills of health care professionals have been improved through the efforts of both components of the grant. The leadership and professional staff of the DTU and HPMU are appropriately prepared and experienced, and effective in carrying out the technical implementation and field support activities of the programs. Support units at AMREF's Nairobi headquarters provide adequate financial management and program support. The channel between AID/Washington and AMREF Nairobi goes through AMREF's New York office. While this channel has proven to be effective for financial reporting and accountability, a direct channel should be established for substantive communications between AID/Washington and AMREF Nairobi.

Both programs are devoted to making decentralization work. The DTU, by definition, focusses on workers at the periphery of the health care system who have little or no access to any other forms of continuing education. The HPMU portfolio of technical and training activities is a rich collection of relevant and appropriate management improvement initiatives at District and local levels. At these operational levels in both countries visited, substantial numbers of health system managers on central and local health management teams and the managers and clinical workers of hospitals and health centers, training institutions, and other organizations involved in health services are being prepared through the distance teaching program and the management planning program to improve their management practices and clinical skills.

The evaluation team concludes that the types of activities carried out under the matching grant are important and are being incorporated in MOH plans in the two countries visited. The activities are consistent with the development and health sector plans of the Governments involved and the country AID Missions. The programs should be continued, improved, and expanded.

DISTANCE TEACHING FINDINGS AND RECOMMENDATIONS

The Distance Teaching Unit (DTU) has successfully met the objectives delineated at the beginning of the grant period and serves as a regional resource for the development of distance teaching materials, training of tutors and course writers, and radio broadcasts for health workers.

The DTU has implemented a number of strategies to achieve the purpose and objectives of the distance teaching programs (1986-1990) that have been effective in reaching over 5000 health workers in upgrading knowledge, attitudes and skills in Kenya, Uganda, Tanzania, and the Sudan.

Distance teaching courses: Ten new courses have been developed and five others have been adapted for use in other countries in addition to the countries where they have been developed. Each course includes lessons, study guides which contain structured teaching and self-evaluation questions, reference books or handouts and assignments. The unit assignment for each lesson is returned to designated DT Centers where they are marked and comments made by tutors. Student questions are responded to by the tutor and explanations are provided.

Radio Programs: 191 radio programs have been produced targeting health care workers. At the end of every 15 minute program is a group learning activity to which the audience is asked to react and send their response to the DTU. The responses reviewed by the evaluation team reveal an enthusiastic and highly motivated audience.

Audio Cassettes: 38 audio cassettes have been produced and are being used in the pilot districts to augment radio programs with more specific information to health workers. It is generally accepted that there is poor reception of radio transmission in some areas and also that certain information for health workers cannot be aired because of the secondary audience.

Demonstrations: The purpose of the demonstrations is to provide health care workers with supervised learning experiences in selected areas in order to improve clinical skills and clinical management of clients. DHMTs have been trained in selected districts where they now provide effective supervised demonstrations to health care workers to increase their practical skills and to teach new skills.

Workshops: Three course writers workshops of 3 stages each were conducted and a total of 25 Ministry of Health officers were trained. As a result of these workshops 5 new courses were developed and are being used while 13 others are in the final stage. Five audio/radio production workshops have been held and a total of 36 Ministry of Health officials and AMREF staff have been trained to develop the materials.

Consultations: The DTU has provided consultations to Ministries of Health on the establishment of distance teaching programs and has supported project managers in other countries to develop distance teaching methodologies as components of existing continuing education programs.

The DTU conducts its activities using generally appropriate technical and management procedures for promotion and publicity of courses, inventory and distribution of learning materials, assessment of target audiences, student orientation, group tutorials, demonstration and counselling sessions, peer study groups, maintenance of program records, tutor training, radio program production, and course assignment marking. The DTU has made progress in decentralizing distance teaching centers, monitoring, and evaluation.

A twelve item questionnaire was administered to 23 distance teaching participants. Survey results were positive for all twelve items. Participants apply the concepts and skills learned on their jobs. They find the sequence and level of course materials appropriate. They find the written and personal contacts with tutors to be useful as they do the radio programs and written materials provided. Participants are satisfied with the distance teaching program and feel that their job performance, professional status, and career opportunities are improved.

The evaluation team made numerous technical and procedural recommendations to improve the conduct of the program. The team also recommended new strategies for student orientation, participant motivation and continuation, group study, increasing student retention and course completion rates, tutor and DHMT training and follow up, new skills oriented courses, use of video, and including distance teaching as part of post-basic continuing education. Finally, the team made extensive recommendations to improve the monitoring and evaluation of both the process and impact of the Distance Teaching program,

including analysis of the cost per unit of output of DTU activities.

HEALTH PLANNING AND MANAGEMENT FINDINGS AND RECOMMENDATIONS

In terms of the specific statement of "Expected Achievements and Accomplishments" contained in the matching grant agreement, a Health Planning and Management Unit has been established within AMREF which serves as a regional center for improvement in the management of resources available for health. During the period of the matching grant, the HPMU has:

Supported the implementation, monitoring, and evaluation of health planning and management development activities. The HPMU has trained all 40 DHMT's (District Health Management Teams) in Kenya in the preparation and submission of annual health plans.

Developed learning materials and guidelines for MOHs and PVOs within the region in the area of planning and management. The HPMU has conducted 28 problem oriented management seminars for Government and private institutions in Kenya and Uganda. The HPMU has also conducted 4 post training follow up visits to assist in the application of new acquired knowledge and skills.

Carried out consultancy assignments in the area of health planning and management. The HPMU has conducted 13 consultancy assignments in Kenya and Uganda including logistical support in the printing of needed forms, development and implementation of proposals for intensifying Primary Health Care programs in selected districts, creation of manuals for planning and managing Primary Health Care programs, and analysis of logistics and transportation systems.

Carried out health systems research. The HPMU has conducted and participated in 5 health systems research projects and surveys including the Kisumu baseline study, transportation studies, studies of alternative approaches to district diagnosis, and the Provincial and District Health Care study.

Initiated and formulated health management projects. Most of the projects referred to in this section have been initiated and formulated by the HPMU in close collaboration with the MOH, RHMTs, DHMTs, and PVOs.

Provided technical inputs to AMREF's own projects having a health management component. Technical planning and management inputs to AMREF's own projects has been less evident; such input is the mandate of the project management department. Much of this type of input is informal and takes place during the day to day interactions of staff from other units. Noteworthy contributions are the operations research project on district diagnosis being carried out in conjunction with larger efforts in Kibwezi district, HPMU involvement in AMREF's strategic planning process, and HPMU regular teaching contributions to the post basic community health course

The HPMU is responsive to requests by its collaborators and its problem-oriented approach leads to the development of well-defined projects tailored to meet the needs of particular organizations, especially at District and local levels.

All management training workshops contained a core of management topics which were presented to participants. Staff of the HPMU used management problems and issues from the participants' institutions to illustrate the more general management topics and principles.

The workshops employed an appropriate mix of training methods including lectures and a variety of participatory exercises carried out in small work groups. Exercises were based in the reality of the management problems encountered by participants in their institutions. Participants were provided with basic health management texts prepared and used by AMREF and other related reading materials.

Discussions with workshop participants revealed improved management practices that were linked to improved service delivery. The results of the survey of the three groups of participants of the Management Workshops contacted during the evaluation were highly positive. Participants apply the concepts and skills learned on their jobs. They find the sequence and level of course materials appropriate. They find the personal contacts with tutors to be useful as they do the written materials provided. Participants are satisfied with the management training program and feel that their job performance, professional status, and future career opportunities are improved.

The HPMU has conducted or participated in twenty technical management activities during the period of the matching grant. These activities are generally carried out jointly with collaborating institution managers and employed a process that included assessment, problem identification, development and documentation of alternative solutions, data collection and analysis, recommendations, and implementation assistance. The methods employed included an appropriate mix of qualitative and quantitative systems analysis and research methods. Findings were produced and incorporated into programs for service delivery improvements. Often, such studies were carried out in phases and it is noteworthy that management improvements suggested during the course of a study were not held in abeyance until the completion of all phases of work.

The evaluation team made numerous recommendations concerning program strategies and areas for expansion, including: cost-recovery, leveraging, and "ceilings" for new programs (to facilitate "buy-ins" from USAID Missions); inclusion of management content in basic training programs for health professionals; new workshops and workshop modules on specific management topics; and, greater exposure of staff to other similar programs. The team also recommended technical improvements in ongoing programs: use of pre and post testing, greater attention to follow up and technical assistance to workshop participants, inclusion of training of trainers content in workshops, increased attention to evaluating the impact of training on service delivery, expanded use of qualitative methods, application of operations research approaches to training innovations, improved documentation of technical consultations and operational research studies, and better documentation of the cost per unit of output of HPMU activities.

JOINT DTU-HPMU FINDINGS AND RECOMMENDATIONS

The concentration of HPMU efforts on management issues in health care delivery and the development by the DTU of a distance teaching course on management suggest a natural area of joint endeavor for the two units. Collaboration in this area would strengthen the programs of both units. The HPMU would have access to distance teaching materials on management topics to reinforce its workshop training and to offer to workshop participants who wish to develop management training programs in their own institutions. The DTU would have access to the considerable expertise available in the HPMU for refining its current management course and for developing a manual for use by course participants. This expertise would also be helpful for

developing new distance courses on specific management topics at the same time as these new topics are developed for use in the HPMU management training program.

SUSTAINABILITY

AMREF is perceived as a valued resource throughout the region. This perception is shared by central Ministries of Health and the decentralized provincial and district management teams and the managers of health posts and hospitals at the sub district level. International organizations and regional and national PVOs and NGOs also hold AMREF in high regard. Among its notable accomplishments is its ability to recruit and retain high quality African professional staff to carry out its programs. AMREF is an established organization in the region and the matching grant programs in distance teaching and planning and management are important parts of its health and development programs. Both programs are featured prominently in the overall AMREF strategic plan, and activities continue in the period between the end of the matching grant and the anticipated successful application for a successor grant.

The Governments of Kenya and Uganda have indicated that the matching grant programs are also consistent with both national development plans and health sector plans. Interestingly, the two Governments have different approaches to phaseover. In Kenya, the MOH includes line items for AMREF services in its own budgets and in budgets for international donor sponsored projects. AMREF is seen as an agency with specialized professional services with whom the Government contracts when these services are required in programs. This creates less pressure to recruit and maintain specialized staff in the MOH, but does require sufficient staff to coordinate MOH needs with AMREF capabilities. In Uganda, the MOH is budgeting for yearly increases in its proportion of support for the activities of the Manpower Development Center. This Center will be responsible for carrying out the programs of distance teaching and planning and management initiated with matching grant support. Continued support from AMREF will be required as the Center develops and consolidates its programs.

At operational levels in both countries, substantial numbers of health system managers on central and local health management teams and the managers of hospitals and health centers, training institutions, and other organizations involved in health services are being prepared through the distance teaching program and the

management planning program to improve their clinical and management practices.

Distance teaching has become accepted as an effective teaching strategy to reach health workers in remote areas enabling them to be more effective in health promotion and curative interventions. This has been demonstrated by the dramatic increase in course enrollment and the increasing involvement by the DHMTs in distance teaching activities.

The HPMU activities in technical assistance and operations research carried out in collaboration with local institutions contribute to creating a climate of willingness to accept and adapt modern management practices. The increased attention to proposal development and assistance in obtaining funds for district level projects is also a positive contribution to the potential for sustainability.

Note on Family Planning Activities

While development of specific family planning activities was not specified in the grant agreement, USAID Nairobi requested the evaluation team to comment on Matching Grant contributions in the area of family planning. The request was received toward the end of the evaluation and it was not possible to conduct a full appraisal of these activities. For the record, the HPMU has conducted 17 training workshops for MCH/FP workers. These include 7 on Management Information Systems for MCH/FP coordinators and medical officers in Tanzania and 10 management workshops for Family Planning Private Sector health workers in Kenya. The DTU has developed a family planning correspondence course consisting of eight content units which has been offered in Kenya and Tanzania. Radio programs have also been produced on family planning for health workers in Uganda and Kenya.

KEY FINDINGS AND RECOMMENDATIONS

This section summarizes the key findings and recommendations of the evaluation. The recommendations are extensive and should not be viewed as negative commentary on the programs; rather they are intended to serve as a guide for future technical improvements in the DTU and HPMU programs. Moreover, the programs should not be expected to implement all recommendations at once. Clearly, priorities will have to be established and opportunities will have to be assessed for the incorporation of suggested improvements into the programs.

DISTANCE TEACHING PROGRAM

Findings

The Distance Teaching Unit (DTU) has more than met its objectives delineated at the beginning of the grant period (e.g., 10 new courses were developed while only 6 were specified in the grant agreement). The DTU has a highly qualified staff who are dedicated to promoting the distance teaching concept. As a result, distance teaching has become more accepted as an innovative and effective teaching strategy capable of meeting the learning needs of health workers. The following general objectives have guided the unit over the life of the grant:

To continue to initiate, develop and run distance learning materials for health workers as a method of continuing education.

To initiate the development of radio programs for health workers and broadcast in the national broadcasting stations.

To assist AMREF project managers in other countries to run distance teaching in support of existing continuing education programs.

To develop in the District Health Management Teams the capability to organize practical demonstrations to supplement distance teaching.

To establish contact and collaboration with other distance teaching institutions in Eastern and Central Africa.

To provide technical assistance to Ministries of Health in developing distance education strategies.

The DTU has implemented a number of strategies to carry out the purpose and objectives of the distance teaching programs (1986-1990) that have been effective in reaching over 5000 health workers in upgrading knowledge, attitudes and skills as follows:

Identification of topics to be covered based on surveys of need and observed deficiencies.

Training of commissioned writers for distance education materials.

Training of tutors and writers to design course materials.

Training of tutors to develop, produce and evaluate radio and audio cassette programs.

Training of District Health Management Teams (DHMTs) to carry out practical demonstrations and to produce audio cassette programs.

Liaison and provision of technical assistance to Ministries of Health and Departments of Education to support distance education at the district level.

Provision of consultation to MOH in Uganda, Tanzania, Sudan, Somalia, and Ethiopia.

Evaluation of distance education programs and learning materials.

Collaboration with other institutions to support and expand Distance Teaching.

Overall the written comments, group discussions, survey results and evaluation team observations produce a most positive picture, including increased knowledge and skills among health workers. The survey results were overwhelmingly positive for all twelve items. Participants apply the concepts and skills learned on their jobs. They find the sequence and level of course materials appropriate. They find the written and personal contacts with tutors to be useful as they do the radio programs and written materials provided. Participants are satisfied with the distance teaching program and feel that their job performance and professional status are improved. Participants were least positive about future career opportunities in relation to course completion. This finding supports the need for continued efforts to gain recognition for distance courses in career development.

The Distance Teaching program is seen as an important, needed, and innovative continuing education activity by groups of highly motivated participants. These participants are serious adult learners and their suggestions for improving the program should be taken seriously. Among the more important themes contained in their comments are requests for: improved, up to date, and country specific reference materials; increased use of group demonstration and counseling sessions; greater publicity for the program and recognition for course completion; and, logistical improvements in program administration.

Recommendations

Administration and Course Management

Expand the promotion and publicity of distance learning opportunities through student advocacy, the designation of personnel at key health institutions to inform potential participants of course offerings, radio programs, and other resources.

Continue to monitor the production and distribution of course materials, manuals, and text books to assure availability to students on a timely basis.

Continue to explore formal recognition for distance teaching and related continuing education activities through affiliations with national and regional educational and training institutions.

Continue to assess target audiences for distance teaching courses to validate the appropriateness of content and level of difficulty for the wide range of health workers currently enrolled, and develop new distance teaching courses to meet identified needs.

Improve physical facilities for distance teaching centers to organize, store, and secure distance learning materials and equipment.

Distance Teaching Methods

Review orientation to distance teaching as a component of the student recruitment process in order to promote realistic expectations of the courses by the students.

Assess the need for increasing the frequency of group demonstration and counselling tutorials to reinforce learning, to promote retention of learning, to develop skills, to enhance problem solving ability, and to increase student confidence.

Build into distance teaching incentives for students to initiate and successfully complete courses. Incentives could include recognition ceremonies, notification to supervisors of participant completion of courses, featuring students and publication of lists of graduates in newsletters and on radio programs.

Promote the formation of study groups among distance learning participants in their own locales.

Develop additional strategies for student retention and increasing successful completion rates of distance learning courses, such as screening and pretesting for requisite knowledge, expediting the return of graded assignments to participants, and increasing positive reinforcement and the extent of tutor commentary on written assignments.

Continue to develop radio programming targeted for health workers and consider expansion of programs to include health promotion content designed for the general public.

Assess the effectiveness of audio cassettes as a supplemental strategy to DT courses and consider expansion of topic areas and target groups.

Training and Supervision of Tutors

Continue to train tutors to expand and to improve the quality of their comments on written assignments, and monitor tutor performance in this area.

Provide ongoing follow up workshops for tutors to further develop their writing skills for distance teaching courses, radio programs, and audio cassettes, and to improve their performance in group demonstration and counselling sessions and written contacts with participants.

Provide studio facilities for the production of radio, audio cassette, and video programs for use in the distance teaching program, and for use in training distance teaching staff to produce audio and video materials.

Provide short term national and regional fellowships and other study opportunities for distance teaching tutors.

Expansion of the Distance Teaching Program

Consider the development of new distance teaching courses focussed on the teaching of specific new skills for health workers.

Conduct a pilot study to determine the feasibility and appropriateness of using video programs to (a) complement current distance teaching audio and written materials and group demonstration and counselling contacts, and (b) to augment and reinforce new distance teaching courses devoted to skill development.

Continue to train members of the District Health Management Teams to provide group demonstration and counselling tutorials to reinforce knowledge and skills and promote their application to improve service delivery.

Explore the expansion of distance teaching offerings to meet the continuing education requirements for post basic training of selected categories of health workers.

Monitoring and Evaluation

Carry out more extensive pretesting of all distance teaching materials: courses, assignments, radio programs and audio cassettes.

Consider use of numerical instead of letter grading of distance training assignments to facilitate analysis of participant performance and comparison of pre and post test scores.

Develop new approaches to evaluating the impact of distance teaching following the completion of training:

- systematic study of participant feedback to courses, radio, and audio cassettes;

- analysis of participant performance on written assignments and pre and post tests; observe participants as they practice to assess their competence and skill level;

record participant reactions to lessons during group demonstration and counselling tutorials;

conduct of focus group discussions with participants and tutors to identify problems; and,

observe and document changes in client care and service delivery following completion of training.

Assess the listenership of current radio programs to determine numbers reached and areas served, use of radio by distance teaching participants, suitability of current time slots, need for repeated programs, etc.

Improve the monitoring of the distance teaching program by developing quarterly indicators of:

Course Enrollments

Retention and Completion

Assignments received and returned

Trends in grades and pre and post test scores and grades on Participant assignments.

Participant mix

Cost per unit of output

Arrange for technical assistance and consultation in the development of systems to implement the monitoring and evaluation recommendations.

The cost-effectiveness of distance teaching needs to be documented to illustrate the relative value of distance teaching methods vs. conventional education methods. This is essential to maintain an appropriate balance of offerings to health workers who have different degrees of accessibility to continuing education, especially workers in remote areas.

HEALTH PLANNING AND MANAGEMENT PROGRAM

Findings

The assessment is highly positive. The HPMU staff are well trained and all have considerable experience in their areas of expertise. They function well as an interdisciplinary team and are respected by counterpart collaborators and AMREF staff. The group is highly productive, hard working, dedicated, and professional.

In terms of the specific statement of "Expected Achievements and Accomplishments" contained in the matching grant agreement, a Health Planning and Management Unit has been established within AMREF which serves as a regional center for improvement in the management of resources available for health. During the period of the matching grant, the HPMU has:

Supported the implementation, monitoring, and evaluation of health planning and management development activities. The HPMU has trained all 40 DHMTs (District Health Management Teams) in Kenya in the preparation and submission of annual health plans.

Developed learning materials and guidelines for MOHs and PVOs within the region in the area of planning and management. The HPMU has conducted 28 problem oriented management seminars for Government and private institutions in Kenya and Uganda. The HPMU has also conducted 4 post training follow up visits to assist in the application of newly acquired knowledge and skills.

Carried out consultancy assignments in the area of health planning and management. The HPMU has conducted 13 consultancy assignments in Kenya and Uganda including logistical support in the printing of needed forms, development and implementation of proposals for intensifying Primary Health Care programs in selected districts, creation of manuals for planning and Managing Primary Health Care programs, and analysis of logistics and transportation systems.

Carried out health systems research. The HPMU has conducted and participated in 5 health systems research projects and surveys including the Kisumu baseline study, transportation studies, studies of alternative approaches to district diagnosis, and the Provincial and District Health Care study.

Initiated and formulated health management projects. Most of the projects referred to in this section have been initiated and formulated by the HPMU in close collaboration with the MOH, RHMTs, DHMTs, and PVOs.

Provided technical inputs to AMREF's own projects having a health management component. Technical planning and management inputs to AMREF's own projects is informal and takes place during the day to day interactions with staff

from other units. In fact, the HPMU is not expected to provide such technical inputs routinely as it is the mandate of the project management department to do so. Nevertheless, the HPMU has made noteworthy technical contributions to the operations research project on district diagnosis being carried out in conjunction with larger efforts in Kibwezi district, AMREF's strategic planning process, and the post basic community health course.

These achievements and accomplishments are the outcomes of a process that usually involves discussions and meetings to identify problems and to develop solutions. These deliberations may take place at the Ministry of Health or at Provincial or District levels or with the management of PVOs or training institutions. Once a mutually agreed upon solution is identified, the organization involved will formally request AMREF assistance. Through this process, the HPMU (as is the case with other AMREF units) is seen to be responsive to requests by its collaborators and the problem-oriented approach leads to the development of well-defined projects tailored to meet the needs of particular organizations.

Recommendations

Strategies

Continue to pursue the central strategy of problem-oriented planning and management assistance in training, technical assistance, and operations research.

Continue to develop and nurture working relationships with the Ministry of Health, Provincial Health Management Teams, District Health Management Teams, and hospitals and health centers to infuse management training and improved management practices throughout the Government health care system.

Continue to work with private voluntary, non governmental, and other organizations in management training and management consultations.

Continue to collaborate with basic training institutions to provide management training to staff and to promote the inclusion of management topics in the basic curricula of these institutions.

Reexamine the marketing strategy for HPMU training, consultation, and operations research activities to explore opportunities for developing fee for service and cost recovery approaches. Continue to leverage resources from other organizations and seek ceilings in USAID grants, contracts, and cooperative agreements to facilitate ease of access to mission funds (through "buy-ins") for specific country activities.

Expansion of Programs

Develop additional training modules on specific management topics such as MIS, supervision, training of trainers, monitoring and evaluation, and proposal development.

Consider approaches to increasing the duration of the current management training offerings from one week to two or three weeks and including in-depth coverage of topics included in the new modules.

Use pre and post testing in management training workshops to assess participant training needs and to validate learning.

Promote efforts to include top management, especially physicians, among the participants of institution based management training seminars.

Expand post training follow up and technical assistance to participants of management training seminars to evaluate the extent to which new learning is applied on the job and to help and encourage trainees to apply new concepts and skills to improve service delivery.

Include training of trainers modules in management seminars to enable participants to be more effective in training operational staff at their institutions.

Promote the exposure of country based staff to management training in the region by using such staff as facilitators in other countries and in regional training activities.

Expand approaches to cost recovery and self sufficiency of training, consultation, and operations research services provided to other units in AMREF; to PVOs, NGOs, and USAID Cooperating Agencies; and to private sector organizations in need of these services.

Train MOH counterparts at all levels of the health care systems in the region to participate in and to conduct HPMU activities.

Initiate liaison and sharing of training materials and approaches with other organizations involved in management training in the region.

Monitoring and Evaluation

In addition to current practices of evaluating the process and logistics of training and limited follow up of trainees, HPMU should use pretests and post tests to measure knowledge gain, group discussion techniques (focus groups), and quantitative surveys such as the instrument used during the evaluation to evaluate the impact of training and employ findings to improve future training offerings.

In all efforts to evaluate the impact of training, seek both qualitative and quantitative evidence of improvements in service delivery.

Develop systems to document the cost per unit of output of activities to facilitate cost effectiveness analysis, e.g., cost per workshop, participant, consultation, and operational research project.

Conduct operational research studies on the process and impact of the recommendations made for improvement in the management training offerings, such as:

inclusion of training of trainers content to promote the multiplier effect of training.

the utility of post training field follow up and technical assistance.

the usefulness of new modules and approaches to expanding the duration of training.

Document the impact of HPMU technical consultations and operations research in terms of findings, implementation, generalizability, and improvements in service delivery.

JOINT DTU AND HPMU FINDINGS AND RECOMMENDATIONS

Findings

The concentration of HPMU efforts on management issues in health care delivery and the development by the DTU of a distance teaching course on management suggest a natural area of joint endeavor for the two units. To date collaboration between the two units has been minimal and only informal contact was made during the development of the distance training management course.

Collaboration in this area would strengthen the programs of both units. The HPMU would have access to distance teaching materials on management topics to reinforce its workshop training and to offer to workshop participants who wish to develop management training programs in their own institutions. The DTU would have access to the considerable expertise available in the HPMU for refining its current management course and for developing a manual for use by course participants. This expertise would also be helpful for developing new distance courses on specific management topics at the same time as these new topics are developed for use in the HPMU management training program.

Recommendations

Integrate HPMU management workshops with the DTU management course to enable workshop participants to function as more effective supervisors and mentors for workers in their own organizations who are enrolled in the DTU management course.

collaborate in developing a manual for the current DTU management course and HPMU management workshops.

review and modify management course offerings.

include in HPMU management seminars, instruction in the use of the distance learning management course.

Conduct operational research studies on the process and impact of the recommendations made for improvement in the distance training and management training programs.

As the HPMU develops new management training modules for its management training seminars, these modules should be considered for adaptation as distance training courses.

Explore opportunities for HPMU and DTU staff exposure to other similar regional and country programs and to training and other professional development activities. In this regard, USAID should promote the involvement of AMREF's professional staff as consultants and technical resources in proposal review and mid term and end of project evaluation processes in other projects.

AMREF FINDINGS AND RECOMMENDATIONS

Findings

AMREF is involved in an ongoing strategic planning process that involves the AMREF network of organizations, Governments, donor agencies, and other organizations involved in health program development in countries in which AMREF operates. It is noteworthy that both matching grant program components are featured prominently in the evolving strategic plan. Among the elements of the strategic plan is the development of a new balance between program and project funding. The current matching grant has expired and as AMREF prepares to submit an application for a second grant, mechanisms need to be developed to assure the continuity of programs in the periods between project funding.

AMREF Nairobi is also involved in a major reorganization and senior staff recruitment effort. The reorganization as currently contemplated will give increased prominence to the HPMU by elevating it to department status. The DTU will remain a unit in the training department. The reorganization promises to strengthen the program and project support functions in AMREF. This is of special interest to the evaluation team in light of observations made by USAID officials concerning needed improvements in preparation of technical proposals and in reporting on grant supported activities.

The reorganization also holds promise for providing needed evaluation services for DTU and needed financial management support for both the DTU and HPMU. To date, the newly formed evaluation department has served as a consultant resource when monitoring and evaluation questions are raised in project development and implementation. The evaluation unit also serves as an evaluation coordinator, keeping track of scheduled evaluation requirements of grants and acting as an intermediary for hiring evaluation consultants. The financial management unit provides monthly expenditure statements and financial status reports to all units and aside from the usual and expected delays in postings, these reports enable project directors to monitor the financial status of their activities. More assistance is

required by the operating units if they are to be able to report on costs per unit of output. The reorganization should address the needs of units such as the DTU which provides training services to large numbers of health workers and generates a substantial data base on program activities. To date the unit has had to rely on a computer service whose first priority was to serve the financial management needs of the organization. The DTU invariably came out second best and monitoring and evaluation of the program suffered.

The principal functions of the New York office include project development, identification of new funding sources, liaison with the full range of organizations involved in health and development, marketing, recruitment, and procurement. In the case of the matching grant, AMREF New York is the designated grantee as a United States registered PVO. Although the legal relationship is between USAID and AMREF New York, in fact project activities are carried out by AMREF Nairobi. Project management and support is provided by the Project Management Department in Nairobi. All substantive and financial documents are sent from Nairobi to New York. The substantive reports are forwarded to USAID. The financial reports are reviewed and submitted to USAID by AMREF New York.

Recommendations

AMREF should continue to provide funding for the activities of the DTU and HPMU (not currently covered by specific project funding) in the interval between the end of the current matching grant and the anticipated award of a successor matching grant.

AMREF and USAID should develop new reporting formats, new reporting periods, and new channels of communications for the substantive aspects of matching grant activities. Reports from AMREF should be submitted directly to AID/Washington and should include:

Progress in accomplishing project objectives in the report period.

Cumulative progress in accomplishing objectives since the start of the project.

Narrative description of accomplishments in the report period.

Discussion of problems and constraints encountered in the report period and how they were resolved.

Plans for the next report period.

AMREF should retain the current systems of financial reporting to USAID, i.e., AMREF/Nairobi to AMREF/New York to AID/Washington.

As AMREF reorganizes and as new key staff are recruited, provisions must be made for HPMU and DTU access to computer processing and evaluation services to assure appropriate monitoring and evaluation of these programs. If necessary, dedicated data processing should be considered for the monitoring and evaluation of the DTU programs.

As AMREF reorganizes and as new key staff are recruited, new approaches should be institutionalized for proposal preparation and submission.

AMREF should continue to work with National Governments and Ministries of Health to promote commitment to HPMU and DTU programs. Budget provision, continuity of appropriately trained staff, and recognition of DTU and HPMU training programs are essential ingredients of future phaseover and sustainability.

PURPOSE AND BACKGROUND

PURPOSE

As stated in the Scope of Work (Annex B), the purpose of this evaluation was to "assess the accomplishments and impact of health activities in countries in East Africa funded under this Matching Grant; and to evaluate AMREF's headquarters performance in providing oversight and support to field activities. Project performance and effectiveness will be measured against the goals and objectives established in cooperative agreement PDC-0276-G-SS-6126-00 (from 9/86 to 9/90)."

The evaluation team was charged with meeting the following objectives:

Assess progress towards and effectiveness in carrying out the health education and training projects specified in the grant, including an assessment of the impact of training on health professionals.

Analyze and evaluate AMREF's technical, financial, policy and programmatic oversight and support to field activities. Particular attention is to be focussed on the implications of AMREF's headquarters being located in Kenya when all AID communications occurs with the New York office.

Assess AMREF's capacities for international development and training and to determine any problems and constraints that may exist to impede achievement of the goals and objectives of the cooperative agreement.

Develop specific recommendations regarding technical modifications and headquarters responsibilities.

Assess whether activities complement the programs and policies of AID and the host governments.

Examine the steps being taken to institutionalize projects to assure the sustainability of benefits.

Assess the potential for project expansion and to recommend actions that could encourage such expansion.

In addition to the purpose and objectives spelled out in the formal Scope of Work, the evaluation team was asked to complete its work in early August so that the report and recommendations

might be used by AMREF in preparing an application for a successor Matching Grant for continued support of the Distance Teaching and Health Planning and Management Programs.

BACKGROUND

Building on a reputation and communications system set up by the Flying Doctor Service in the late 1950s, AMREF (The African Medical and Research Foundation) has gradually developed activities in the fields of health education, training, community health, health planning, and management and evaluation, and has expanded its original clinical activities and research. AMREF was in the forefront of the international recognition of the importance of primary health care. Through its work in health behavior, continuing education, development of learning materials, communicable disease control, community-based health care and other activities, AMREF is recognized as a health institution which is an important resource for the region, governments, NGOs, universities and donors.

AMREF is an international NGO with its headquarters in Nairobi and operational country offices in Tanzania and Uganda and project offices in Sudan and Somalia. The Nairobi office currently serves both as headquarters and as the Kenya country office. With a current annual budget of some \$13 million, support from a multiplicity of sources, and a staff of more than six hundred (the great majority of whom are Kenyan, other African nationals, and nationals of developing countries from other regions), AMREF is an indigenous international NGO with a thirty-plus year history in the development of the health care systems of the region.

In 1986 AMREF was awarded a three year \$613,000 Matching Grant to carry out programs in Distance Teaching and Health Planning and Management. In 1989 AMREF was provided with a one year no cost extension for this grant. The programs supported under this grant are:

Health Planning and Management

A Health Planning and Management Unit (HPMU) was to be established in AMREF's operational headquarters in Nairobi to provide management assistance to health professionals in East Africa employed by NGOs as well as MOH staff at the local district, and regional levels. Training was to be available to organizations in East Africa requesting assistance and would address such topics as employee

motivation (in the absence of incentive systems), conflict resolution, staff orientation and development, and linkages between project budgeting, planning, and implementation. Special training activities would also be developed that focussed on sustainable community-based child survival and family planning programs.

Distance Teaching

Funds were provided to improve and expand its Distance Teaching Unit (DTU), which prior to this grant had taught four courses to 800 health professionals throughout Kenya. The program is intended to reach health professionals delivering services in rural areas who have no access to continuing education through other mechanisms. AMREF's distance teaching at the time of the award of the grant was characterized by students learning at their own pace through written assignments (which are reviewed by instructors and returned to students) supplemented by radio broadcasts and assigned readings. Improvements through this project were to include: training of DHMTs (District Health Management Teams) to organize clinical practice sessions in the field for course participants; development and production of additional radio training programs; distribution of Afya (a quarterly health publication) to all health centers and dispensaries in Eastern Africa (approximately 5000); and provision of technical assistance to distance teaching units in other countries.

EVALUATION TEAM COMPOSITION AND METHODS

COMPOSITION

The evaluation team was comprised of a core group of four persons: two external evaluators and two AMREF department heads.

External Evaluators

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The external evaluation team requested the full participation of the DTU and HPMU heads in all aspects of the evaluation process. This participatory process offered three important benefits to the evaluation effort with no compromise of the professional objectivity of the external team members. First, the AMREF team members were able to provide a detailed contextual framework that could not be obtained by external evaluators operating alone. Second, as participants in the development of recommendations, the AMREF team members are able to assess the likelihood of being able to carry them out. Finally, and of greatest importance, as members of the evaluation team, the AMREF unit heads and their professional staffs were involved in an intensive self-study

process in planning for and carrying out the evaluation. This self-study process is critical, if evaluation is to lead to program improvement.

METHODS

The focus of the evaluation was on the technical aspects of distance training and on the management training and other substantive planning and management activities carried out under the matching grant. The evaluation team did not attempt an overall evaluation of AMREF programs or management. Attention to these areas was pursued only as far as specifically called for in the Scope of Work (see Annex B).

The methods used in the evaluation of AMREF's matching grant for Distance Teaching and Health Planning and Management, included:

Pre-departure

Telephone briefings with the AID/Washington Cognizant Technical Officer.

Briefings at AMREF's New York office.

Review of the Scope of Work of the evaluation and other background documents provided by AMREF New York.

Exchange of correspondence and conference calls between the external evaluators and the heads of the DTU and HPMU to clarify the scope of work and to prepare plans for the actual conduct of the evaluation in Kenya and Uganda.

Preparation of instruments and data analysis formats for surveys of DTU and HPMU training program participants.

Development of a bibliography of current literature on Distance Learning (copies of all documents were eventually left with the DTU in Nairobi).

In-country: Kenya and Uganda (July 23 - August 9, 1990)

Meetings and discussions with professional staff of the DTU and HPMU.

Meetings and discussions with AMREF top management and staff of substantive and support departments.

Meetings and discussions with Ministry of Health, Government, and other institutions' officials.

Extensive collection and review of documentation made available from the files and working papers of the DTU and HPMU.

Review of "products" prepared by the DTU and HPMU including: training materials, courses, lessons, assignments, evaluation instruments, radio and audio cassette programs, technical reports, and operations research studies.

Review of the extensive data base maintained for the DTU including: enrollments, completions, dropouts, lessons and assignments completed, pre and post test scores, and participants by job category and district.

Meetings and discussions with AID Mission Health, Population, and Nutrition Office staff in Nairobi and Kampala.

Surveys of, and discussions with, current and past participants of DTU and HPMU training activities. The survey instrument used was an adaptation of a technique used in Columbia University's International Training Program. The technique was designed for rapid feedback on the process of a particular training session and was adapted to give rapid feedback on twelve items of interest to distance trainers and management trainers. The items were revised in Kenya to include questions suggested by AMREF staff and to include language and usage common to East Africa. A copy of the instrument is included in Annex F. The analytical method is available in, Weatherby, N., and Gorosh, M., "Rapid Response With Spreadsheets," Training and Development Journal, Vol. 43, No. 9, September 1989.

Review of the qualifications and experience of DTU and HPMU professional staff.

Preparation of a draft report submitted to AMREF, Kenya and to the USAID mission, Nairobi prior to departure.

Debriefing with AMREF, Kenya and USAID, Nairobi staff prior to departure.

Post-return

Debriefing at AMREF, New York.

Preparation of final report based on comments received on draft.

Debriefing at AID, Washington.

DISTANCE TEACHING BACKGROUND, FINDINGS AND RECOMMENDATIONS

Background

The ultimate goal of the DTU program is to improve the health of people in the rural areas of Eastern Africa. The purpose of the program is to establish and extend sustainable distance education in MOH in Kenya, Uganda, Tanzania and Sudan as well as offering technical assistance to MOH and other NGOs.

The target group is the rural health workers who have little opportunity to share experience with other professionals or to continue their education. There are over 33,000 health workers in Kenya alone who are and will potentially benefit from continuing education as well as health workers in Tanzania, Uganda and the Sudan.

Distance Teaching is a proven alternative method to providing quality education that meets learning needs of people in isolated areas in a cost effective manner. This method allows people to remain at their homes or places of work at the same time they are enrolled in courses. In this way they continue to provide services which are in short supply while they are improving their ability to provide the service. Distance teaching through radio and correspondence courses is an efficient way of reaching rural health workers and often the only way in which they can be reached. It is unlikely that the number of health workers that need continuing education can be reached by conventional courses nor will there be sufficient resources to do so.

AMREF in conjunction with ministries of health in Eastern Africa has been providing distance education programs for health workers for the past six years. The programs have been implemented by AMREF Distance Teaching Unit which is a part of the Training Department. The distance teaching programs are designed to provide continuing education to health workers to maintain knowledge gained during basic training and to learn new information and skills focusing on community-based health care and primary health care.

General Findings

The Distance Teaching Unit (DTU) has successfully met the objectives delineated at the beginning of the grant period. The following general objectives have guided the unit over the life of the grant:

To continue to initiate, develop and use distance learning materials for health workers as a method of continuing education.

To initiate the development of radio programs for health workers and broadcast them on the national broadcasting stations.

To assist AMREF project managers in other countries to run distance teaching in support of existing continuing education programs.

To develop in the District Health Management Teams the capability to organize practical demonstrations to supplement distance teaching.

To establish contact and collaboration with other distance teaching institutions in Eastern and Central Africa.

To provide technical assistance to ministries of health in developing distance education Strategies.

An original objective to distribute Afya, a quarterly health publication, to all health centers and dispensaries in Eastern Africa was eliminated from matching grant activities and implemented with other funding.

The DTU has implemented a number of strategies to achieve the purpose and objectives of the distance teaching programs (1986- 1990) that have been effective in reaching over 5000 health workers in upgrading knowledge, attitudes and skills as follows:

Identification of topics to be covered based on surveys of need and observed deficiencies.

Training of commissioned writers for distance education materials.

Training of tutors and writers to design course materials.

Training of tutors to develop, produce and evaluate radio and audio cassette programs.

Training of District Health Management Teams (DHMTs) to carry out practical demonstrations and to produce audio cassette programs.

Liaison and provision of technical assistance to Ministries of Health and Departments of Education to support distance education at the district level.

Provision of consultation to MOH in Uganda, Tanzania, Sudan, Somalia, and Ethiopia.

Evaluation of distance education programs and learning materials.

Distance Teaching Methodologies

A review of evaluation data, participant feedback from letters, and on-site group discussions held by the evaluation team revealed a positive impact on health workers in terms of increased knowledge and skills obtained from distance teaching methodologies.

The distance teaching methods utilized during the grant period were the following:

Distance teaching courses: Ten new courses have been developed and five others have been adapted for use in other countries in addition to the countries where they have been developed. Each course includes lessons, study guides which contain structured teaching and self-evaluation questions, reference books or handouts and assignments. The unit assignment for each lesson is returned by mail to designated DT Centers where they are marked and comments made by tutors. Student questions are responded to (again, by mail) by the tutor and explanations are provided.

Radio Programs: 191 radio programs have been produced targeting health care workers. At the end of every 15 minute program is a group learning activity to which the audience is asked to react and send their responses to the DTU. The responses reviewed by the evaluation team revealed an enthusiastic and highly motivated audience.

Audio Cassettes: 38 audio cassettes have been produced and are being used in the pilot districts to augment radio programmes with more specific information to health workers. It is generally accepted that there is poor reception of radio transmission in some areas and also that certain information for health workers cannot be aired because of the secondary audience.

Demonstrations: The purpose of the demonstrations is to provide health workers with supervised learning experiences in selected areas in order to improve clinical skills and clinical management of clients. DHMTs have been trained in five districts in Kenya and in one district in Uganda to provide supervised demonstrations to health care workers to increase their practical skills and to teach new skills.

Workshops: Three course writers workshops of 3 stages each were conducted and a total of 25 ministries of health officers were trained. As a result of these workshops 5 new courses were developed and are being used while 13 others are in the final stage.

Five audio/radio production workshops have been held and a total of 36 ministries of health and AMREF staff have been trained and used to develop the materials.

Consultations: The DTU has provided consultations to Ministries of Health on the establishment of distance teaching programs and has supported project managers in other countries to develop distance teaching methodologies as components of existing continuing education programs.

The following DTU table provides a summary of DTU activities and accomplishments.

Reports on Distance Teaching USAID Matching Grant Activities and Accomplishments

Objectives	Sept - Dec 1986	Jan - Dec 1987	Jan - Dec 1988	Jan - Dec 1989	Total
1. Develop 6 courses	<p>3 courses developed for Kenya adapted for Uganda.</p> <ul style="list-style-type: none"> o Communicable Diseases. Sent 2 participants to the Writers Workshop run by the University of Nairobi. o Child Health o Communicable Diseases o Community 	<p>3 stages Writers Workshop on Designing and Developing Distance teaching material (print) completed with 10 courses in draft form.</p> <p>4 countries represented and a total of 11 people completed the 3 series. 4 courses completed for Sudan but not used because of security. Courses on:</p> <ul style="list-style-type: none"> o Maternal & Child Health/Family Planning o Immunizable Diseases and Control of Diarrhoeal Diseases o The Six Common Parasitic Diseases o Environmental Health 	<p>4 new courses for Uganda on</p> <ul style="list-style-type: none"> o Immunization and control of Diarrhoeal Diseases o Management of Rural Health Facilities o Management of Essential Drugs o Environmental <p>1 course completed for Tanzania in</p> <ul style="list-style-type: none"> o Family Planning in Kiswahili o Writers workshop (3 stages) organized for Tanzania and 9 courses in draft. <ul style="list-style-type: none"> o 2 Courses for Kenya o Family Planning o Helping Mothers Breastfeed o Environmental Health course adapted for Kenya 	<p>Writers Workshop 14 people from 6 countries attended 7 courses in draft form developed. Commissioned Writers and 3 courses completed on:</p> <ul style="list-style-type: none"> o Mental Health o Obstetrics and Gynaecology o Medicine <p>3 courses adopted for Tanzania but still in draft form</p> <ul style="list-style-type: none"> o Unit on AIDS 	<p>25 Ministries of Health Officers trained to develop correspondence courses.</p> <p>10 new courses - Unit on AIDS. Completed and are being used.</p> <p>4 courses adapted and being used in other countries.</p> <p>4 new courses completed but not used because of political situation in Sudan.</p>

Objectives	Sept - Dec 1986	Jan - Dec 1987	Jan - Dec 1988	Jan - Dec 1989	Total
2. Develop 6 and produce radio programmes	Workshop to establish the modalities of using radio. Participants were drawn from AMREF, Ministries of Health and Kenya Institute of Education.	52 radio programmes were broadcasted on Voice of Kenya	52 radio programmes broadcasted on VOK. Managed to get time stop for repeat and 40 of the 52 were actually repeated (Thursday actual and Saturday a repeat). 22 programmes were broadcast on Radio Uganda. Radio programme production workshop attended by 14 participants from Kenya, Uganda, Tanzania, Sudan, and AMREF. Somalia could not get visa on time.	52 programmes on VOK 36 programmes on radio Uganda 4 programmes on radio Tanzania. Held a radio programme Workshop in Uganda 40 programmes produce.	129 programmes on VOK 58 programmes radio Uganda 4 on radio Tanzania 22 Ministries of Health and AMREF officers trained in the production of radio programmes.
3. Audio cassettes (added objective) instead of Afya			Workshop on production of Audio Cassettes 14 Participants from 2 District Health Management Teams in Kenya. Other MOH and AMREF staff.	20 Audio cassettes programmes produced together with their supportive material 18 other adapted from radio programmes.	20 audio programmes distributed 18 adapted from radio
4. Train District Health Management Teams to carry out Practical Demonstrations		Held discussion with 7 districts Health management Team 4 Practical demonstrations/ counseling held Nyamira, kiambu, Gatundu and Thika Some 4 DHMTs trained	2 Practical demonstrations/ counseling held in Uganda trained tutors of Mbale Health Manpower Development to carry out this activity.	1 Practical demonstration in Nyamira	7 Practical demonstrations 5 in Kenya 2 in Uganda 6 DHMTs trained 2 centres in Uganda where tutors of the centres have been trained
5. Provided technical assistance to the Ministries of Health	Provided technical assistance to Ministries of Health Uganda, Kenya, Tanzania	Technical assistance to Ministries of Health in Kenya, Tanzania, Uganda, Sudan, and Zimbabwe, Somalia, Refugee Health Unit University of Mozambique Department of Paediatrics Makerere University	Technical assistance to Kenya Christian Ministries of Health Botswana, Ethiopia and all the others where we started.	Institute of Education Medical Association Provided technical input The Commonwealth of learning The Kenya National Education for All Commission	Provided technical assistance to 7 Ministries of Health and 4 others.

Objectives		Sept - Dec 1986	Jan - Dec 1987	Jan - Dec 1988	Jan - Dec 1989	Total
6. Increase the number of health workers doing correspondence courses. Figures are only for Kenya.	No. enrolled	122	423	511	636	1692
	No. completed	28	104	146	281	559
	Lessons sent out	1020	3644	4037	5046	13747
	Assignments Marked	844	2769	3202	3837	10652
7. Increase the distribution of Afya. Changed this objective to initiate the use of audio cassettes (see earlier objective) and develop more correspondence courses and frequency of radio programmes.						
6 Evaluation			Developed pre & post tests for Child Health, Community Health and Communicable Diseases	Developed pre & post tests for Family Planning and Helping Mothers to Breastfeed	Developed pre & post tests for Mental Health, Medicine, Obstetrics Gynaecology Environmental Health	9 pre & 9 post tests

The number of participants to the correspondence courses increased. By 1986 the total enrolment per year was less than 250. By December 1989 the total enrolment per year had increased to 636 in Kenya alone and about 200 in Uganda.

ADMINISTRATION AND COURSE MANAGEMENT

Promotion and publicity of DT courses

Students expressed their opinion that DT courses should be more widely promoted in their institutions and communities. Promotion of DT courses is through informal student and tutor advocacy of the courses, through formal announcements sent to health care institutions, and through radio announcements. Course announcements sent to health care institutions are often not posted at all, or are not in central locations visible to staff. The designation of personnel at key institutions to post course and radio program announcements and to advocate the value of DT activities could improve student recruitment efforts.

Management of learning materials

DT print materials, audio cassettes and radio programs are written and produced by three methods:

Commissioned writers who are specialists in the content areas

Workshops for writers and producing materials

DTU staff writing and production

Materials are reviewed by MOH officials and specialists in the field for appropriateness, level of difficulty, accuracy of content and comprehensiveness. The validity of learning materials is pre tested with a small group of potential students and revised as indicated.

The importance of distributing these materials to DT students on a timely basis is recognized if students are to complete the study guides and reading assignments. Distribution of textbooks and course materials on a timely basis after the students enrol in a course needs to be monitored in Uganda.

Assessment of DT learning materials

In order to establish sustainable distance teaching programs as an integral component of continuing education programs in Ministries of Health, educational materials need to be

relevant and culturally specific, reflect state of the art knowledge and skills, and meet the contemporary learning needs of health workers.

The DTU has developed print, radio scripts, and audio cassettes that are content specific and appropriate for health workers. Workshops for writers and tutors have facilitated the production of learning materials that are based on adult learning principles and that are relevant to the targeted audiences.

A goal of the DTU is to train staff in Ministries of Health to develop their own materials and courses to meet identified needs. Workshops have included participants from Kenya, Uganda, Tanzania, and the Sudan. Educational materials are pre-tested for readability, level of difficulty and relevance. Content experts review the materials for accuracy. Materials are developed using a programmed teaching methodology appropriate for adult learners. Each unit includes a pre-test and post-test, objectives, presentation of content, assignments, and self and tutor evaluations. References to text books and supplemental materials are integrated throughout each unit. While this process is appropriate and leads to the development of sound learning materials, greater use might be made of existing materials prepared by other organizations for similar purposes.

Radio and audio cassette scripts are thoroughly researched and thoughtfully written giving attention to priority of concepts, organization of material, and clarity of expression. Delivery is programmed to allow for note taking by listeners. Self evaluation and discussion questions are included and students are encouraged to respond in writing. Case studies and problem solving methods are utilized to present content and assignments. Recommendations for the continued improvement of radio and audio cassette materials include the following:

Periodically reassess the learning needs of each cadre of health worker.

Pre-test all materials prior to inclusion in distance teaching courses.

Validate the accuracy of content through a panel of experts.

Update materials on a regular basis.

Pre-test radio and audio cassette scripts on targeted listener audiences.

Prepare new course and supplemental materials based on assessment of needs and at a level of difficulty that challenges each cadre of health worker.

Formal Recognition for DT

Motivation of large numbers of health workers to complete DT courses will most likely continue to be a constraint due to the lack of formal recognition for completing continuing education courses. Intensified collaboration with the MOH and Directorate of Personnel Management is needed to plan strategies to include recognition of DT courses for promotion. In addition, linkages with local, regional and international universities and medical training college needs to be explored as to the feasibility of formal recognition for continuing education unit and/or credit granted by an educational institution. Core public health courses such as the DT course in Community Health would have the highest potential for acceptance by educational and training institutions.

The MOH Counterpart to DTU is the Continuing Education Department. Distance teaching is a well established and functioning strategy for continuing education within the MOH of Uganda, however, more efforts are needed to promote distance teaching in the Ministries of Health of Kenya and Tanzania. The Ministries perceive the development of DT favorably in view of the increasing costs of formal courses and the relative low cost of the DT strategy. It is therefore in the best interests of the MOH to expand DT as a continuing education strategy. The Kenya MOH should assume a larger commitment to allocating personnel for distance teaching program development and implementation. Because distance teaching is supported by the development of practical skills the MOH also needs to play an increasing role in the implementation of practical demonstrations.

Assessment of target audiences

The goal of the DTU is to improve the knowledge, skills and attitudes of health care workers through distance education. There is a continuing training assessment by the MOH and DTU to determine needs of health workers for continuing education. Core courses were developed, based on this assessment, to reach members of the health team in rural areas. DT courses are open to all health workers who have completed their basic training and have been working for at least one year. It is recognized that not all courses are suitable for all cadres of health workers.

Participants represent the following cadres: clinical officer, community health nurse, enrolled nurse, enrolled nurse-midwife, family planning field officer, lab technician, nutritionist, occupational therapist, medical records technician, pharmaceutical technologist physiotherapist, social worker, public health field officer, radiographer, and rehabilitation therapist. Cadres at the assistant level also are accepted into the DT courses such as: X-ray, public health, laboratory, patient attendant, pharmaceutical, leprosy, nurse attendant, immunization and medical records. The DTU staff and tutors generally accept that courses are useful to all cadres of health care workers. Course writers however, gear the level of difficulty of content and course materials to specific cadres i.e. Child Health was targeted to Clinical Officers, Family Planning to Enrolled Nurses, Environmental Health to Public Health Technicians and Helping Mothers Breastfeed to Family Health Field Educators.

DT courses are therefore targeting a specific level of health worker assuming a basic background from which to build the scope and level of difficulty. The untrained cadres have a relatively poor basic education and may find courses too difficult while the highly trained personnel may find some courses overly simplified and not specific to their needs. DTU staff have attempted to address this issue by developing supplemental written materials and audio cassettes aimed at specific cadres of health workers.

There is a need to counsel potential students regarding the purpose and level of difficulty of courses and to restrict enrolment for courses according to professional level. There remains a need to develop more specific courses to challenge

the different professional groups with a level of technical content and skill competence to meet their needs and promote continued motivation.

METHODS

Student Orientation

Orientation materials are sent after enrolment in a DTU course. Orientation materials include: a guide to studying correspondence courses, a discussion on independent learning, aims of the course, techniques for study, and a "how-to-read" section. Additional materials should be developed to present both the values and limitations of distance learning to prevent unrealistic expectations by students as to their responsibility as independent learners within a nontraditional method of teaching/learning and the expected outcomes in terms of benefits and recognition.

Group Tutorials

Group tutorials for students enrolled in DT courses are scheduled every six months in Uganda and once per year in every district in Kenya. Tutors are drawn from DHMTs, faculty of educational institutions, and AMREF staff. During the tutorial sessions, a full schedule of activities occurs as follows:

Small group sessions to discuss assignments and lessons, to clarify content, and to apply concepts to actual problems in work settings.

Small group discussions that focus on issues related to course management

Large group discussions focusing on problem solving and sharing of approaches to improve service delivery.

Informal student interactions

Demonstrations of selected skills related to the lesson

Students and tutors expressed the need for more frequent face-to-face tutorials because of the perceived and observed quality of interaction between students and tutors. The

tutors would like to assess the impact of more frequent sessions on student retention and course completion. They recognize the value of tutorials as a method of promoting student retention of learning and of enhancing problem solving skills.

Group tutorials are currently not being used in Kenya. The tutors recognized the need to expand these activities and requested future meetings to plan the logistics to operationalize this concept.

Student Retention and Completion of Courses

The course completion rate from April 1988-March 1989 was 14% of a total enrollment of 1782 in 139 courses in Uganda and the dormancy (or inactive for a period of six months) rate for the three year period between 1985-1988 was 41.3%.

For Kenya, the total enrollment for December 1986-December 1989 was 1692 and the completion rate was 559 or 33%. The dormancy rate for December 1988-1989 was 25.8%.

Both completion and dormancy rates are affected by the time period of observation. For example, in a one year time period, the completion rate would inevitably be low as many students who start a course in a year could not possibly complete 12 to 18 units in that same year. Similarly, a one year period of observation would produce an artificially low dormancy rate as all students starting in months 7-12 could not possibly meet the dormancy criterion. Improved monitoring and evaluation systems should include analytical methods to control for these factors.

An assessment interview of a group of tutors in Uganda revealed assumptions for poor student retention as follows:

Lack of student recognition for completion of courses

Unrealistic student expectations of DT and course outcomes

Infrequent face-to-face tutorials suggesting limited positive feedback and reinforcement of learning

Lack of an adequate postal system to expedite sending of materials and return of marked assignments

Lack of an adequate transportation system for students to travel to postal centers or DT centers to give and receive materials

Students expressed that their primary motivation for enrolling in DT courses was to acquire more knowledge and skills to improve their effectiveness as health care practitioners. They expressed disappointment that course certificates were not recognized for increased salary or promotion. They agreed that certificates were sometimes recognized during job interviews. Students in Uganda suggested that duplicates of their certificates be sent to their employers and that formal and public recognition be given for completion of courses. Kenya tutors validated the above assumptions and in addition felt strongly that DT courses motivated students to take additional courses and eventually enrol in post-basic courses.

Peer Study Groups

Peer study groups have not been generally initiated by or for students within their locales. Transportation is a major constraint to more frequent face-to-face tutorials. Peer study groups within districts or provinces would be a supportive method for reinforcing content and skills, sharing of information and problem solving.

STUDENT COMMENTARY AND SURVEY RESULTS

Overall the written comments, group discussions, survey results and evaluation team observations produce a most positive picture. The Distance Teaching program is seen as an important, needed, and innovative continuing education activity by groups of highly motivated participants. These participants are serious adult learners and their suggestions for improving the program should be taken seriously. Among the more important themes contained in their comments are requests for: improved, up to date, and country specific reference materials; increased use of group demonstration and counseling sessions; greater publicity for the program and recognition for course completion; and, logistical improvements in program administration.

Written comments from the DT participants in Uganda included the following suggestions and observations:

The radio broadcast program is on late when people are already sleeping so I think it should be changed.

I wish the AMREF could send us up to date journals. Some courses are difficult to understand.

Shortage of manuals for some lessons.

Frequency of face to face tutorials should be extended from once to twice a year and duration from two days to one week.

Other opportunities are needed for further studies.

DT participants in Kenya offered the following:

I would recommend regular seminars for the various courses to be arranged at least once a year. These could be used for students to come together to discuss matters affecting their effectiveness in the field. Seminars could also be used for graduation ceremonies.

Seminars and workshops should be held twice yearly.

Government should consider DT certificates as qualification for future studies.

AMREF should forward the names of hard working students for consideration for promotion and upgrading of their job groups.

I would like to have access to more periodicals, if possible.

Annual follow up by the training team, more frequent seminars, more opportunities for practical work, government recognition of certificates, and more publicity about the courses.

More frequent seminars, better publicity for distance teaching among health workers, and government recognition of certificates.

Government recognition. More references to Kenya and Kenyan conditions and examples in the course materials.

In addition to the written comments submitted by DT participants, the evaluation team conducted group discussions with participants in Uganda and Kenya. Observations and recommendations from these group discussions included the following:

Some courses need manuals and more reference materials.

Some of the terminology needs simplification.

Participants should be given files to keep course materials organized and secure.

Some of the drugs of choice in the reading materials are not available in the hospitals and clinics. (Note: essential drug lists vary from country to country and DT uses a regional Child Health Text).

Manuals are out of date for some treatments. (Note: the 1973 manual used in the Child Health Course is being revised. Supplementary up to date information sheets are used in connection with the old manual).

Tutor comments on assignments are minimal. Often answers are simply graded "right" or "wrong" with no commentary and no indication of how to improve on incorrect responses.

Group study with nearby participants is desirable but often difficult to arrange.

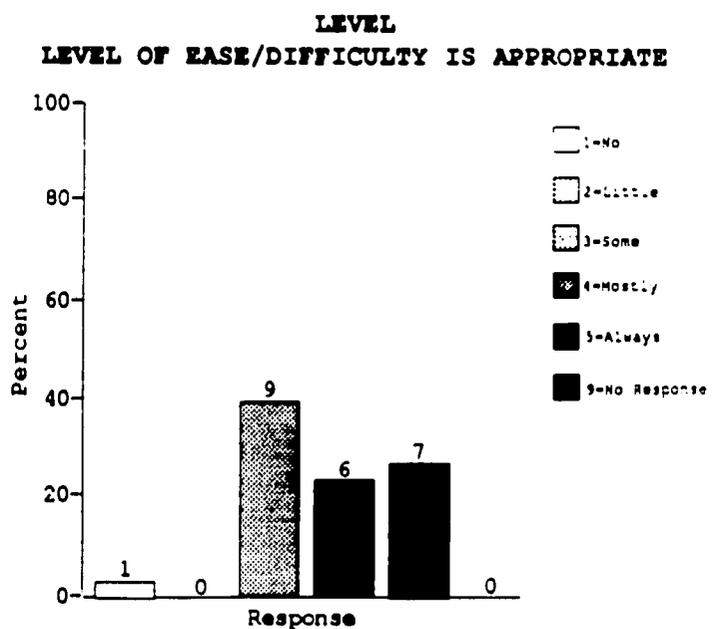
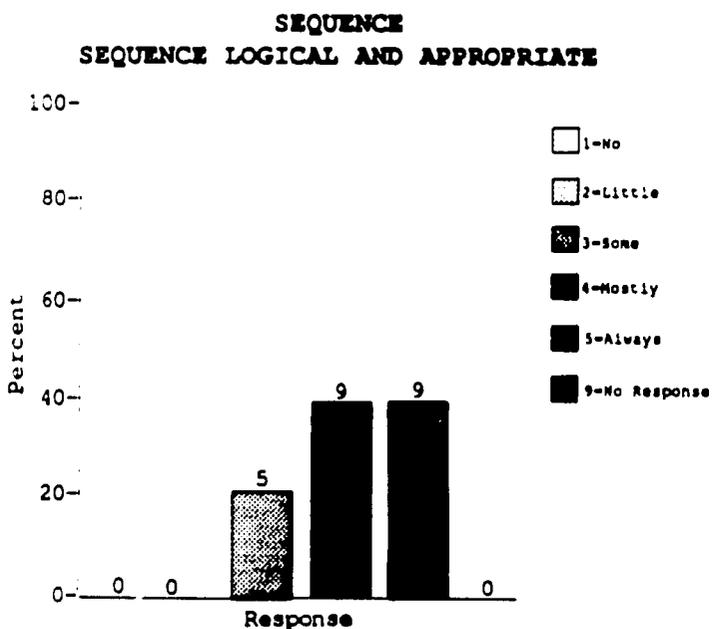
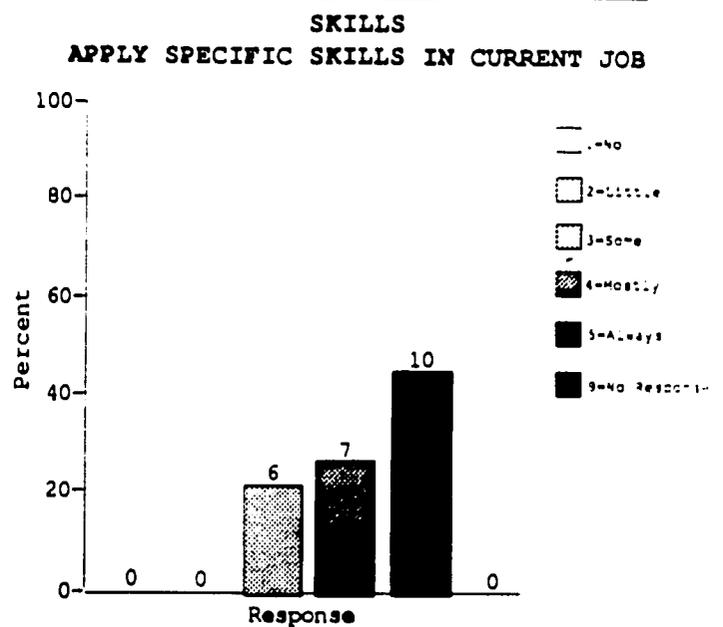
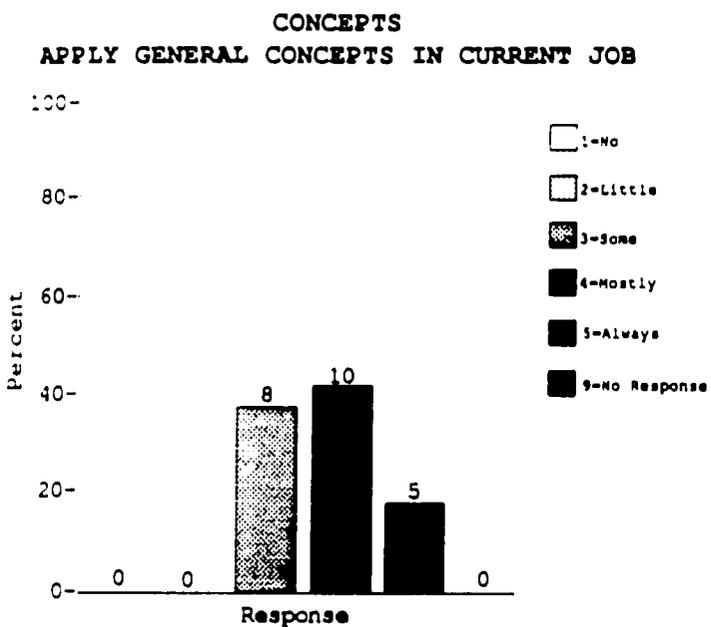
Courses produced better work organization, interpersonal relations, staff counseling, and improved skills (e.g., use of the child health card).

The clinical demonstrations in a district hospital's family planning and oral rehydration units were valuable. There was strong sentiment that these demonstrations be conducted more

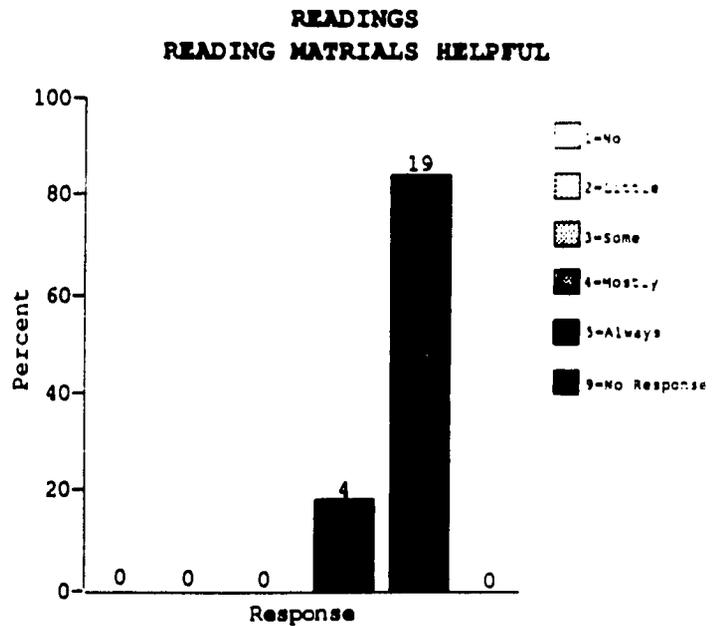
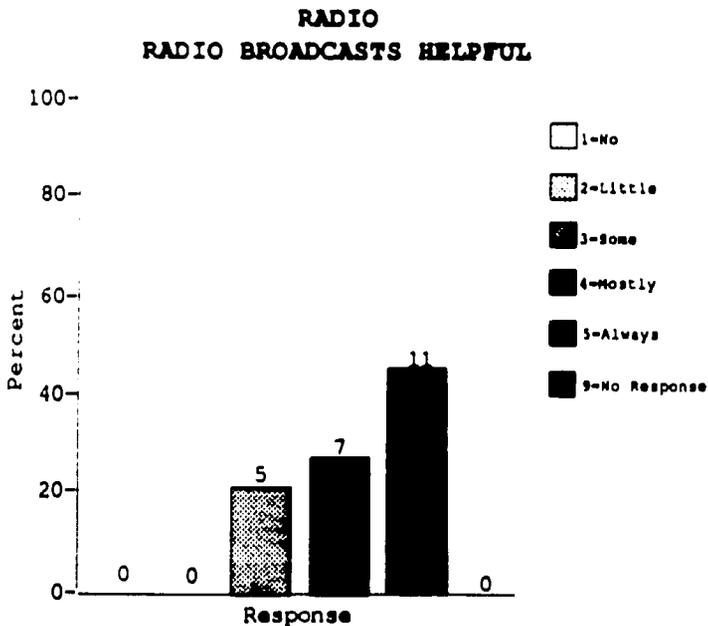
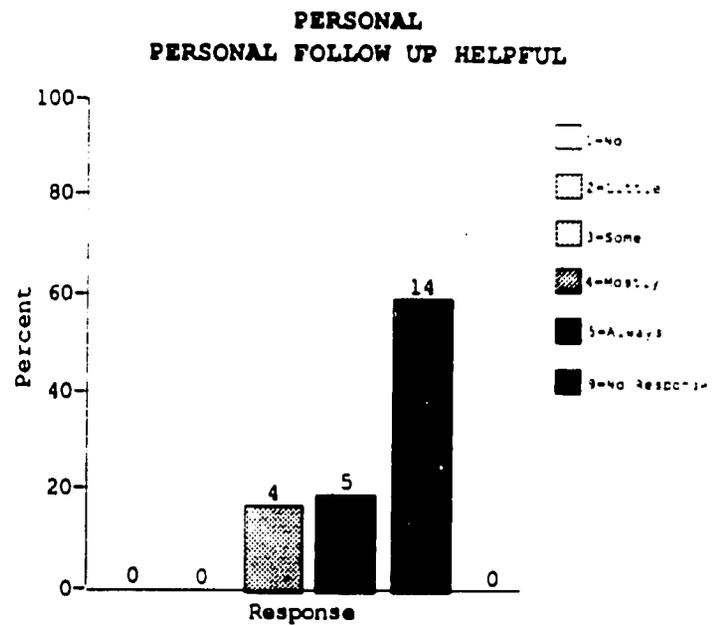
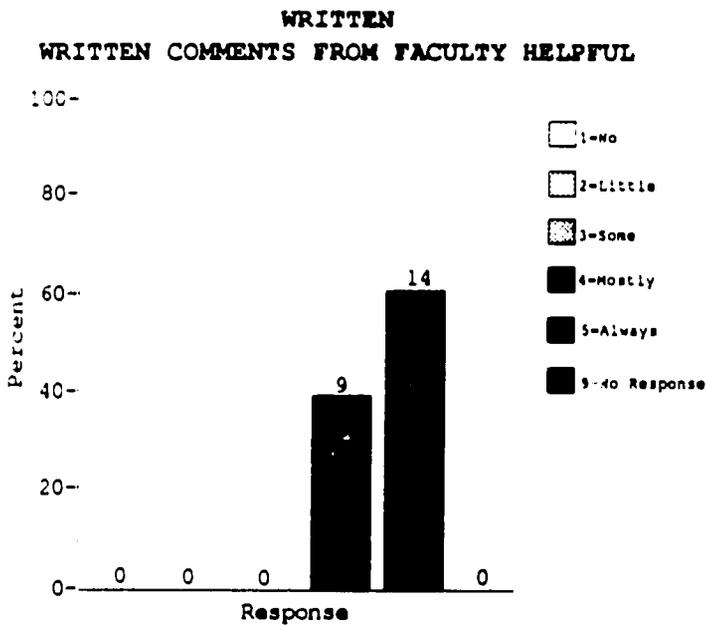
frequently and for longer periods of time. Participants were enthusiastic about working with other distance learners and welcomed the opportunity to use the tutors and hospital staff as resources.

During the course of the evaluation a survey was conducted of 23 DT program participants. The instrument used is reproduced in ANNEX F. The survey results reinforce the observations and discussions presented above. Survey findings are presented on the following pages in both tabular and bar chart formats. The results were overwhelmingly positive for all twelve items. Participants apply the concepts and skills learned on their jobs. They find the sequence and level of course materials appropriate. They find the written and personal contacts with tutors to be useful as they do the radio programs and written materials provided. Participants are satisfied with the distance teaching program and feel that their job performance, professional status, and future career opportunities are improved, although they were less positive about career opportunities than other areas.

DISTANCE TEACHING N = 23	CONCEPTS	SKILLS	SEQUENCE	LEVEL
MEANS FOR VALID RESPONSES (1 - 5)	3.87	4.17	4.17	3.78
# VALID RESPONSES	23	23	23	23
% ANS. "NO"	.00	.00	.00	4.35
% ANS. "LITTLE"	.00	.00	.00	.00
% ANS. "SOME"	34.78	26.09	21.74	39.13
% ANS. "MOSTLY"	43.48	30.43	39.13	26.09
% ANS. "ALWAYS"	21.74	43.48	39.13	30.43
% DID NOT ANSWER	.00	.00	.00	.00

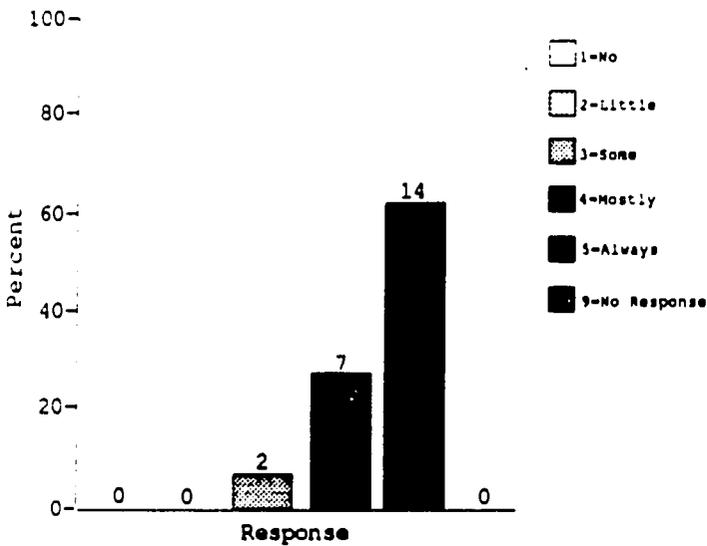


DISTANCE TEACHING N = 23	WRITTEN	PERSONAL	RADIO	READINGS
MEANS FOR VALID RESPONSES (1 - 5)	4.61	4.43	4.26	4.83
# VALID RESPONSES	23	23	23	23
% ANS. "NO"	.00	.00	.00	.00
% ANS. "LITTLE"	.00	.00	.00	.00
% ANS. "SOME"	.00	17.39	21.74	.00
% ANS. "MOSTLY"	39.13	21.74	30.43	17.39
% ANS. "ALWAYS"	60.87	60.87	47.83	82.61
% DID NOT ANSWER	.00	.00	.00	.00

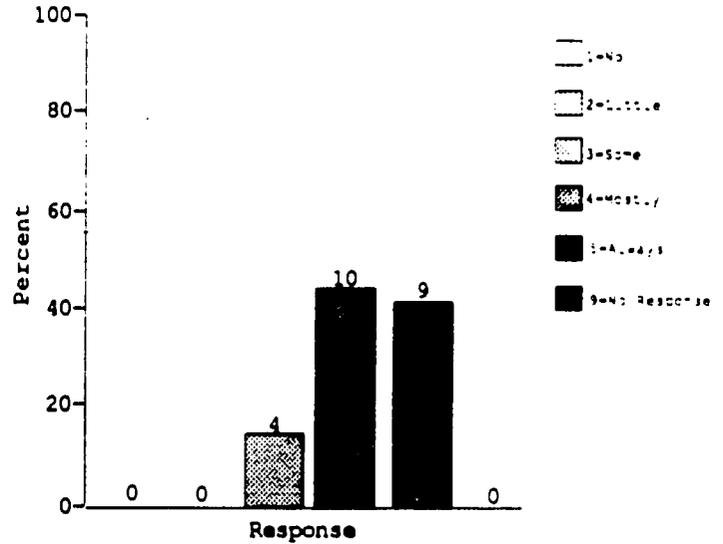


DISTANCE TEACHING N = 23	CURRENT	STATUS	FUTURE	SATISFACTION
MEANS FOR VALID RESPONSES (1 - 5)	4.52	4.22	395	4.04
# VALID RESPONSES	23	23	22	23
% ANS. "NO"	.00	.00	.00	.00
% ANS. "LITTLE"	.00	.00	8.70	8.70
% ANS. "SOME"	8.70	17.39	26.09	17.39
% ANS. "MOSTLY"	30.43	43.48	21.74	34.78
% ANS. "ALWAYS"	60.87	39.13	39.13	39.13
% DID NOT ANSWER	.00	.00	4.35	.00

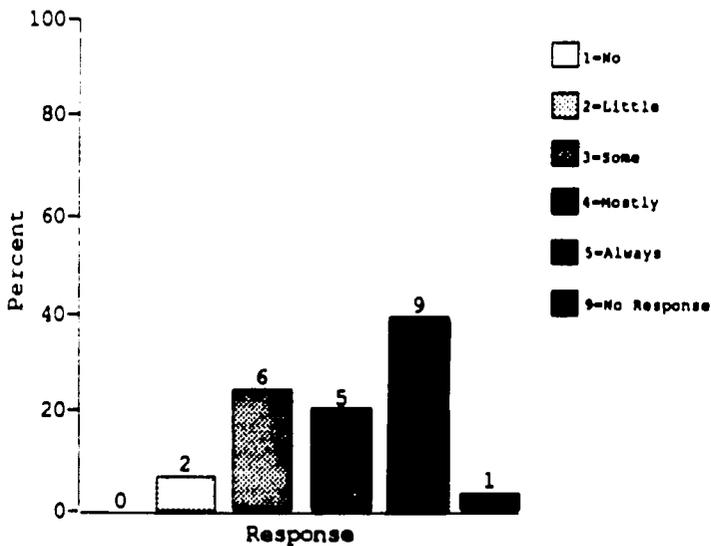
**CURRENT
IMPROVE CURRENT JOB PERFORMANCE**



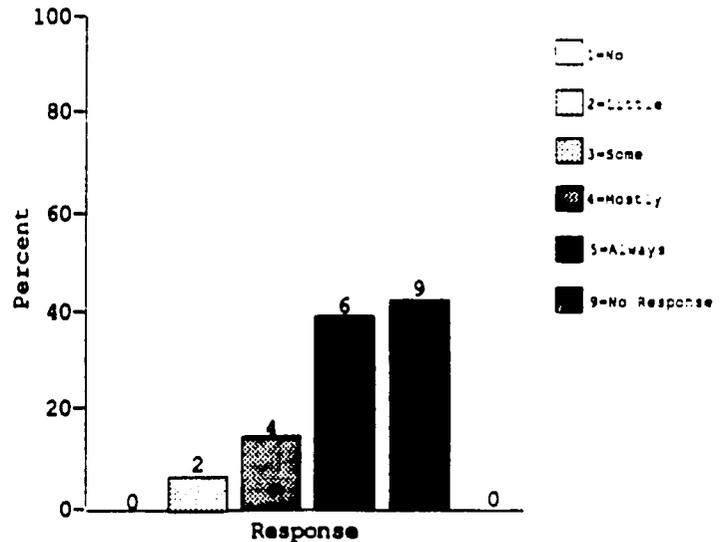
**CURRENT
IMPROVE PROFESSIONAL STATUS**



**FUTURE
IMPROVE FUTURE CARRER OPPORTUNITIES**



**SATISFACTION
OVERALL SATISFACTION WITH TRAINING**



TRAINING AND SUPERVISION OF TUTORS AND COUNTERPARTS

Tutor Training Strategies

DTU has used distance education to provide continuing education to health workers in Eastern Africa since 1982. Requests for distance education materials have been received from ministries of health and non-governmental agencies in countries in East, Central and Southern Africa. DTU staff soon recognized that there was a need to equip people from different countries with the knowledge and skills needed to develop their own relevant distance education materials.

Two series of workshops were offered on Designing and Developing Printed Material for Distance Education in 1987 and 1989. Participants were from ministries of health in Kenya, Uganda, Tanzania, Sudan Somalia, Ethiopia, Zimbabwe and Botswana. The objectives of the workshops were as follows:

To become familiar with what is involved in the distance education system

To equip course writers with the necessary skills needed to design a specific distance education course.

To have course writers plan, develop and write courses for a specific cadre of health workers.

To build a core of experienced distance education printed material designers and writers who will disseminate their skills throughout Eastern and Southern Africa.

The workshops were divided each into three phases. The first eleven day phase presented an overview of the distance teaching system. The second phase lasted for six months during which the participants returned to their work settings and continued to develop the course materials and to pre-test them. The third phase included an eleven day workshop devoted to the actual editing, layout and formatting of the materials.

A second strategy was utilized to develop a cadre of experts in the development of radio and audio cassette programs. Because of the numbers of health workers needing continuing

education, the DTU decided to expand efforts to reach health care workers through radio and audio cassettes. Middle level health workers were trained through a series of workshops to produce radio and audio cassettes for distance education. These workshops included planning, preparation, script writing and production of audio and radio programs. Participants were exposed to studio recording and different types of radio formats such as interviewing and role playing. Programs were completed for future use during the course of the workshop.

Follow-up workshops are now needed to prepare more experts in distance teaching course writing in the production of radio and audio cassette programming and in the administration of distance teaching. Future workshops for tutors should include discussion of evaluation data and lessons learned. After the assessment of the appropriateness of the use of video programs in distance education, future workshops should also include this component.

Studio Production Facilities

Studio-time is contracted locally for production and workshop use. A basic studio facility near the DTU is needed to support the continuing education needs of tutors, writers, and audio, and video production staff. Consultants in video production are indicated to assist tutors to become competent in basic production and utilization of video programs for competency based training.

Correspondence Course Marking

Tutors are commissioned to mark assignments and provide counseling for students. The written comments by tutors provide the students with consistent feedback and is the main source of interaction. The turn around time for marking an assignment is less than one month in Kenya although delays of up to 3 months were reported in Uganda. The quality of tutor written feedback to students is continually monitored in Kenya but not in Uganda. A review of marked assignments in Uganda revealed limited comments by tutors beyond indications of right or wrong answers and thus there is need for improvement.

Distance Teaching Centers

The DTU in Kenya and Uganda have attempted to decentralize the DT Centers. Progress has been made in Uganda where three additional centers are being established in rural and isolated districts in an attempt to reach more health workers and address the constraint of limited transportation. Tutors assigned to these areas recognized the need for additional resources and facilities. Specifically, tutors need a physical facility with adequate space to organize, store and secure distance learning materials and equipment and to counsel students. Consideration should also be given to establishing resource libraries at these outreach centers to support students and tutors in the teaching-learning process.

Tutor Fellowships

Tutors need exposure to other systems of distance learning in order to compare and contrast programs and to share methods and strategies for implementation, monitoring and evaluation.

EXPANSION OF THE DT PROGRAM

Demonstrations

DT courses emphasize specific concepts needed for health care workers to improve service delivery in urban and community based settings. The student is assisted to apply theory to practice using the case study method in the study guides provided. In Uganda, the face-to-face tutorials reinforce problem solving in small group discussions. Demonstrations of specific skills that need reinforcement or new skill development has been instituted in Uganda and in five districts in Kenya. Members of the DHMT have initiated follow-up supervision of students to promote application of concepts to practice and assessment of competencies in the work setting. Tutors and students expressed the need for expansion of demonstrations, reinforcement of skills, new skill development and application of theory to practice in order to enhance their effectiveness as practitioners and improve patient care delivery.

It is beyond the scope of work of the commissioned tutors to travel to student work settings to provide demonstrations and the supervision necessary for skill development and application of knowledge. Tutors suggested that the most feasible approach to this problem would be to delegate tutor responsibilities with DHMT members in their role as supervisors. DHMT members would then share accountability for reinforcement of theory to practice and supervision of competency-based skill development. The primary tutors would retain overall monitoring of student progress, marking of assignments and group tutorials at central locations. DT would then be decentralized to the district level, as well as providing the periodic reinforcement that students need.

Video Production

Distance teaching materials have included study guides to accompany textbooks and handouts. Audio cassettes, radio programs, supplemental materials, and practical demonstrations along with counseling reinforce specific skills. The use of video programs to supplement print and audio material has been discussed as to its potential, especially as the target audiences of health care workers seek additional skills. In discussions with tutors and DT staff, the concept of using video has appeal but needs to be assessed for appropriateness and for the level of technology that exists in each country.

Simple video programs produced by local staff, tutors, students and DHMT members can be an effective instructional method to supplement demonstrations. Video programs demonstrating specific skills would allow students to learn at their own pace repeating the program as often as necessary for reinforcement. Video programs could be utilized at central DT Centers. Video programs sent ahead of scheduled demonstrations would decrease the time DHMT members are involved in skill development allowing more time for counseling and providing alternative learning experiences.

A pilot study could be conducted to determine the feasibility of producing and using video programs for instructional purposes and measuring the impact on student competency to perform selected skills.

Continuing Education Expansion

DT courses are well recognized throughout Kenya and Uganda as valid continuing education for health workers. The Ministry of Health's Continuing Education Department collaborates closely with DTU in the development of courses and written materials. They participate actively in the implementation and evaluation of activities. Students are aware of the MOH sanction of DT courses, quality of the materials and professional talent of the tutors. Students are highly motivated to take DT courses in order to acquire knowledge and improve their professional competency and effectiveness in providing patient care and promoting health. It is assumed that many of the courses are of the calibre to be sanctioned by university departments of continuing education for certificate and /or credit. In this way, students could build credits through DT courses that would apply to diploma and post-basic degree programs. This would be an additional incentive for student to enroll and complete DT courses. The DTU and the MOH would need to negotiate with local, national and international universities to provide this opportunity to future students.

COUNTRY SPECIFIC DISTANCE TEACHING ACTIVITIES

Kenya

The DTU in Kenya is situated in AMREF's headquarters and consists of two health professional staff, an administrator, a radio producer and a secretary. The DTU is part of the AMREF Training Department which has fourteen professional staff members. Each year the DTU enrolls approximately 400 health workers, sends out 6200 lessons to students, and marks 4100 assignments. One hundred students complete at least one course of about 14 units every year. Fifty-two radio programs have been produced by the unit. The DTU is responsible for managing distance teaching activities in other countries as well setting policies and procedures. The DTU is also a center for the production and distribution of learning materials and for the organization and implementation of workshops. The DTU manages faculty and student activities and performs monitoring and evaluation functions.

Uganda

Distance education in Uganda is an established method of continuing education. The program is located within the Health Manpower Development Center of the MOH. Thus far, AMREF has trained two people to manage distance education courses and demonstrations and four others to develop learning materials. Seven courses have been adapted for distance teaching and successfully operationalized. Nine radio programs have been developed and broadcasts occur twice weekly. Uganda has a poor postal system and is in the process of decentralizing its distance education centers to facilitate communication and to support the group tutorials and demonstrations that take place twice yearly.

Tanzania

When USAID withdrew from Tanzania, AMREF had just introduced distance education to the MOH Continuing Education Unit. The activity has continued on a small scale. To date, AMREF has trained two writers to produce learning materials and nine courses have been developed. The courses have not yet been offered to health workers.

Sudan

AMREF has initiated a distance teaching program in Sudan for health workers. MOH personnel have participated in writers workshops. Four courses have been adapted and four new courses have been developed. These courses have not yet been offered to health workers.

Other

Other countries have benefitted from consultation in distance teaching offered by AMREF's DTU. In Zimbabwe, the DTU assisted the MOH to design a DT course to train tutors of paramedical schools. Zambia and Ethiopia have adapted DT course materials for their own continuing education programs.

MONITORING AND EVALUATION

Project Monitoring:

Reports

In Kenya, annual and quarterly reports are written on a regular basis that include background material, summary of activities by country and course enrollment data. Annual reports include all activities of the DTU including student enrollment data, course completions and assignments marked.

Implementation Plans

The DTU produces workplans covering a six month period. The workplans are comprehensive and include an outline of activities projected each month. Inclusion of progress indicators and persons accountable for specific activities would improve project monitoring.

Student Services

The DTU monitors student services routinely and produces summary annual reports. The following student services are monitored:

New enrollments and total enrollment per course.

Posting of recruitment letters and orientation materials to students.

Posting of course materials and marked assignments.

Completion of courses per course, total completed courses and completed per student.

Enrollment and distribution by cadre.

Distribution of students by district and country.

Distribution by cadre of students.

Active, irregular and dormant students.

Records of student/tutor communications.

Student qualifications, training courses and place of employment and special areas of work.

The above data have been computerized with the assistance of the Finance Department and needs to be reviewed for accuracy by DTU staff and programmed for easy retrieval. A numerical system of grading as opposed to the current system of letter grading would facilitate analysis of student progress.

Tutors and Commissioned Writers

DTU staff provide consultation to tutors by means of telephone dialogue and site visits. These means also provide a mechanism for informal monitoring regarding quality of student consultation, demonstrations and group tutorials. Marked assignments are reviewed periodically for quality of comments.

Content specialists are commissioned to write correspondence courses. The following is a description of the steps expected of commissioned writers:

The writer submits an outline and objectives within a period of two months to be approved by DTU

The writer submits the first three units to DTU for review and feedback prior to proceeding with subsequent units

DTU edits the completed units for content and language with the assistance of editors

DTU pre-tests the first three units and submits the comments to writers prior to completion of the final draft

DTU reserves the right to discontinue the contract with commissioned writers for qualitative reasons or if the writing is not completed within a six month period

Monitoring of Radio Programmes and Audio Cassettes Radio

The selection of the topics for radio programs is determined by the following criteria:

Topics are prioritized by health workers through a survey

Topics and series of topics are selected for production by the DHMTs

Health learning needs are validated using baseline surveys from the MOH Continuing Education Department

A program outline for the series is developed by DTU and content specialists. This outline is then submitted to the MOH relevant departments for review and comment. The scripts are then prepared, written and edited by DTU staff. The first three programs are recorded and pre-tested with a sample survey of health workers prior to final editing and transmission.

Feedback is obtained through listeners' letters. A review of listener letters by the evaluation team revealed a favorable response to the programs and listener commitment to answering the questions posed at the end of each broadcast. DTU staff attempt to reply to letters through the transmitted programs, newsletters or personal response to individuals. Staff limitations prohibit extensive replies to letters. The DTU might consider using customized form letters to be responsive to listener letters.

Audio Cassettes

The process for monitoring audio cassettes is the same as for radio programs. The cassettes are reviewed by DHMT members for appropriateness of content, level of difficulty and quality of audio production. Participants are surveyed as to the effectiveness of the audio programs and accompanying support materials in increasing their knowledge and skills.

PROJECT EVALUATION

The monitoring activities of the DTU as outlined above have generated a wealth of data that has been only partially utilized to measure progress, to evaluate and revise programs and to plan for the future. The DTU has progressed in establishing an evaluation process that includes needs assessment of surveys, pre-and post testing of student knowledge and skills, pre-and post testing of materials,

listenership response and tutor/writer evaluations. To date, the DTU has implemented formal evaluations in the following areas:

Correspondence Courses- pre and post testing of student knowledge and skills

A 1987 Course Evaluation for three courses- Child Health, Community Health and Communicable Disease- completed by course participants, tutors and DHMT supervisors and content specialists

Participant pre-tests of the first three units of a new course for each course.

Radio Program pre-tests of the first three units of a series for each series.

A 1988 Radio Listenership evaluation of the quality and usefulness of the radio program "Health is Life".

A 1989 Survey Questionnaire Evaluation of Audio Cassettes requesting participant feedback and DHMT feedback on content, quality and logistics.

The above evaluation activities provide clear directions for obtaining information about appropriateness and utility of content, level of difficulty, comprehensiveness, and helpfulness of study guides. The DTU needs to develop and implement a systematic evaluation plan for each component that assures regular feedback of results for program improvement.

Recommendations for Future Implementation of Program Monitoring and Evaluation:

Evaluation Plan

A specific Evaluation Plan for the DTU should be developed to guide staff in the evaluation process. The plan should include a systems approach to the evaluation process, activities, critical indicators, accountable parties and timetable over the length of the grant period.

Critical Indicators

Indicators that are assessed to be critical in measuring the progress made toward meeting the objectives outlined in the grant should be established and monitored.

Quantitative and Qualitative Impact Indicators

The DTU in collaborating with other CE components have developed continuing education impact indicators. Plans for the future include development of methods and evaluation tools to measure quantitative and qualitative indicators of the impact on target audiences in improving services delivery and health care should be developed for specific areas. There is also the need to implement this plan in other countries.

Cost Effectiveness

Consideration should be given to further cost effectiveness indicators for marketing as well as evaluation purposes. Preliminary estimates of cost/unit of output made during the evaluation produced the following:

Distance Teaching Estimated Cost

The running cost once the materials have been produced (US \$1.00 = Ksh .21):

ACTIVITY	TOTAL	
	(Kshs.)	(US \$)
<u>Running Cost</u>		
1. For a health worker to complete a 12-unit course	550.00	26.19
2. To transmit a 15-minute radio program	3,480.00	165.71
3. For a health facility to receive and listen to an audio cassette program of 30 minutes	18.00	0.85
<u>Production Cost</u>		
1. To produce a radio program by AMREF staff	2,760.00	131.43
2. To produce a radio program through a training/production workshop	3,055.00	145.48
3. To produce an audio cassette	3,200.00	152.38
4. To produce a 12-unit correspondence course using a hired writer	115,500.00	5500.00
5. To produce a 12-unit course using a person trained at our workshop	71,014.00	3381.62
6. To produce a newsletter	25.00	1.19

RECOMMENDATIONS

Administration and Course Management

Expand the promotion and publicity of distance learning opportunities through student advocacy, the designation of personnel at key health institutions to inform potential participants of course offerings, radio programs, and other resources.

Continue to monitor the production and distribution of course materials, manuals, and text books to assure availability to students on a timely basis.

Continue to explore formal recognition for distance teaching and related continuing education activities through affiliations with national and regional educational and training institutions.

Continue to assess target audiences for distance teaching courses to validate the appropriateness of content and level of difficulty for the wide range of health workers currently enrolled, and develop new distance teaching courses to meet identified needs.

Improve physical facilities for distance teaching centers to organize, store, and secure distance learning materials and equipment.

Distance Teaching Methods

Review orientation to distance teaching as a component of the student recruitment process in order to promote realistic expectations of the courses by the students.

Assess the need for increasing the frequency of group demonstration and counselling tutorials to reinforce learning, to promote retention of learning, to develop skills, to enhance problem solving ability, and to increase student confidence.

Build into distance teaching incentives for students to initiate and successfully complete courses. Incentives could include recognition ceremonies, notification to supervisors of participant completion of courses, featuring

students and publication of lists of graduates in newsletters and on radio programs.

Promote the formation of study groups among distance learning participants in their own locales.

Develop additional strategies for student retention and increasing successful completion rates of distance learning courses, such as screening and pretesting for requisite knowledge, expediting the return of graded assignments to participants, and increasing positive reinforcement and the extent of tutor commentary on written assignments.

Continue to develop radio programming targeted for health workers and consider expansion of programs to include health promotion content designed for the general public.

Assess the effectiveness of audio cassettes as a supplemental strategy to DY courses and consider expansion of topic areas and target groups.

Training and Supervision of Tutors

Continue to train tutors to expand and to improve the quality of their comments on written assignments, and monitor tutor performance in this area.

Provide ongoing follow up workshops for tutors to further develop their writing skills for distance teaching courses, radio programs, and audio cassettes, and to improve their performance in group demonstration and counselling sessions and written contacts with participants.

Provide studio facilities for the production of radio, audio cassette, and video programs for use in the distance teaching program, and for use in training distance teaching staff to produce audio and video materials.

Provide short term national and regional fellowships and other study opportunities for distance teaching tutors.

Expansion of the Distance Teaching Program

Consider the development of new distance teaching courses focussed on the teaching of specific new skills for health workers.

Conduct a pilot study to determine the feasibility and appropriateness of using video programs to (a) complement current distance teaching audio and written materials and group demonstration and counselling contacts, and (b) to augment and reinforce new distance teaching courses devoted to skill development.

Continue to train members of the District Health Management Teams to provide group demonstration and counselling tutorials to reinforce knowledge and skills and promote their application to improve service delivery.

Explore the expansion of distance teaching offerings to meet the continuing education requirements for post basic training of selected categories of health workers.

Monitoring and Evaluation

Carry out more extensive pretesting of all distance teaching materials: courses, assignments, radio programs and audio cassettes.

Consider use of numerical instead of letter grading of distance training assignments to facilitate analysis of participant performance and comparison of pre and post test scores.

Develop new approaches to evaluating the impact of distance teaching following the completion of training:

- systematic study of participant feedback to courses, radio, and audio cassettes;

- analysis of participant performance on written assignments and pre and post tests; observe participants as they practice to assess their competence and skill level;

record participant reactions to lessons during group demonstration and counselling tutorials;

conduct of focus group discussions with participants and tutors to identify problems; and,

observe and document changes in client care and service delivery following completion of training.

Assess the listenership of current radio programs to determine numbers reached and areas served, use of radio by distance teaching participants, suitability of current time slots, need for repeated programs, etc.

Improve the monitoring of the distance teaching program by developing quarterly indicators of:

Course Enrollments

Retention and Completion

Assignment received and returned

Trends in grades and pre and post test scores and grades on participant assignments.

Participant mix

Cost per unit of output

Arrange for technical assistance and consultation in the development of systems to implement the monitoring and evaluation recommendations.

The cost-effectiveness of distance teaching needs to be documented to illustrate the relative value of distance teaching methods vs. conventional education methods. This is essential to maintain an appropriate balance of offerings to health workers who have different degrees of accessibility to continuing education, especially workers in remote areas.

HEALTH PLANNING AND MANAGEMENT FINDINGS AND RECOMMENDATIONS

FINDINGS

General

The evaluation team met extensively with members of the HPMU and their counterparts at Ministries of Health; Regional, Provincial, District, and Local health agencies; and representatives of non-governmental organizations with whom the unit collaborates in its management training, technical assistance, and operations research activities. The team also met with representatives of other AMREF programmatic and support units to discuss inter-departmental issues. The team reviewed the considerable documentation available on HPMU activities, including training materials and technical assistance and operations research reports. Finally, the team met with participants of management training programs and collaborators in technical assistance and operations research activities to assess the impact of these activities on management practices.

Overall, the assessment is highly positive. The HPMU staff are well trained and all have considerable experience in their areas of expertise. They function well as an interdisciplinary team and are respected by counterpart collaborators and AMREF staff. The group is highly productive, hard working, dedicated, and professional.

In terms of the specific statement of "Expected Achievements and Accomplishments" contained in the matching grant agreement, a Health Planning and Management Unit has been established within AMREF which serves as a regional center for improvement in the management of resources available for health. During the period of the matching grant, the HPMU has:

Supported the implementation, monitoring, and evaluation of health planning and management development activities. The HPMU has trained all 40 governmental DHMT's (District Health Management Teams) in Kenya in the preparation and submission of annual health plans.

Developed learning materials and guidelines for MOHs and PVOs within the region in the area of planning and management. The HPMU has conducted 28 problem oriented management seminars for Government and private institutions in Kenya and Uganda. The HPMU has also conducted 4 post training follow up visits to assist in the application of new acquired knowledge and skills.

Carried out consultancy assignments in the area of health planning and management. (Note: the term "consultancy" is used to describe the provision of technical assistance services.) The HPMU has conducted 13 consultancy assignments in Kenya and Uganda including logistical support in the printing of needed forms, development and implementation of proposals for intensifying Primary Health Care programs in selected districts, creation of manuals for planning and managing Primary Health Care programs, and analysis of logistics and transportation systems.

Carried out health systems research. The HPMU has conducted and participated in 5 health systems research projects and surveys including the Kisumu baseline study, transportation studies, studies of alternative approaches to district diagnosis, and the Provincial and District Health Care study.

Initiated and formulated health management projects. Most of the projects referred to in this section have been initiated and formulated by the HPMU in close collaboration with the MOH, RHMTs, DHMTs, and PVOs.

Provided technical inputs to AMREF's own projects having a health management component. Technical planning and management inputs to AMREF's own projects has been less evident; such input is the mandate of the project management department. Much of this type of input is informal and takes place during the day to day interactions of staff from other units. Noteworthy contributions are the operations research project on district diagnosis being carried out in conjunction with larger efforts in Kibwezi district, HPMU involvement in AMREF's strategic planning process, and HPMU regular teaching contributions to the post basic community health course.

These achievements and accomplishments are the outcomes of a process that usually involves discussions and meetings to identify problems and to develop solutions. These deliberations may take place at the Ministry of Health or at Provincial or District levels or with the management of PVOs or training institutions. Once a mutually agreed upon solution is identified, the organization involved will formally request AMREF assistance. Through this process, the HPMU (as is the case with other AMREF units) is seen to be responsive to requests by its collaborators and the problem-oriented approach leads to the development of well-defined projects tailored to meet the needs of particular organizations.

While AMREF is not the exclusive purveyor of planning and management services and training in the region, its focus on the district and sub-district levels is unique in providing management training, support, and assistance to decentralized, community-based service delivery systems. These systems are often characterized by limited reward systems, inadequate supplies, and overloaded management staff. HPMU contributions to management improvement include raising worker morale, improving worker communication, better use of information for decision making, improved logistics systems, and increased delegation of authority.

The evaluation team encouraged the HPMU to begin a study of the cost per unit of output of its various activities to be able to analyze cost effectiveness. A start was made during the evaluation process and preliminary estimates have been produced for the management training activities. These estimates show a range of US\$ 144 to US\$ 406 as the cost per participant trained in a one week training course. As a preliminary estimate, the team concludes that AMREF is indeed at the low end of cost per participant trained in comparable international training programs. As estimates are refined, the cost per unit of output will be more exact and, hopefully, the methodology will be applied to assess the costs of other HPMU activities.

Management Training

The evaluation team met with three groups of participants of HPMU management training workshops including:

Mathare Mental Hospital, Nairobi
Radiography Department, Medical Training College, Nairobi
Religious Medical Bureaux and Paramedical Schools,
Kampala

The team also reviewed the workshop syllabus, curriculum, readings, and other training materials for the following activities:

Radiographers Management Workshop, April 1990
Health Management Workshop for Heads of Departments from
Mathare Mental Hospital, May 1989
Mathare Mental Hospital Management Workshop, April 1990
Health Management Workshop for Medical Records Personnel

These one week management workshops for 20 to 30 participants are conducted primarily by HPMU staff in collaboration with top management of the participating institution. Occasionally consultant trainers are employed to provide specialized expertise or to fill in for staff trainers when training workloads produce scheduling overlaps.

All workshops are customized to meet the programmatic needs of the organizations from which participants are selected. This is accomplished through a workshop planning process that involves key managers of the institutions involved.

Topics included in the Medical Record Workshop included organization of medical records departments, implementation of medical records services, development of specific recommendations to improve medical records services, status and role of medical records in the Ministry of Health, role of medical records in a district hospital, flow of information in the health services system.

Topics included in the two Workshops for the Mathare Mental Hospital included, the role of continuing education in the hospital, staff welfare in the hospital

setting, interdepartmental communications, supplies and equipment procurement, in-hospital transportation.

Topics included in the Workshops for Radiographers included occupational health issues such as AIDS and radiation exposure, obtaining, servicing and maintaining equipment, continuing education for radiographers, the role of the radiographer in facility design and equipment selection, terms and conditions of service for radiographers, supply and demand for radiographers.

All workshops also contained a core of management topics which were presented to participants. Staff of the HPMU used management problems and issues from the participants' institutions to illustrate the more general management topics and principles. This core included:

Concepts and definitions of management, management functions and principles, decision making, the planning implementation - and evaluation cycle, training and continuing education, communications, delegation, problem solving, the planning process, needs assessment, policies, goals, objectives, supervision, leadership, motivation, teamwork, coordination, time management, logistics, information systems, reporting, project formulation, implementation planning, budgeting and finance.

The workshops employed an appropriate mix of training methods including lectures and a variety of participatory exercises carried out in small work groups. Exercises were based in the reality of the management problems encountered by participants in their institutions. Participants were provided with basic health management texts prepared and used by AMREF and other related reading materials.

Workshop evaluations were concerned primarily with the process of the workshop and included some items about the utility of the material covered. Most of the evaluation items concerned timing, duration, facilities and meals, workshop organization, quality of instruction, value of readings and group assignments, and suggestions for future workshops. Neither knowledge gain nor post training follow up evaluation of the application of new knowledge and skills was attempted. The HPMU did not routinely include follow up

technical assistance in its training packages. This practice is often used to assess the application of training, to reinforce the training, and to provide technical support to participants in their efforts to apply new knowledge and skills in the work setting.

The evaluation team met with three groups of participants of HPMU management training workshops. At each meeting there was a general discussion of the value of the training with particular efforts to relate the training to changes in management that produced improvements in service delivery. At each meeting the survey instrument developed by the evaluation team was administered to the participants to collect systematic data on key aspects of the training. The results of this discussions and surveys are presented below for each of the three groups of past participants contacted.

Mathare Mental Hospital

At the request of the Hospital management for assistance in improving teamwork and interdepartmental coordination, the HPMU conducted two management workshops for staff of the institution. The principal themes of the workshop, based on needs assessment conducted at the hospital, were management, supervision, communications, group dynamics, leadership, and conflict resolution. All participants were selected from among the managers of service units and supervisors of hospital staff.

Workshop recommendations led to the formation of a staff welfare committee, the creation of a staff newsletter, the establishment of interdepartmental procurement, personnel, and transportation committees.

Top management of the hospital attributed the following outcomes to the management workshops: improved patient care, improved communications, improved interdepartmental communications, better staff relationships, better staff to patient relationships, friendlier atmosphere, and an improved sense of belonging to an organization.

Middle managers and supervisory personnel reported the following improvements: dealing with personnel problems, communications, understanding of management, increased confidence, relationships with co-workers, relationships

with patients, teamwork, leadership, delegation, problem solving, accessibility of supervisors to staff, identifying causes of problems and alternative solutions, interdepartmental coordination, time management, passed on training to subordinates, supplies and logistics, transportation, morale, use of information for decision making, service delivery, and application of management skill to personal lives.

The evaluation team pressed the participants to give examples of improvements in patient care attributable to the management training workshop. Responses included: better interpersonal skills are applied to elicit complete and accurate responses in intake interviews, improved logistics and supplies assure that prescribed treatments are administered and not postponed due to lack of medications, improved hospital transport enables prompt movement of patients for services such as occupational and physical therapy, and improved interdepartmental communication promotes a greater willingness to make and to receive patient referrals.

Top management and staff were unanimous in their request for additional workshops on new management topics and for technical follow up from HPMU staff.

Management Training For Radiographers

The Radiographers' responses to management training noted improvements in: proposal writing (a proposal is pending for the conduct of a seminar on occupational health issues), use of management techniques in teaching roles, interactions and negotiations with suppliers and clients, confidence, interpersonal relationships, dealing with superiors and subordinates, self confidence, problem solving, motivation to pursue additional continuing education, team work, and perception of management as a legitimate area of study,

Participants also requested refresher courses and additional courses on other management topics such as budget and finance, proposal development, and organization. Participants also suggested that HPMU consider extending the duration of future courses to cover topics in greater depth. Among those participants

who were members of the Radiography faculty of the Medical Training College, there was a strong conviction that management training be included in the basic preparation of Radiographers. They requested assistance from HPMU in designing appropriate curriculum components and in preparing lecturers to teach management topics.

Management Training for Religious Medical Bureaux and Paramedical Schools, Kampala

This workshop was designed to provide an introductory management course for the health and health related program officers of the Catholic, Protestant, and Islamic religious organizations and staff of the paramedical schools in Kampala, Uganda.

Participants reported the following improvements attributable to workshop: developed a one year work plan for the organization and involved subordinate staff in the planning process, passed on concepts and skill to others in the organization, personnel management, used group problem solving techniques in developing a revised basic nursing curriculum, used brainstorming techniques to delineate decision options, employed communications skills to involve communities in project development, redistributed tasks and delegated authority and responsibility in a reorganization of immunization teams, applied the concept of opinion leaders and identified them in approaches to new communities, initiated use of work plans for individual staff members, developed a standardized reporting form for sub projects.

Several of the participants also attended a proposal development workshop and their comments reflected application of knowledge and skill gained from both training experiences: developed a community needs assessment statement (population, service accessibility, distances to be traveled), learned to write an executive summary, learned to prepare detailed budget for all project activities, prepared two project proposals and awaiting funding decision. The Islamic Bureau reported development of a small primary health care proposal that was submitted to and funded by the Libyan Islamic Call Society.

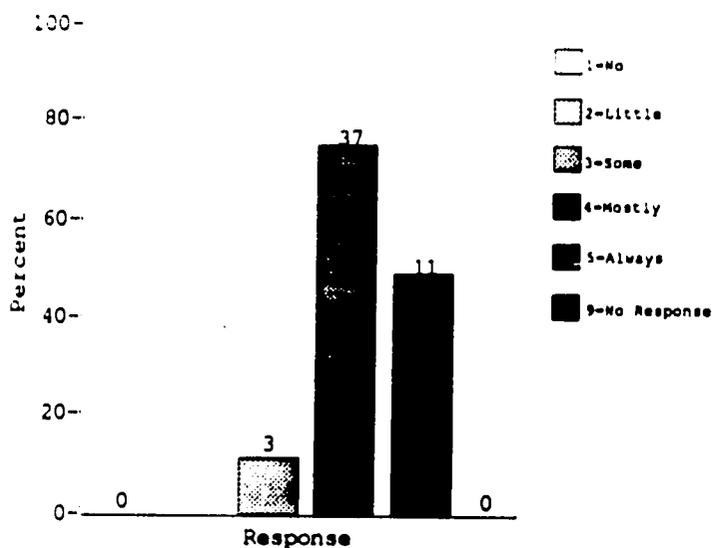
Participants were pressed to relate their management training to improved service delivery. Responses included: better organization and allocation of ward sisters and nursing students and daily staff meetings result in improved patient care, e.g., patients receive medications as prescribed, referrals to specialists are carried out on time, less sepsis on wards, and greater involvement of patients in their own care as they have been encouraged to voice their opinions and concerns.

As was the case with the other groups of participants, requests were made for further training in greater depth on management topics. Requests were also made for assistance in adapting management workshops for lower level staff in the organizations represented. Administrators of the Nursing School requested assistance in including management topics in the basic curriculum. All participants concurred in the need to be trained as management trainers to enable them to pass on management skills to others in their organizations.

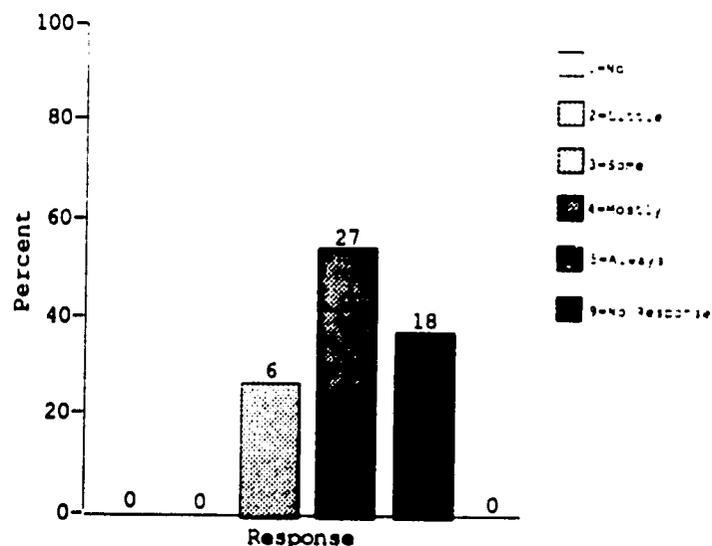
During the course of the evaluation, a survey was conducted of 52 participants of HPMU management training workshops. The instrument used appears in ANNEX F. The results of the survey were highly positive. As indicated in the tables and graphs on the following pages, participants apply the concepts and skills learned on their jobs. They find the sequence and level of course materials appropriate. They find the personal contacts with tutors to be useful as they do the written materials provided. Participants are satisfied with the management training program and feel that their job performance, professional status, and future career opportunities are improved.

MGT ALL N = 52	CONCEPTS	SKILLS	SEQUENCE	LEVEL
MEANS FOR VALID RESPONSES (1 - 5)	4.12	4.21	4.17	3.92
# VALID RESPONSES	52	52	52	51
% ANS. "NO"	.00	.00	.00	.00
% ANS. "LITTLE"	1.92	.00	3.85	5.77
% ANS. "SOME"	5.77	13.46	23.08	23.08
% ANS. "MOSTLY"	71.15	51.92	25.00	26.09
% ANS. "ALWAYS"	21.15	34.62	48.08	26.92
% DID NOT ANSWER	.00	.00	.00	1.92

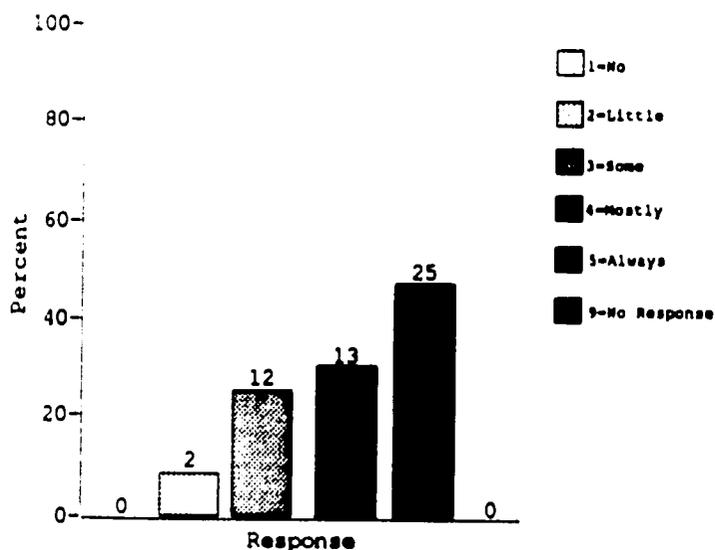
CONCEPTS
APPLY GENERAL CONCEPTS IN CURRENT JOB



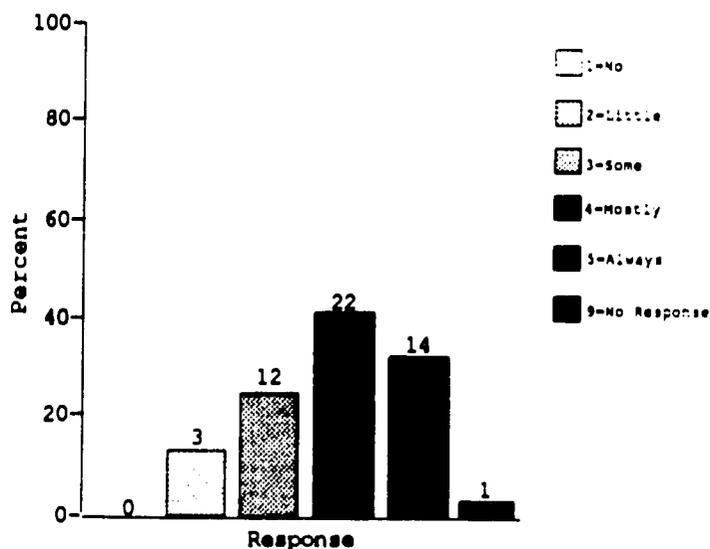
SKILLS
APPLY SPECIFIC SKILLS IN CURRENT JOB



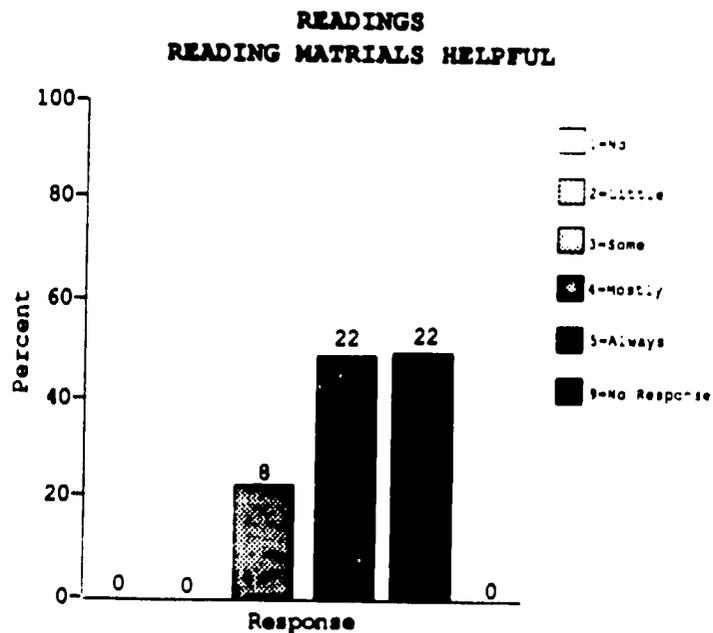
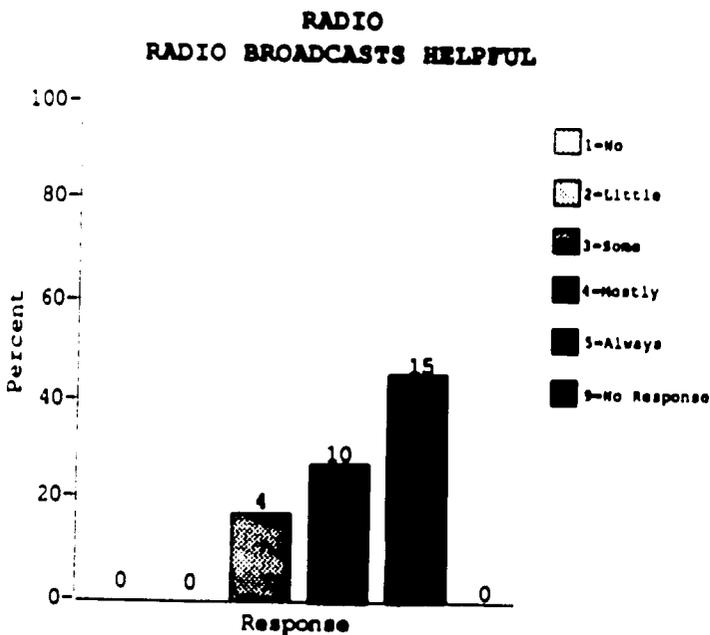
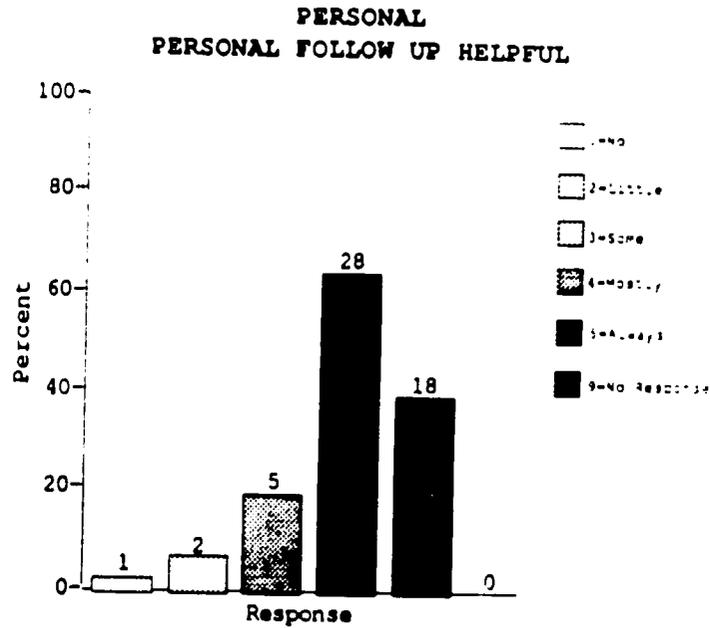
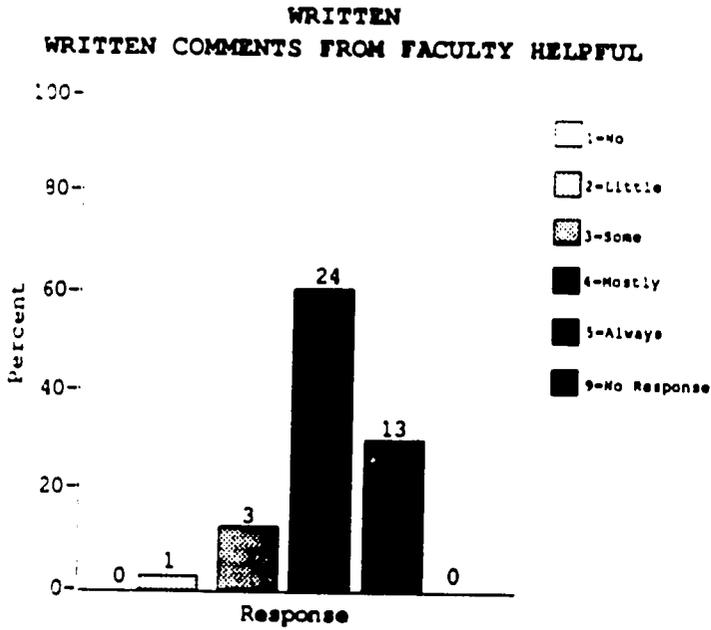
SEQUENCE
SEQUENCE LOGICAL AND APPROPRIATE



LEVEL
LEVEL OF EASE/DIFFICULTY IS APPROPRIATE

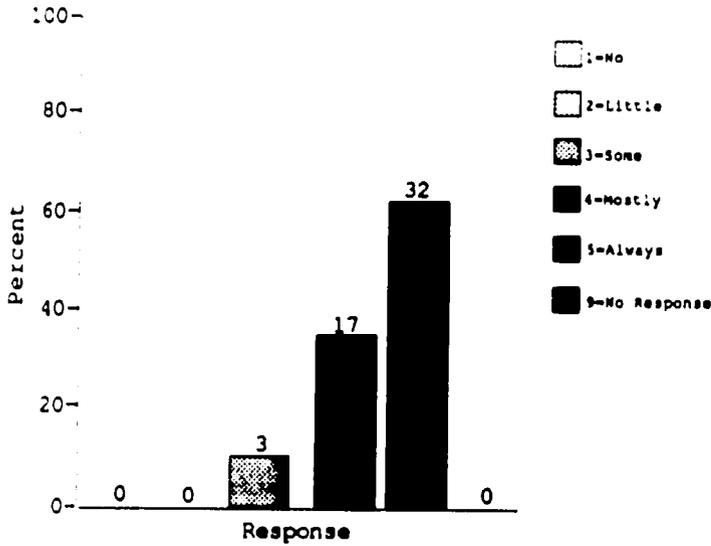


MGMT ALL N = 52	WRITTEN	PERSONAL	RADIO	READINGS
MEANS FOR VALID RESPONSES (1 - 5)	4.20	4.12	4.38	4.27
# VALID RESPONSES	41	52	29	52
% ANS. "NO"	.00	1.92	.00	.00
% ANS. "LITTLE"	2.44	3.85	.00	.00
% ANS. "SOME"	7.32	9.62	13.79	15.38
% ANS. "MOSTLY"	58.54	50.00	34.48	42.31
% ANS. "ALWAYS"	31.71	34.62	51.72	42.31
% DID NOT ANSWER	.00	.00	.00	.00

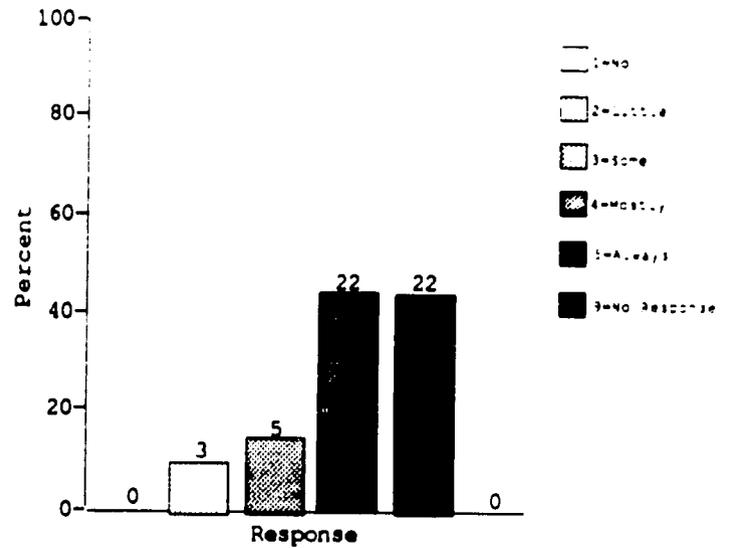


MGT ALL N = 52	CURRENT	STATUS	FUTURE	SATISFACTION
MEANS FOR VALID RESPONSES (1 - 5)	4.56	4.21	4.10	4.48
# VALID RESPONSES	52	52	52	52
% ANS. "NO"	.00	.00	1.92	.00
% ANS. "LITTLE"	.00	5.77	5.77	.00
% ANS. "SOME"	5.77	9.62	11.54	9.62
% ANS. "MOSTLY"	32.69	42.31	42.31	32.69
% ANS. "ALWAYS"	61.54	42.31	38.46	57.69
% DID NOT ANSWER	.00	.00	.00	.00

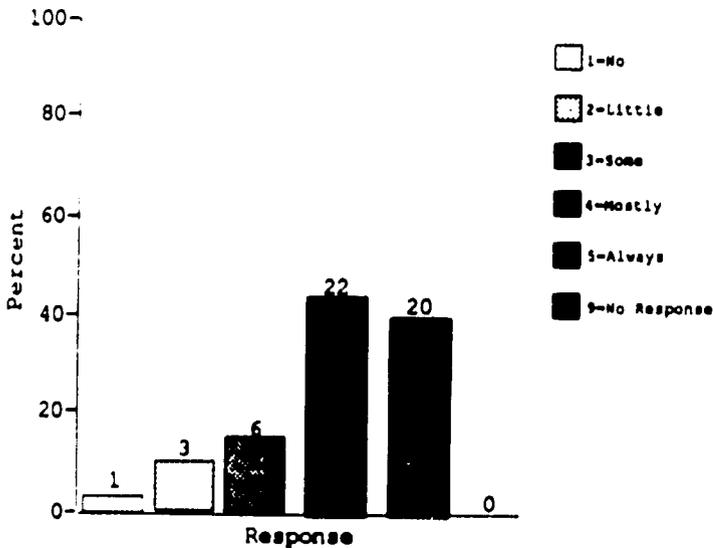
**CURRENT
IMPROVE CURRENT JOB PERFORMANCE**



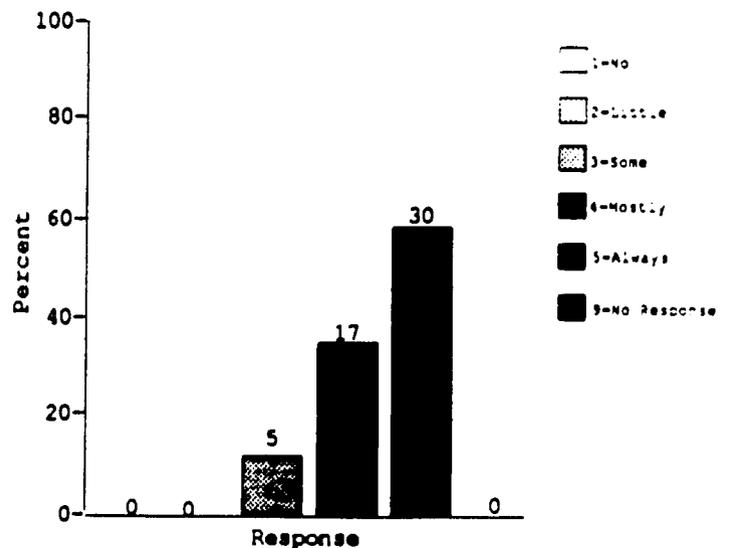
**CURRENT
IMPROVE PROFESSIONAL STATUS**



**FUTURE
IMPROVE FUTURE CARRER OPPORTUNITIES**



**SATISFACTION
OVERALL SATISFACTION WITH TRAINING**



Technical Assistance, Consultancies, Surveys, Operations Research

The HPMU has conducted or participated in twenty technical management activities during the period of the matching grant. These activities are generally carried out jointly with collaborating institution managers and employed a process that included assessment, problem identification, development and documentation of alternative solutions, data collection and analysis, recommendations, and implementation assistance. The methods employed included an appropriate mix of qualitative and quantitative systems analysis and research methods. Findings were produced and incorporated into programs for service delivery improvements. Due to time constraints and the location of projects, it was not possible for the evaluation team to meet with all collaborating institutions and individuals involved in this aspect of HPMU activity. However, a detailed review of selected projects was undertaken with the staff of the unit and MOH officials.

Planning and Management of Primary Health Care in Tanzania: a Manual for District Health Teams

Initiation Ministry of Health Request

Objectives Production of training materials for planning and management of PHC programs at district levels

Strategies, Methods, Procedures Joint deliberation among MOH and AMREF staff and consultants during a one week meeting. The consultant was Dr. Bennett, formerly of the AMREF Health Learning Materials Unit. Existing training materials were reviewed and a revised manual was drafted.

Process The draft manual was pretested on Regional and District Medical Officers.

Problems and Issues There was some discussion concerning "ownership" of the manual. Although AMREF was substantially and substantively involved in all aspects of development of the manual, the MOH Tanzania will be listed as author with AMRFF's contribution noted in an acknowledgements section.

Results Two thousand copies of the manual will be printed by December 1990.

Implementation Status Prior to printing and distribution some revisions will be made in the case studies and additional case studies will be added to some chapters.

Nyamira District Health Plan

Initiation This newly created district requested AMREF assistance in developing its PHC plan for the period 1988/89 to 1992/93.

Objectives Develop a plan for the new district in conformity with the MOH requirement that all districts submit plans.

Strategies, Methods, Procedures AMREF, MOH, and DHMT reviewed existing data. Work was done outside of the district and no new data were collected.

Process The planning team was divided into PHC intervention groups and each group prepared a plan for its area. Group plans were then compiled and integrated into a district plan.

Problems and Issues The district was created out of an existing districts and its boundaries were not clear and data for the district was not specific to the area but related to the former larger district.

Results The plan was adopted by the district and was submitted to the MOH for funding.

Implementation Status The district has received a funding allocation from the Ministry of Health for plan implementation.

Kisumu District Primary Health Care Program

Initiation The District Health Management Team and the Ministry of Health requested AMREF assistance.

Objectives Conduct a needs assessment and prepare a District Primary Health Care Plan.

Strategies, Methods, Procedures Used existing data supplemented by interviews with District managers and health workers and observations at all district health facilities. Clients and communities were not surveyed or interviewed.

Process AMREF worked closely with the DHMT, Church groups, UNICEF, and GOK water and sanitation officials.

Problems and Issues Health leadership was not fully informed about the PHC approach and DHMT staff were not always available to participate fully in the process.

Results Project proposal was submitted to SIDA and funding was awarded.

Implementation Status The PHC program is being implemented in the District. Communities and health workers are being sensitized to the PHC approach. AMREF is currently conducting the project baseline study.

Transport Management Study

Initiation Project grew out of general discussions with RHMT and DHMT concerning problems of transport. DHMT requested AMREF to conduct study to improve the situation.

Objectives Identify and remove transport bottlenecks.

Strategies, Methods, Procedures Surveys, observations, interviews, and review of all records pertaining to vehicle acquisition, maintenance, repair, use, and replacement.

Process HPMU professional staff designed a questionnaire for data collection. In collaboration with DHMT visited some 70 sites for data collection.

Problems and Issues Records were often not available and some transport officials were secretive about their activities.

Results The first phase of the study is completed. Findings include: inadequate record keeping, garages located too far from health facilities, inappropriate vehicles are assigned, preventive maintenance is poor, budgets are insufficient, supplies of spare parts are inadequate, unauthorized use of vehicles, need for reducing the variety of vehicles used.

Implementation Status The report has been distributed to DHMT's and HPMU is awaiting feedback. When feedback is received, HPMU plans to incorporate findings and recommendations into a pilot study to improve transport in one district in each of three provinces.

Operations Research - Integrated District Diagnosis

Initiation AMREF initiated this activity in connection with ongoing activities in Kibwezi district.

Objectives Develop new low cost methods and tools for community assessment. To compare and evaluate health information data obtained from different approaches. To develop a model for district health information collection.

Strategies, Methods, Procedures Data collection and interviews at all district health facilities, household health surveys, health related socio-cultural studies, and Delphi panels of local community leaders to obtain health related perceptions.

Process Collaboration with other AMREF units involved in Kibwezi district.

Problems and Issues Religious mission health facilities in the district were generally not responsive to requests to participate in the study.

Results The health care system is now fully described.

Implementation Status Prepared to start phase two which includes the development and testing of alternative assessment tools.

The HPMU portfolio of technical assistance, consultation, survey, and operations research activities is a rich collection of relevant and appropriate management improvement initiatives. These activities are responsive to needs and requests from the field and are carried out in collaboration with those who request assistance. The methods used are appropriate (although occasionally, time constraints prevent the use of a full range of analytical tools). Documentation of efforts is impressive with complete reports prepared and distributed.

Most of the technical consultation and research activities of the HPMU have been focussed on issues associated with decentralization. As a consequence, the HPMU has built up a unique expertise and capability in district and local level management problems and solutions and on communications and relations between local levels and central Ministries of Health. The HPMU performance in these areas would be strengthened by wider exposure to similar activities being carried out in the region, by increased attention to the cost-effectiveness dimensions of activities, and, by greater attention to follow up on its activities to look beyond improvement in management systems and to attempt to relate such improvements to better service delivery.

RECOMMENDATIONS

Strategies

Continue to pursue the central strategy of problem-oriented planning and management assistance in training, technical assistance, and operations research.

Continue to develop and nurture working relationships with the Ministry of Health, Provincial Health Management Teams, District Health Management Teams, and hospitals and health centers to infuse management training and improved management practices throughout the Government health care system.

Continue to work with private voluntary, non-governmental, and other organizations in management training and management consultations.

Continue to collaborate with basic training institutions to provide management training to staff and to promote the

inclusion of management topics in the basic curricula of these institutions.

Reexamine the marketing strategy for HPMU training, consultation, and operations research activities to explore opportunities leveraging resources and for developing fee for service and cost recovery approaches. Seek ceilings on future USAID funded projects to facilitate access (through the "buy-in" mechanism) by country missions to fund needed activities.

Expansion of Programs

Develop additional training modules on specific management topics such as MIS, supervision, training of trainers, monitoring and evaluation, and proposal development.

Consider approaches to increasing the duration of the current management training offerings from one week to two or three weeks and including in depth coverage of topics included in the new modules.

Use pre and post testing in management training workshops to assess participant training needs and to validate learning.

Promote efforts to include top management, especially physicians, among the participants of institution based management training seminars.

Expand post training follow up and technical assistance to participants of management training seminars to evaluate the extent to which new learning is applied on the job and to help and encourage trainees to apply new concepts and skills to improve service delivery.

Include training of trainers modules in management seminars to enable participants to be more effective in training operational staff at their institutions.

Promote the exposure of country based staff to management training in the region by using such staff as facilitators in other countries and in regional training activities.

Expand approaches to cost recovery and self sufficiency of training, consultation, and operations research services

provided to other units in AMREF; to PVOs, NGOs, and USAID Cooperating Agencies; and to private sector organizations in need of these services.

Train MOH counterparts at all levels of the health care systems in the region to participate in and to conduct HPMU activities.

Initiate liaison and sharing of training materials and approaches with other organizations involved in management training in the region.

Monitoring and Evaluation

Use group discussion techniques (focus groups) and quantitative surveys such as the instrument used during the evaluation to evaluate the impact of training and employ findings to improve future training offerings.

In all efforts to evaluate the impact of training, seek both qualitative and quantitative evidence of improvements in service delivery.

Develop systems to document the cost per unit of output of activities to facilitate cost effectiveness analysis, e.g., cost per workshop, participant, consultation, and operational research project.

Conduct operational research studies on the process and impact of the recommendations made for improvement in the management training offerings:

inclusion of training of trainers content to promote the multiplier effect of training.

the utility of post training field follow up and technical assistance.

the usefulness of new modules and approaches to expanding the duration of training.

Document the impact of HPMU technical consultations and operations research in terms of findings, implementation, generalizability, and improvements in service delivery.

JOINT DTU-HPMU FINDINGS AND RECOMMENDATIONS

FINDINGS

The concentration of HPMU efforts on management issues in health care delivery and the development by the DTU of a distance teaching course on management suggest a natural area of joint endeavor for the two units. To date collaboration between the two units has been minimal and only informal contact was made during the development of the distance training management course.

Collaboration in this area would strengthen the programs of both units. The HPMU would have access to distance teaching materials on management topics to reinforce its workshop training and to offer to workshop participants who wish to develop management training programs in their own institutions. The DTU would have access to the considerable expertise available in the HPMU for refining its current management course and for developing a manual for use by course participants. This expertise would also be helpful for developing new distance courses on specific management topics at the same time as these new topics are developed for use in the HPMU management training program.

RECOMMENDATIONS

Integrate HPMU management workshops with the DTU management course to enable workshop participants to function as more effective supervisors and mentors for workers in their own organizations who are enrolled in the DTU management course.

collaborate in developing a manual for the current DTU management course and HPMU management workshops.

review and modify management course offerings.

include in HPMU management seminars, instruction in the use of the distance learning management course.

Conduct operational research studies on the process and impact of the recommendations made for improvement in the distance training and management training programs.

As the HPMU develops new management training modules for its management training seminars, these modules should be considered for adaptation as distance training courses.

Explore opportunities for HPMU and DTU staff exposure to other similar regional and country programs and to training and other professional development activities. In this regard, USAID should promote the involvement of AMREF's professional staff as consultants and technical resources in proposal review and mid term and end of project evaluation processes for other projects.

AMREF FINDINGS AND RECOMMENDATIONS

FINDINGS

This section of the evaluation report compiles a variety of management issues derived from discussions with AMREF staff in New York, Nairobi, and Uganda; conversations with USAID officers in Washington and Kenya; and observations made by the evaluation team concerning the specific issues raised in the scope of work.

Strategic Plan

AMREF is involved in an ongoing strategic planning process that involves the AMREF network of organizations, Governments, donor agencies, and other organizations involved in health program development in countries in which AMREF operates. It is noteworthy that both matching grant program components are featured prominently in the evolving strategic plan. Among the elements of the strategic plan is the development of a new balance between program and project funding. The current status of the matching grant is a good example of the need for both types of funding. The current matching grant has expired and as AMREF prepares to submit an application for a second grant, mechanisms need to be developed to assure the continuity of programs in the periods between project funding.

Reorganization

AMREF Nairobi is currently involved in a major reorganization and senior staff recruitment effort. The reorganization as currently contemplated will give increased prominence to the HPMU by elevating it to department status. The DTU will remain a unit in the training department. The reorganization promises to strengthen the program and project support functions in AMREF. This is of special interest to the evaluation team in light of observations made by USAID officials concerning needed improvements in preparation of technical proposals and in reporting on grant supported activities.

The reorganization also holds promise for providing needed evaluation services for DTU and needed financial management support for both the DTU and HPMU. To date, the newly formed

evaluation department has served as a consultant resource when monitoring and evaluation questions are raised in project development and implementation. The evaluation unit also serves as an evaluation coordinator, keeping track of scheduled evaluation requirements of grants and acting as an intermediary for hiring evaluation consultants. The financial management unit provides monthly expenditure statements and financial status reports to all units and aside from the usual and expected delays in postings, these reports enable project directors to monitor the financial status of their activities. More assistance is required by the operating units if they are to be able to document costs per unit of output to increase effectiveness and efficiency and to improve their competitive positions. The reorganization should address the needs of units such as the DTU which provides training services to large numbers of health workers and generates a substantial data base on program activities. To date, the DTU has focussed on program development and expansion and not on monitoring and evaluation. The unit has not had access to consistent expert advice on evaluation design or to computer services and has had to rely on an evaluation department with limited resources and on a computer service whose first priority was to serve the financial management needs of the organization. The DTU invariably came out second best and monitoring and evaluation of the program suffered.

Relationships between AMREF New York and AMREF Nairobi

The principal functions of the New York office include project development, identification of new funding sources, liaison with the full range of organizations involved in health and development, marketing, recruitment, and procurement. In the case of the matching grant, AMREF New York is the designated grantee as a United States registered PVO. Although the legal relationship is between AID and AMREF New York, in fact project activities are carried out by AMREF Nairobi. Project management and support is provided by the Project Management Department in Nairobi. All substantive and financial documents are sent from Nairobi to New York. The substantive reports are forwarded to AID. The financial reports are reviewed and submitted to AID by AMREF New York. The section on "Reporting" below, includes some suggestions for financial and substantive reporting under this arrangement. The remainder of this section deals with

issues raised in the scope of work and covered during the course of the evaluation.

Turnaround time for communications between Nairobi and New York is short -- one to three days. This is made possible by use of Fax, telex, and telephone for urgent communications and by use of international couriers for transmission of larger documents.

The President of AMREF/USA (based in New York) typically travels to Nairobi four times yearly. The Director-General (based in Nairobi) visits New York between two and four times yearly. These visits are complementary to other communications between New York and Nairobi and assure effective coordination between the two offices.

The flow of funds from New York to Nairobi is smooth. There have been no reports of delays in receiving funds from New York or in receiving financial statements from Nairobi. Since the grant is funded through a Federal letter of credit, there is typically sufficient cash on hand to meet requests from field operations in Kenya and Uganda (and other countries in the region). The New York Financial Director makes at least one trip per year to Kenya to maintain smooth financial operations.

The financial department in Nairobi prepares annual budgets based on the workplans prepared by the operating departments and units. Replanning and rebudgeting is carried out when major changes in objectives and activity schedules take place. Monthly reports are provided to the operating units showing line item budgets, expenditures, obligations, and balances available.

Reporting

In discussions with the matching grant CTO in Washington and with AMREF Staff in New York, the suggestion was made that some changes be made in reporting systems for the HPMU and DTU programs. Specifically, the proposal was made for direct communication and reporting on substantive aspects of the project between AMREF Nairobi and AID Washington with copies to AMREF New York and AID Nairobi. Given the availability of modern communications channels and the reorganization and strengthening of the Project Management Department in

Nairobi, such direct communication on technical matters should be tried. The current financial reporting system works -- leave it in place, i.e., all financial transactions between AMREF Nairobi and AID Washington are conducted via AMREF New York.

RECOMMENDATIONS

AMREF should continue to provide funding for the activities of the DTU and HPMU (not currently covered by specific project funding) in the interval between the end of the current matching grant and the anticipated award of a successor matching grant.

AMREF and USAID should develop new reporting formats, new reporting periods, and new channels of communications for the substantive aspects of matching grant activities. Reports from AMREF should be submitted directly to AID/Washington and should include:

Progress in accomplishing project objectives in the report period.

Cumulative progress in accomplishing objectives since the start of the project.

Narrative description of accomplishments in the report period.

Discussion of problems and constraints encountered in the report period and how they were resolved.

Plans for the next report period.

AMREF should retain the current systems of financial reporting to USAID, i.e., AMREF/Nairobi to AMREF/New York to AID/Washington.

As AMREF reorganizes and as new key staff are recruited, provisions must be made for HPMU and DTU access to computer processing and evaluation services to assure appropriate monitoring and evaluation of these programs. If necessary, dedicated data processing should be considered for the monitoring and evaluation of the DTU programs.

As AMREF reorganizes and as new key staff are recruited, new approaches should be institutionalized for proposal preparation and submission.

AMREF should continue to work with National Governments and Ministries of Health to promote commitment to HPMU and DTU programs. Budget provision, continuity of appropriately trained staff, and recognition of DTU and HPMU training programs are essential ingredients of future phaseover and sustainability.

GOVERNMENTAL RELATIONS

The Evaluation Team met with representatives of the Kenya and Uganda Governments' Ministries of Health and Provincial and District Health authorities. The team also met with representatives of the Kenya and Uganda AID Mission Health, Population, and Nutrition offices.

In all cases the message was clear. AMREF programs overall, and the distance teaching and planning and management activities supported through the matching grant, are important and welcome components of the health and development programs of the countries. AMREF's matching grant activities are also consistent with the development assistance strategies of the AID Missions.

Kenya Ministry of Health

The Senior Deputy Director of Medical Services, Dr. A.O. Oyoo (also the Director of the Division of Family Health), was the highest GOK official contacted by the evaluation team. Dr. Oyoo had collaborated extensively with AMREF in his previous role as Provincial Medical Officer and served as a consultant to AMREF in the development of proposals for new projects in Uganda. Dr. Oyoo is designated as an alternate to the Director of Medical Services for AMREF Advisory Board Meetings.

Dr. Oyoo was firm in assertion of the MOH intention to continue to use AMREF in the areas of manpower development and training and in management assistance in specific problem areas, especially at the provincial and district levels by working with the PHMTs and DHMTs. He had special praise for AMREF's record of working in difficult to reach areas and encouraged AMREF to extend its training and management activities to hospitals and health centers away from district headquarters. As further evidence of the MOH commitment, Dr. Oyoo pointed out that AMREF is now a line item in the MOH budget and that AMREF is also listed as a line item in a SIDA grant to the MOH.

In our discussions with Dr. Oyoo, several issues were raised with respect to the DTU and HPMU programs.

Continuity of Counterparts Due to transfers, reassignments, and educational absences, DTU and HPMU programs have not had access to continuous contacts with appropriately trained counterparts at the MOH. The team urged efforts to promote this needed continuity.

Phaseover The issue of the MOH eventually assuming AMREF's role in the DTU and HPMU programs was raised. Again Dr. Oyoo was firm in his support for the programs. He took the position that phaseover did not always imply that Government would literally assume responsibility for carrying out programs. He noted that the ability of government to conduct business through contracts with specialized organizations such as AMREF was a valid form of institutionalization.

Recognition The question of recognition of AMREF's distance and management training courses for promotions, salary increases, and job opportunities is a complex issue involving past continuing medical education practices, Public Service Commission regulations, and Ministry of Education guidelines. Dr. Oyoo did not regard the lack of formal recognition for these courses as a negative factor that deters participation. He suggested that there were possibilities for informal recognition that could be explored. Finally, he noted that the programs of newly formed educational institutions in Kenya and the future involvement of AMREF in basic and post basic training and continuing education could provide future opportunities to gain recognition.

Uganda Ministry of Health

Principal contacts in Uganda included Dr. Vincent Ojoome, Director of the Health Manpower Development Center at Mbale and Mr. Nzabanita, the Assistant Director of Medical Services for Planning. Again, there was considerable appreciation expressed for AMREF's contributions in training and management. It was noted that AMREF assisted in the establishment of a Health Information System in 18 Districts and it was hoped that AMREF would be involved in extending the system to 16 additional districts as well as conducting management activities and training programs in all districts.

The Ministry representatives indicated a need for continued training and supervision of DHMT's who require technical assistance and follow up after they are trained. One area of needed assistance was in the use of information at the district level.

The Ministry representatives noted the effectiveness of the Health Manpower Development Center and informed us of the intention to incorporate the training programs for operational staff of categorical programs (Essential Drugs, EPI, AIDS) at the Mbale Center. Government commitment to the Manpower Development Center was further indicated by plans to increase the GOU contribution to the Center over the next four years from a current level of 10% to 30% by the fourth year.

Finally, one of the evaluation team members had an informal contact with the Minister of Health who conveyed strong support for continuation of AMREF's DTU and HPMU training and management activities in Uganda.

USAID Nairobi

The evaluation team met with Mr. David Oot, Ms. Mollie Gingerich, Ms. Millie Howard, and Ms. Nellie Mwanzia, of the Health, Population, and Nutrition Office.

The HPNO staff conveyed their general interest in AMREF activities, although there is no present direct Mission support of AMREF activities. The Mission views AMREF as an important broad resource in Kenya and in the region, particularly in the area of training and training materials development and the HPNO frequently refers other PVO's and NGO's to AMREF for such materials. The Mission noted that a particular strength of AMREF was its capacity to attract and retain well-trained and highly competent African professional staff and its record in employing such staff in important technical positions. The Mission also noted weaknesses in technical proposal preparation and project monitoring.

The Mission regards AMREF matching grant activities in distance teaching and management and planning as being consistent with Mission programs in planning, management, information systems, institutional development, and manpower development.

The evaluation team debriefed with the HPNO and submitted a draft copy of this report prior to departure from Kenya.

USAID Kampala

The evaluation team met briefly with Mr. Paul Cohn and Mr. David Puckett of the Health, Population, and AIDS office. Mr. Cohn explained that the Mission in Uganda was primarily concerned with Population and AIDS and that UNICEF is the principal actor in other health sector activities. He also noted that since the matching grant was a centrally funded project and that most activities are carried out from AMREF's Nairobi offices, the Uganda Mission was only indirectly involved in the distance teaching and planning and management activities. Nevertheless, Mr. Cohn indicated that these programs were "not inconsistent" with Mission policy.

SUSTAINABILITY

The issue of sustainability is addressed directly and indirectly in virtually all sections of this report. This section will summarize the major findings of the evaluation team.

AMREF is perceived as a valued resource throughout the region. This perception is shared by central Ministries of Health and the decentralized provincial and district management teams and the managers of health posts and hospitals at the sub-district level. International organizations and regional and national PVOs and NGOs also hold AMREF in high regard. Among its notable accomplishments is its ability to recruit and retain high quality African professional staff to carry out its programs. AMREF is an established organization in the region and the matching grant programs in distance teaching and planning and management are important parts of its health and development programs. Both programs are featured prominently in the overall AMREF strategic plan, and activities continue in the period between the end of the matching grant and the anticipated successful application for a successor grant.

Although matching grants are centrally funded and USAID country missions are not directly involved in their monitoring, it is important to note that the matching grant activities are consistent with USAID policies and programs in the countries visited.

The Governments of Kenya and Uganda have indicated that the matching grant programs are also consistent with both national development plans and health sector plans. Interestingly, the two Governments have different approaches to phaseover. In Kenya, the MOH includes line items for AMREF services in its own budgets and in budgets for international donor sponsored projects. AMREF is seen as an agency with specialized professional services with whom the Government contracts when these services are required in programs. This creates less pressure to recruit and maintain specialized staff in the MOH, but does require sufficient staff to coordinate MOH needs with AMREF capabilities. In Uganda, the MOH is budgeting for yearly increases in its proportion of support for the activities of the Manpower Development Center. This Center will be responsible for

carrying out the programs of distance teaching and planning and management initiated with matching grant support. Continued support from AMREF will be required as the Center develops and consolidates its programs.

At operational levels in both countries, substantial numbers of health system managers on central and local health management teams and the managers of hospitals and health centers, training institutions, and other organizations involved in health services are being prepared through the distance teaching program and the management planning program to improve their clinical and management practices. The HPMU activities in technical assistance and operations research carried out in collaboration with local institutions contribute to creating a climate of willingness to accept and adapt modern management practices. The increased attention to proposal development and assistance in obtaining funds for district level projects is also a positive contribution to the potential for sustainability.

The evaluation team concludes that the types of activities carried out under the matching grant are important and worthy of being sustained. The activities are consistent with the development and health sector plans of the Governments involved and the sponsoring donor agency. In addition to the positive policy climate, the programs have reached substantial numbers of health program managers with new knowledge and new skills for improving service delivery. Distance teaching programs have created a demand for courses by developing new courses, training course writers, training DHMTs to provide demonstration and counseling service, teaching tutors to grade assignments, and creating the capability to develop radio programs and audio cassettes. Planning and management programs have trained DHMTs to compile their annual statistical reports, prepare annual health plans, submit successful proposals for funding to Government and donor agencies, trained managers of NGOs to improve service delivery, prepared the groundwork for the introduction of management content into the basic training of health professionals, and carried out consultations and research of relevance to solving important health program management problems.

While the paths to sustainability may differ in the two countries visited during this evaluation, the provision of

funds in Government budgets for distance teaching and management and planning activities and the recognition of the need to promote management development at district and local levels of the health care system are strong and positive signals of the need, priority, and commitment to these programs.

ANNEX A ACRONYMS

AID (also USAID)	United States Agency for International Development
AIDS	Acquired Immunodeficiency Syndrome
AMREF	African Medical Research Foundation
CE	Continuing Education
CTO	Cognizant Technical Officer
DHMT	District Health Management Team
DT	Distance Teaching
DTU	Distance Teaching Unit
EPI	Expanded Program of Immunization
FP	Family Planning
GOK	Government of Kenya
GOT	Government of Tanzania
GOU	Government of Uganda
HIS	Health Information System
HPM	Health Planning and Management
HPMU	Health Planning and Management Unit
HPNO	Health, Population, and Nutrition Office
MCH	Maternal and Child Health
MIS	Management Information System
MOH	Ministry of Health
NGO	Non Governmental Organization
PHC	Primary Health Care
PVO	Private Voluntary Organization
RHM	Regional Health Management Team
SIDA	Swedish International Development Agency
UNICEF	United Nations International Childrens Emergency Fund
VOK	Voice of Kenya (Radio)

ANNEX B

AMREF Matching Grant
Final Evaluation
SCOPE OF WORK

Purpose:

To assess the accomplishments and impact of health activities in countries in East Africa funded under this Matching Grant; and to evaluate AMREF's headquarters performance in providing oversight and support to field activities. Project performance and effectiveness will be measured against the goals and objectives established in cooperative agreement PDC-0276-G-SS-6126-00 (from 9/86 to 9/90).

Objectives:

1. To assess AMREF's progress towards and effectiveness in carrying out the health education/training projects specified in the grant, which are aimed at enhancing the supervisory and management skills of health care professionals in specified countries in East Africa. This should include an assessment of the impact of training on health professionals.
2. To analyze and evaluate the effectiveness of AMREF's headquarters in providing technical, financial, policy and programmatic oversight and support to field activities in all focus countries. Particular attention should be focused on the programmatic implications of AMREF's headquarters being located in Kenya when all A.I.D. communication occurs with the New York office.
3. To assess AMREF's capacities for international development and training, as well as to determine what, if any, problems and constraints are preventing them from reaching the goals and objectives outlined in the cooperative agreement with FVA/PVC.
4. To develop specific recommendations for AMREF regarding technical modifications to field implementation and headquarter-centered responsibilities, including: training design and curriculum development, field backstopping, monitoring and evaluation, administrative procedures, and staff development.

5. To assess whether activities complement health programs and policies of A.I.D. and the host governments.
6. To examine what steps are being taken to institutionalize projects in order to assure the sustainability of benefits.
7. To assess the potential of projects to expand within existing (and possibly additional) countries, and to recommend actions that could encourage such expansion.

Evaluation Outputs:

The evaluation team leader will be responsible for preparing and delivering ten copies of the final report to A.I.D. by (date??). Prior to this, the team leader will provide by (date ??) a copy of the draft report concurrently to AMREF and A.I.D. for their review and comments.

The report should provide the following:

1. An assessment of AMREF's progress towards the goals of the Grant Agreement.
2. An evaluation of AMREF's performance and effectiveness in focus countries, as well as the problems and constraints that are influencing progress towards the established goals.
3. Recommendations to AMREF for actions to support their future progress.

The body of the report should also contain the following:

- Table of Contents
- Executive Summary
- Key Findings and Recommendations
- Purpose of evaluation
- Team composition and study methodology
- Separate analyses of Distance Teaching Program and Health Management and Planning Program
- Annexes
 - Scope of Work (SOW)
 - List of documents consulted
 - List of individuals/organizations consulted

Background :

In 1986 AMREF submitted a proposal requesting A.I.D. assistance of \$767 thousand for a three year matching grant, to which AMREF would match equal funds. FVA/PVC provided AMREF with \$643 thousand for a three year cooperative agreement and only two of the three proposed programs were accepted for funding. These are the Health Management and Planning Unit and the Distance Teaching Program, described below. In 1989 AMREF was provided a one year no-cost-extension for this project.

Health Management Planning Unit - This unit was to be established in AMREF's operational headquarters in Nairobi in order to provide management assistance to health professionals in East Africa employed by Non-Government Organizations (NGOs) as well as Ministry of Health staff at the local, district, and regional levels. Training was to be available to organizations in East Africa requesting assistance and would address such topics as employee motivation absent incentive systems, conflict resolution, staff orientation and development, and linkages between project budgeting, planning and implementation. Special training activities would also be developed that focused on sustainable community-based child survival and family planning programs.

Distance Teaching Program - AMREF was provided funding to improve and expand its Distance Teaching Program which prior to this grant had taught four courses to 800 health professionals throughout Kenya. In Distance Teaching students learn at their own pace through radio, publications and written assignments (which they return to an instructor in Nairobi for comments before proceeding to the next lesson). The program is intended to reach health professionals delivering services in rural areas who have no access to continuing education through any other mechanism. Improvements through this project were to include: training of District Health Management Teams to organize clinical practice sessions in the field for course participants; development and production of additional radio training programs; distribution of Afya (a quarterly health publication) to all health centers and dispensaries in Eastern Africa (approximately 5000); and provision of technical assistance to distance teaching units in other countries.

Methodology:

The evaluators will conduct their assessment using the following:

1. AMREF Matching Grant Agreement.
2. Prior internal and external evaluations of field operations and headquarters (if available).
3. Annual Reports of Project
4. Other documents considered relevant.

5. Interviews with AMREF staff, faculty, course participants, host country counterparts (MOH, universities, etc), USAID Missions, and other individuals considered relevant.
6. Interviews with and/or surveys of project beneficiaries (i.e.- course participants).

Schedule:

July 16 to 18	Headquarters evaluation/briefing in New York City
July 21 to Aug 5	Headquarters and field evaluations in Kenya
July 25 to 28	Field evaluations in Uganda
August 22	Debriefing at AMREF N.Y.
October 25	Debriefing at A.I.D. in Washington

Evaluation Questions and Issues: Described below are questions and issues that FVA/PVC/CSH has developed to direct the evaluator(s) during the course of the evaluation. Some questions are more relevant for the field than headquarters, and vice versa. The evaluation team should use these questions as a guide; it is not expected that each will be separately addressed in the final report.

- Ability of project design and implementation procedures to meet project objectives
 - Are AMREF's program activities consistent with the focus of the grant agreement?
 - Is there evidence that project beneficiaries have benefitted from AMREF's involvement in subject communities?
 - What strategies has the project management taken to improve health training programs? Do strategies seem appropriate?
 - Do field guidance, training materials and promotional materials reflect state-of-the-art health knowledge and sensitivity to cultural constraints?
 - Has training and education been targeted to particular groups? If so, do groups seem appropriate? Has targeting been effective?

- How appropriate are training materials/curriculum for countries and participants? How has training been tailored to meet specific needs of students? How effective are materials used in Distant Teaching Program? Is Afya, the health quarterly, providing information that health practitioners could not obtain elsewhere?
- How many training programs are successfully functioning? How many were planned to be functioning at this time?; and, how many health professionals have participated in AMREF'S program under this cooperative agreement? How many were scheduled to participate at this time?

Institutional Development in the Field

- At each level, does the field staff have the training and skills necessary to perform project functions?
- How does AMREF identify trainers and consultants? Has any type of training been provided to teaching staff? If not, would such assistance be relevant?
- If training has occurred, do staff feel it was appropriate and have they incorporated skills into their job responsibilities?
- Has technical staff been sensitive to local abilities to absorb new information?
- Have training materials been field tested? If so, how and by whom?

Project Monitoring and Evaluation

- What type of system has each project activity developed to monitor and measure costs, progress and the effectiveness of activities? What are the indicators of progress in program activities?
- Who is responsible for data collection and analysis? Do these individuals have the training and skills necessary to do the job?
- Has the development of the Evaluation and Operational Research Unit at AMREF's headquarters in Nairobi increased the PVO's evaluation capabilities? If so, how?

- Has AMREF developed a system to measure the impact of training programs on course participants? If so, is data from this system being used to refine courses, or redirect resources or staff time? What does data indicate regarding program effectiveness (i.e. - skills, performance and employment of students)?
- Does AMREF keep track of course participants once training is completed?
- How is feedback provided to project staff, counterpart organizations, students and community?

Relationship with Host Government, Community and other organizations in country

- What has been the involvement of the MOH, universities local institutions, or other NGOs in terms of project design, financial support or project implementation?
- How successful are partnerships with local partner organizations? Are counterparts assuming ownership of the projects?
- Has this project contributed to, or otherwise impacted, public or private sector activities of other organizations involved in the health sector?
- Do projects complement policies and programs of host government and A.I.D.?

Sustainability

- What financial and organizational strategies have been implemented to promote project's sustainability?
- How successful has AMREF been at establishing revolving funds or other cost-recovery mechanisms?
- What efforts are being made to phase out of certain activities/areas, and to turn responsibility over to the community/host government?
- Do communities and/or local institutions believe that project meets their health needs?
- Does AMREF plan to leave communities/countries at any specified point? If so, do host governments or other institutions demonstrate commitment/ability to sustain project benefits once AMREF's support ceases?

Relationship between field and headquarters

- How does headquarters (HQ) - both New York and Nairobi offices - support field efforts? What role does the New York office play in project management and monitoring?
- What is the turn-around time between field requests for information, technical assistance, etc. and responses from headquarters?
- Do headquarter's funding mechanisms promote smooth project implementation?
- How many trips have headquarter's staff made to field sites? What has been the nature of the visits (i.e.- to provide technical assistance, monitor status of project, etc.)?
- Is technical assistance from headquarters to field typically initiated by HQ, field, or either?
- To what extent, if any, does Headquarters provide policy and program guidance to field staff?
- What type of staff support does headquarters need to effectively do its job? Has such support been sufficient?
- Does headquarters tend to employ technical staff, or to hire consultants as needed? What have been the effects of using the approach that they employ?

Financial Management/Tracking

- What is the turn-around time between field expenditure requests and money sent from headquarters?
- Is there typically enough cash on hand to meet requests from the field?
- Is there an implementation plan or time line that relates activities to expected expenses? If so, how far into the future does it calculate?
- How do planned and actual expenditures relate?

ANNEX C: DOCUMENTS REVIEWED

1. AMREF NEWS, No. 19, January - March 1990
2. AMREF in Action, 1989
3. "Starting Where the People Are: The African Medical and Research Foundation," in Carnegie Quarterly V.XXXII/No.2, Spring 1987
4. Facts About AMREF and the Flying Doctors, AMREF USA
5. Concept Paper on Distance Teaching, AMREF, Nairobi, November 1989
6. Proposal for Distance Teaching, AMREF Training Department, Nairobi, November 1989
7. Letter from Mr. Norman Fairweather, Financial Director, AMREF NY responding to points raised in scope of work, July 18, 1990
8. Letter from Dr. Wilson K. Kisubi, Acting Head, Health Planning and Evaluation Department, AMREF, Nairobi, responding to points raised in scope of work, June 19, 1990
9. Scope of Work for AMREF Matching Grant Final Evaluation, May 11, 1990
10. Matching Grant No. PDC-0276-G-SS-6126-00 Award, USAID, October 6, 1986
11. Mid Term Evaluation of Amref Distance Teaching in Eastern Africa, by F.M. Mburu, Nairobi, April 1989
12. AMREF Strategic Plan, 1989-1994, February 1989
13. Health Planning and Management Unit Reports
Jan 1986 - Dec 1986
Jan 1987 - Mar 1987
Apr 1987 - Jun 1987
Jul 1987 - Sep 1987
Jan 1988 - Jun 1988

Jul 1988 - Jun 1989
Jul 1989 - Dec 1989

14. Distance Teaching Unit Reports

Jul 1987 - Sep 1987
Oct 1987 - Dec 1987
Jan 1988 - Mar 1988
Apr 1988 - Jun 1988
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Sep 1988 - Aug 1989
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Sep 1989 - Jun 1990
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15. DEH NEWS (Distance Education in Health) Issue No. 1, January 1990, AMREF, Nairobi
16. Community Health Course, AMREF and MOH Uganda
17. Family Planning Course, AMREF, Kenya
18. Environmental Health Course, AMREF and MOH Uganda
19. Helping Mothers to Breastfeed Course, AMREF, Kenya
20. Environmental Health Course, AMREF, Kenya (adapted from Uganda Course)
21. Mental Health Course, AMREF, Kenya
22. Gynaecology and Obstetrics Course, AMREF, Kenya
23. Radio Scripts for the Environmental Health Series, AMREF, Kenya
24. Questionnaires, Pretests, and Posttests for DTU courses and radio programs.
25. Letters received from radio program listeners (2" thick file)
26. Letters received from DTU course participants (3" thick file)

27. Tape Recordings of Selected Radio Programs
28. Matching Grant Proposal for Improving Health Care Delivery System at District Level, 1990-1994 (Submitted to USAID by the HPMU)
29. Four year Plan of Operation, 1990 - 1994, HPMU
30. Proposal for Assistance to the Ministry of Health of Kenya for Strengthening Rural Health Services, HPMU, August 1986
31. Briefing Document, "Distance Teaching Component," July 1990
32. Briefing Document, "Correspondence Courses," July 1990
33. Data on the Distance Teaching Program in Kenya Students by district by cadre:
 - Person Course Assignments by month and year
 - Person Course Lessons sent by month and year
 - Person Course Completions by month and year
 - Person Course Enrollments by month and year
 - Person Course "Dormancy" (Dropouts), Active, and Completion
34. The Kenya National Continuing Education Programme, Proposal to SIDA for the 1990-1994 Health Sector Assistance Period, AMREF and Ministry of Health
35. Budgets for Distance Teaching Unit, 1988 and 1990
36. Activity Schedules for Distance Teaching Unit, 1990 and 1991
37. Workplans for Distance Teaching Unit, 1987-1990
38. Nduba, Stephanie K., "Distance Education for Non Formal Education: a case study." Submitted to the Commonwealth non formal education conference, Nairobi, 6-9 June 1990.
39. Report of a Workshop on Designing and Writing of Distance Education Materials for Health Workers, May and November, 1989, prepared by Stephanie K. Nduba, AMREF, Nairobi

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41. Resumes of Professional Staff, DTU and HPMU.
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49. Nyandarua District PHC Five Year Plan, HPMU, 1989.
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1. Staff Development in Uganda by Nairobi Team
2. Support to Health Manpower Development Centre from Health Management Unit, AMREF, Nairobi

3. Report on Health Management Workshop for Medical Bureaux held at Kisubi, 15-22 October, 1989
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5. Distance Teaching Reports
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 - Unit Report Apr 1985 - Dec 1987
6. Examples of marked distance teaching assignments.
7. Examples of Child Health and Communicable Disease course lessons.
8. Detailed Analysis of the Distance Teaching Unit, Apr 1985-June 1988.
9. Job Description for the Distance Education Unit Coordinator.
10. Strategies for reducing drop out rates and increasing completion rates for distance teaching in Uganda.

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ANNEX E

ORGANIZATIONS AND INDIVIDUALS CONTACTED

UNITED STATES

AMREF New York

Dr. James Sheffield, President
Mr. Norman Fairweather, Financial Director

USAID Washington

Ms. Susan Morawetz, FVA/PVC

KENYA

USAID, Nairobi

Dr. David Oot	:	Health/Population/Nutrition Office
Ms. Millie Howard	:	"
Ms. Mollie Gingrich	:	"
Ms. Nellie Mwanzia	:	"
Mr. Vic Barbiero	:	REDSO/ESA

AMREF Nairobi

Dr. Michael Gerber	:	Director General
Dr. Al Henn	:	Executive Deputy Director General
Mr. S. Shitemi	:	Deputy Director General

Distance Teaching Unit

Ms. Stephanie Nduba	:	Head, DTU
Mr. Peter Mwarogo	:	Radio Programme Officer
Mr. Charles Omondi	:	Distance Teaching Officer
Ms. Nancy Ndung'u	:	Secretary

Health Planning & Management Unit

Dr. Muthoni Kariuki	:	Acting Head, HPMU
Dr. Philip Theuri		
Mr. Samuel Ong'ayo		

Mr. Eban Taban

Project Management

Dr. Florence Musiime : Senior Project Officer in
charge of Regional Activities

Finance Department

Mrs. Millie Ondimu : Senior Project Accountant,
responsible for DT Accounts
Mr. Ngugi Kiongo : Project Accountant
Ms. Eva Nabeta : Computer Analyst

Evaluation Department

Dr. W. Kisubi : Head of Evaluation

Training Department

Dr. M. Migue : Director of Training
Dr. J. Nduba : Head of CE Unit
Dr. C. H. Wood : Retired Director General
(who was Director of Training
when DT started)
Dr. Sem Bhachu : Post Basic Unit
Ms. Mary Memia : Continuing Education Unit

Community Health Department

Ms. Joyce Naisho
Ms. Penina Ochola
Ms. Margaret Mwiti

MINISTRY OF HEALTH, CONTINUING EDUCATION UNIT,
TUTORS AND RADIO PROGRAMME PRODUCERS

Name	Designation	Place
Dr. A. O. Oyoo	Senior Deputy Director of Medical Services & Director of Division of Family Health	MOH
Mr. William Odundo	HO, Tutor DTU	MOH
Mr. Alfred Odhiambo	Assistant Chief Clinical Officer, Tutor DTU	MOH Hqs.
Mr. David Omare	NO/OHN, Occupational Health Division	MOH
Ms. Anne W. Njenga	Nurse Tutor, Tutor DTU	MTC
Ms. Susan M. Nzube	Assistant CNO, Tutor DTU	MTC
Mr. Simon Muchiri	Health Education Officer, Tutor DTU	MTC MOH
Mr. Michael Ojiambo	Research Officer (Biologist) Tutor DTU	National Environment Secretariat
Mr. Kimani	Health Information Systems	MOH
Mr. Richard Odindo		CE, MOH
Mr. Athony Ophwelle	Clinical Officer	Division of F. Health

NAKURU PHMT, DHMT AND IN-CHARGES OF HEALTH FACILITIES

Name	Designation	Place
Dr. L. K. Kiptui	PMO	Nakuru
Dr. B. N. Mayanja	MO i/c	Nakuru Hospital
Mr. Eric M. Njoroge	Clinical Officer i/c	Elburgon
Mrs. Mary Koech	Enrolled Nurse/FP	Rongai
Mrs. E. N. Kariuki	Community Nurse	Elburgon
Mr. J. Shiraku	PHS	PMO's Office
Mr. Nelson N. Waweru	PPHO	Nakuru
Mrs. Margaret Ruo	Enrolled Nurse	Gilgil Hosp.
Mrs. Yunike Rori	N.O i/c	Molo Hospital
Mrs. Anne Wafula	Clinical Officer i/c	Gilgil Hosp.
Mr. Wanyonyi Nakitare	D.P.H.N.	Kapsabet
Dr. S. D. Sonoiya	D.M.O.H.	Nakuru
Dr. P. K. Athero	M.O. i/c	Naivasha
Mr. W. M. Kamau	H.S.	Naivasha

MATHARE MENTAL HOSPITAL: PARTICIPANTS OF MANAGEMENT WORKSHOPS

Name	Designation
Irene Mboteh	NO CED
Rose W Ndirity	No. II Community Psychiatry
Mary W Gichohi	Clinical Officer
John Kahiro Gachobe	Occupational Therapist
Paul N. Murayah	Physiotherapy Department
Hannah M. Kagari	No. I Out Patient Services
Muthami J. K.	No. II Ward 5 Male
Samuel K Nzioki	No. II Ward 4 Male
George N. Waweru	No. II Ward 6 Male
Sam Mwangi	Occupational Therapist
Annie Marie Ngari	No. II Ward I Male
Willy Mwea	Clinical Officer
Nancy W. Michire	No. Orientation
Keziah W. Batera	No. II Ward 8 Male
M. N. Nguiguti	No. I
Helen W. Macharia	N/O Male Side
Annah W. Kimaku	No. I
Joyce Ngigi	School of Nursing
Geoffrey Wathome	Ward 1 Female
Kariuki Macharia	Community Psychiatric
A. Muchene	F 3
F. G. Kihuho	
J. O. Mboga	Mathare Hospital
Muriithi Henry	MSU Infirmary
Peter Mulinge Katala	MSU Sec A
E. W. Ndoria	House Keeper
J. M. Gitau	MSU
J. G. Magu	Hospital Nursing Officer
Mary B Ombui	Ward 4 Male
Francis K Maruya	No. 1 Orientation
Rahab Kiarie	OPD

RADIOGRAPHERS MANAGEMENT TRAINING
MEDICAL TRAINING COLLEGE, NAIROBI

Name	Designation	Place
Phyllis W Ranja	Tutor, Chairman K.A.R.	MTC
Peter K Mutua	Tutor, V-Chairman K.A.R.	MTC
Richard Odoyo	Senior Radiographer	Kenyatta N.
	Secretary, K.A.R.	Hospital
Benjamin W Waithaka	Radiographer	"
Patrick K Kiarie	Radiographer	Nairobi Hospital
Jacinta N Gachau	Radiographer	Kenyatta N.
		Hospital
David A Bwonya	Radiographer (Lecturer)	MTC
Nicholas N Kabuu	Radiographer,	Kenyatta N.
	Assistant Secretary, K.A.R.	Hospital
A. M. Kasomo	Radiographer i/c	KEMRI
Mary Mwangi	Radiographer	Kenyatta N.
		Hospital
Solomon Kilaha	Radiographer/Tutor	Member K.A.R.

DT PARTICIPANTS, NAKURU

Name	Designation	Place
Samson Masaviru L.	EN/E Psychiatric Nurse	MOH
Serah Mailu	Enrolled Community Nurse	MOH
Sarah Mbote	Kenya Registered Nurse	MOH
Jamin S Maruti	Community Nurse	"
Richard K. B. Tobit	Community Nurse	"
Mbugua P. W. Nicholas	Kenya Enrolled C. Nurse	"
Francis Gichuhi	Senior Clinical Officer	Egerton Univer.
		College
John Njenga Njoroge	Nursing Officer	Nakuru Gen.
		Hospital

UGANDA

USAID Kampala

Mr. Paul Cohn : AIDS/Health/Population Office
Mr. David Puckett : AIDS/Health/Population Office

RELIGIOUS BUREAUX AND PARAMEDICAL SCHOOLS - KAMPALA

Name	Designation	Place
Juliet Mayanje	Nursing Officer	Mengo Hospital
M. S. Mbabali	Nurse Tutor	Mulango School of Nursing
Bibian Mupizi (Mrs)	Health Co-ordinator	KLA ARCH
John Moses Busulwa	Health Co-ordinator	CDU, Mukono
I. Musoke Sebakigye	Health Co-ordinator	SDA Church
Dr. CWZ Kyohere	Medical Superintendent/ National Facilitator PDP	Mengo Hospital
C. N. Kabugo	Executive Secretary	Uganda Catholic Medical Bureau
Dr. S.M.A. Gaffar	Director Medical Services	Uganda Muslim Supreme Council
John Fr. Lule	Health Co-ordinator	Kiyinda-Mityana Diocese

DISTANCE TEACHING, UGANDA

Name	Designation	Place
Vincent Ojome	Director	HMDC, Mbale
Sjoerd Postma	AMREF Health Planner	Entebbe
Lilian Nyamanyanje	Radio Producer	"
John Odolon	" "	"
Jonathan Muganga	Health Inspector	"
P. Y. Kadama	Ag. Assistant Director of Medical Services (Planning)	MOH
Mr. Nzabanita	Assistant Director of Medical Services (Planning)	MOH
J. B. Kowooya	Tutor and SU	Masaka
Eva Mpuhuuke	Tutor	Fort Portal
J. H. Enyamu	Tutor	School of Hygiene
J. Mugorwa	Tutor	Fort Portal
Mrs. Mary Muiri	Tutor	Mbale Medical School
Boniace Mutusa	Training Officer	HMDC
Ruth Maginoh	Training Officer	HMDC
Dr. Igune Michael	Training Officer	HMDC
Dr. Peter Ngatia	Medical Training Officer	AMREF, HMDC

DTU PARTICIPANTS, MBALE, UGANDA

Name	Designation	Place
Orech Deborah	Senior Enrolled Nurse	MOH
Geoffrey L Mukasa	Health Assistant	"
Peter Wakalyembe	Medical Assistant	"
Namugaya A Jane	Enrolled Nurse	"
Wandawa Patrick	Public Health Inspector	"
Samuel M Weswanah	Health Educator	Bahai's MOH
Nangoli Racheal	Enrolled Nurse	MOH
Agnes A Khisa	Nursing Officer	"
Esingu Peter	Medical Assistant	African Tex. Mills Ltd.

Charles Sebikari	Dispenser	MOH
Ojok V Kitara	Medical Assistant	MOH
Rev. Googo M Patrick	Community Based HC Trainer	AMREF, Mbale
Lukwago Rehema (Mrs)	Midwife	MOH
Mulonda Perpetua	Nursing Officer	"
Pekke Joy	Enrolled Midwife	MOH

ANNEX F

SURVEY INSTRUMENT USED FOR EVALUATION OF DISTANCE
TEACHING AND MANAGEMENT TRAINING PROGRAMS

NAME _____

CURRENT POSITION _____

ORGANIZATION _____

HIGHEST FORMAL EDUCATION _____

YEARS OF MANAGEMENT EXPERIENCE _____

PRIOR MANAGEMENT TRAINING _____

Please circle the response that most closely represents your answer to each of the following questions:

- 1 = No, never, not at all.
- 2 = Little, few, almost never
- 3 = Some, somewhat, some of the time
- 4 = Mostly, most of the time, many
- 5 = Always, completely, all of the time

.....

1. I have been able to apply general concepts from the training program in my current job. 1 2 3 4 5

2. I have been able to apply specific skills from the training program in my current job. 1 2 3 4 5

3. I find the sequence of the training materials to be logical and appropriate. 1 2 3 4 5

4. I feel that the level of ease/difficulty of the training materials is appropriate. 1 2 3 4 5

5. I find the written comments from faculty to be helpful. 1 2 3 4 5

6. I find personal follow-up from faculty and training teams to be helpful. 1 2 3 4 5

7. I find the radio broadcasts to be a helpful follow up to training. 1 2 3 4 5

8. I find the reading materials sent to me are helpful. 1 2 3 4 5
9. I feel that the training program has improved my ability to carry out my current job. 1 2 3 4 5
10. I feel that the training program has improved my professional status. 1 2 3 4 5
11. I feel that the training program has improved my future career opportunities. 1 2 3 4 5
12. Overall, I am satisfied with the training program. 1 2 3 4 5

ANNEX G

INSTITUTIONS COLLABORATING
WITH

AMREF'S
DISTANCE TEACHING UNIT

Prepared by:
Mrs Stephanie Nduba

INSTITUTIONS

1. UNIVERSITY OF NAIROBI
 - (a) College of Health Science
 - (b) College of Education and External Degree
2. KENYA INSTITUTE OF EDUCATION
3. ALL AFRICAN CONFERENCE OF CHURCHES
4. KENYA BROADCASTING CORPORATION/RADIO UGANDA
5. HEALTH LEARNING MATERIALS - WHO NETWORK
6. KENYA MEDICAL ASSOCIATION
7. KENYA ADULT TEACHING ASSOCIATION
8. UNESCO/KENYA NATIONAL EDUCATION FOR ALL COMMISSION
9. MBALE CATHOLIC DIOCESE
10. INTERNATIONAL EXTENSION COLLEGE
11. INTERNATIONAL COUNCIL OF DISTANCE EDUCATION
12. MINISTRIES OF HEALTH - KENYA, UGANDA, TANZANIA, SUDAN, ETHIOPIA, ZIMBAMBWE AND BOTSWANA
13. VARIOUS UNITS OF AMREF e.g.
 - Book Distribution
 - Library
 - Clinical
 - Community Health
 - Computer Management
14. THE COMMONWEALTH OF LEARNING
15. COUNTERPARTS

1. UNIVERSITY OF NAIROBI

(A) COLLEGE OF HEALTH SCIENCE

The relationship so far is that we use the College's library and expertise in different fields e.g. when developing the Mental Health Course and radio programmes, the Psychiatric Department was involved.

(B) COLLEGE OF EDUCATION AND EXTERNAL DEGREE (CEES)

At the beginning we drew a lot of experience from the then College of Adult and Distance Education (CADE). The College also introduced us to the International Extension College (IEC). We (CEES and DTU) participate in each other's workshops by sending participants and facilitators. The Head of DTU is a member of the School of Distance Education Board.

When the College gets an external consultant it informs us well in advance so that we can utilise him/her without having to struggle for work permit or pay for air ticket. A member of the College is also a member of our Newsletter Editorial Board.

2. KENYA INSTITUTE OF EDUCATION (KIE)

KIE and DTU enjoy close relationship. The Unit is a member of KIE Distance Teaching Panel where it contributes significantly. Also members of the Unit are continuously being called upon to assist in the development of distance health learning material for schools, colleges and general public.

We participate in each other's training programmes particularly when training people from outside Kenya. These people whether they are being trained by KIE, CEES or AMREF have to spend sometime with the other two.

Finally, KIE has kindly allowed us to use their Audio Studio at very minimum cost.

3. ALL AFRICAN CONFERENCE OF CHURCHES

The Unit contacted AACC because of its Audio Studio training facilities and whenever we have audio workshops participants use the studio at reasonable cost.

4. KENYA BROADCASTING CORPORATION/RADIO UGANDA

The two national radios transmitted our programmes and try hard to avail air time.

5. HEALTH LEARNING MATERIAL - WHO

As all the material produced for distance education are health learning material, it was necessary to work hand in hand with this network. In turn, HLM has advertised our distance education materials to different countries.

6. KENYA MEDICAL ASSOCIATION (KMA)

KMA/DTU work hand in hand in the production of material. KMA has just started running distance education for doctors.

7. KENYA ADULT TEACHING ASSOCIATION

Members of the Unit are members of this Association but apart from attending meetings, nothing much has happened.

8. UNESCO/KENYA NATIONAL EDUCATION FOR ALL COMMISSION

The Head of the Unit is a member of the National Education for All Committee which is responsible to map out strategies of reaching this goal, whose co-ordinator is UNESCO.

9. MBALE CATHOLIC DIOCESE

The Catholic Diocese of Uganda has an audio studio in Mbale so the Unit has developed a good working relationship and as a result was allowed to use the only available studio at a fee.

10. INTERNATIONAL EXTENSION COLLEGE

DTU enjoys a very close relationship with this institution. Members of staff of the two institutions know each other at personal level. They can call on each other for consultations and support. The IEC runs a four month course in Distance Teaching for Developing Countries.

So far, 3 members of AMREF and 5 employees of ministries of health, Uganda, Tanzania and Kenya have attended this course. The two institutions exchange materials and the IEC has provided AMREF with technical support.

11. INTERNATIONAL COUNCIL OF DISTANCE EDUCATION

The Unit is a member of this Council and gets all publications. So far the Council has invited the Unit to send at least a representative to its Conference later this year.

12. MINISTRIES OF HEALTH - KENYA, UGANDA, TANZANIA, SUDAN ETHIOPIA, ZIMBABWE AND BOTSWANA

The Unit enjoys working with various divisions of these ministries particularly those of the East African countries.

13. VARIOUS DEPARTMENTS AT AMREF

DTU could not achieve all it has achieved if it was not for the combined efforts of other units of AMREF particularly the Continuing Education Unit, Community Health Department, Clinical Department Book Distribution Unit and Computer Services Management.

14. THE COMMONWEALTH OF LEARNING

DTU is a member of the above Institution and gets involved in consultation meetings and in its conference. It was recently selected to be the Regional Distance Education in Health for Non-formal Education Centre though there is no fund to carry out this activity.

Finally, the Unit has provided material and information to many organizations, institutions and universities in the region.

15. COUNTERPARTS

There is an excellent working relationship with the AMREF/Ministry of Health counterparts in Kenya, Tanzania and Uganda - DTU has trained all the personnel involved in distance education - be it in the production of material or in the running of the programme. There are well marked counterparts in Kenya, Uganda and Sudan (nothing is going on in Sudan because of security problem). This situation is a bit different in Tanzania as the Ministry keeps on changing personnel concerned with DT and also has not made its mind yet on where to place distance education.

ANNEX H

HPMJ PRELIMINARY ANALYSIS OF COST PER UNIT OF OUTPUT

PRELIMINARY COST ANALYSIS

1. MANAGEMENT TRAINING	1986	1987	1988	1989	1990
1. COAST PROVINCE (DHMTS)	x				
2. RIPT VALLEY (DHMTS)	x				
3. NYANZA PROVINCE (DHMTS)		x			
4. WESTERN PROVINCE (DHMTS)		x			
5. UGANDA (DHMTS, NGOS, HWS)		x			
6. EMBU DISTRICT (DHMTS)		x			
7. RIPT VALLEY (DHMTS)			x		
8. NATIONAL (PHYSIOTHERAPISTS)			x		
9. RIPT VALLEY (SUB-DHMTS)			x	x	
10. POST BASIC (DIPLOMA STUDENTS)			x		
11. NATIONAL (MED. RECORDS OFFICERS)			x		
12. MATHARE MENTAL HOSPITAL (UNIT HEADS)					
13. RIPT VALLEY (CLINICAL OFFICERS & NURSES)				x	
14. NATIONAL (CLINICAL OFFICERS & NURSES)				x	
15. UGANDA (UGANDA MEDICAL BUREAU)				x	
16. NATIONAL (RHTC TUTORS)				x	
17. NATIONAL (RHTC TUTORS)				x	
18. MATHARE MENTAL HOSPITAL (UNIT INCHARGES)					x
19. NATIONAL (RADIOGRAPHERS)					x

1. MANAGEMENT TRAINING

	Average No. of Participants	Cost (Ksha)	AMRZP Personnel	Total	Cost Per Participant ^a Ksha.	\$
Coast (1986)	30	80,000	16,000	96,000	4,000	174
R. Valley (1986)	40	90,000	16,000	106,000	3,313	144
Nyanza (1987)	40	90,000	29,100	119,110	3,723	162
Western (1987)	30	80,000	29,100	109,110	4,546	198
Uganda (1987)	30	165,000	33,000	198,000	8,250	359
Embu (1987)	40	90,000	16,000	106,000	3,313	144
R. Valley (1988)	40	90,000	27,000	117,000	3,656	159
Physiotherapists (1988)	30	80,000	27,000	117,000	4,041	177
Diploma students (1988 - 89)	18	incurred by Training dept.	232,000	Each Year	-	-
Medical Records Officers (1988)	30	80,000	35,000	115,000	4,791	208
Mathare Hospital Staff (1988)	30	105,000	35,000	140,000	5,834	254
Clinical Officers, Nurses (1989)	30	90,000	28,000	118,000	4,916	214

Clinical Officers Nurses (1989)	30	90,000	31,000	121,000	5,041	219
Uganda Med. Bureau (1989)	25	330,000	20,000	350,000	1,750	78
Rural Health Training Centres (Tutors) (1989)	20	incurred by Train ing Dept.	35,700	-	-	-
Rural Health Training Centres (Tutors) 1989)	20	incurred by Train ing Dept	35,700	224,000		
Mathare Mental Hospital (incharges) (1990)	30	190,000	34,000	224,000	9,334	406
Radiographers (1990)	30	190,000	34,000	224,000	9,334	406

*Includes 25% overhead

1. Duration of training is five days

11. FOLLOW UP VISITS	1986	1987	1988	1989	1990
1. NYANZA PROVINCE	x				
2. COAST PROVINCE	x				
3. EMBU DISTRICT (MCH/FP)		x			
4. RIFT VALLEY (SUB DHMTS)			x		

II. FOLLOW-UP VISITS

	No. of Stations visited	Duration of visit	Cost (Kshs)	Personnel
NYANZA	8	10 days	8,000	27,230
COAST	9	10 days	12,000	27,230
EMBU	4	2 days	(covered by Ministry of Health)	-
RIFT VALLEY	7	10 days	20,000	27,220

111. SURVEYS/OPERATIONS RESEARCH

	1986	1987	1988	1989	1990
1. CE BASE LINE (KISII)	x				
2. KISUMU BASELINE (KISUMU)					
3. TRANSPORT MANAGEMENT STUDY (NYANZA EASTERN, COAST)		x	x		
4. CE DATA BASE (KITUI, MACHAKOS & KIAMBU)					x

III.. Surveys/Operations Research

	Cost (Kshs) Incurred by Training	Personnel	Total
CE Baseline Survey Kisii		27,174	
Kisumu Baseline Survey	450,000	228,947	676,947

IV. CONSULTANCIES

	1986	1987	1988	1989	1990
1. HEALTH MANAGEMENT DEVELOPMENT (ETHIOPIA)	x				
2. ANNOTATED BIBLIOGRAPH (MCH/FP)				x	
3. MOH - PHC DEVELOPMENT (6 DISTRICTS IN KENYA)			x		
4. HEALTH MANAGEMENT DEVELOPMENT (UGANDA)			x		
5. HMIS DEVELOPMENT (SOUTHERN SUDAN)				x	

IV. CONSULTANCIES

- The foundation received funds whereas HPHU staff did the work.

V. TECHNICAL ASSISTANCE

	1986	1987	1988	1989	1990
1. DATA COLLECTION & ANALYSIS NANDI DISTRICT			x		
2. 5 YR NATIONAL DEVELOPMENT PLANS DISTRICTS IN KENYA		x			
3. PHC PROGRAM PLANNING & DEVELOPMENT KISUMU DISTRICT			x		
4. ANREP 5 YR. PLAN		x			
5. STATISTICAL BULLETIN FOR NANDI DISTRICT		x			
6. CURRICULUM DEVELOPMENT FOR HTC					

/MOH-KENYA				
7. DATA COLLECTION & ANALYSIS EXERCISE FOR NANDI DISTRICT			x	
8. HIS FORMS REVIEW & PRINTING FOR KENYA & UGANDA				x

TECHNICAL ASSISTANCE

	Cost (Kshs)	Personnel	Total
Data Collection (Nandi Dist)	32,000	19,410	51,410
5 Year National Dev. Plan (Kenya)	700,000	112,120	812,120
PHC Plan Kisumu Dist.	80,000	50,940	130,940
AMREP 5 year plan	(AMREP incurred the cost)		
Stat. Bulletin for Nandi Dist.	32,000	19,410	51,410
Curriculum Dev. MTC/MOH Kenya	(not incurred the cost)		
HIS forms review/printing	300,000	29,115	329,115

VI. OTHER WORKSHOPS	1986	1987	1988	1989	1990
1. RESEARCH METHODOLOGY					
2. PROJECT DEVELOPMENT AND IMPLEMENTATION FOR DISTRICT HEALTH MANAGERS - UGANDA					

VII. TRAINING IN MCH/FP	3 months				6 months
	1986	1987	1988	1989	1990
1. MCH-PP HIS FOR MCH/FP COORDINATORS IN THE LAKE ZONE (MWANZA) - TANZANIA			x		
2. MCH-PP HIS FOR MCH/FP COORDINATORS IN TADORA ZONE-TANZANIA			x		
3. MCH-PP HIS FOR MCH-PP COORDINATORS IN DAR ES SALAAM ZONE - TANZANIA			x	x	
4. MCH-PP HIS FOR MCH-PP COORDINATORS IN SOUTHERN ZONE (MTWARA)					
5. MCH-PP HIS FOR MCH-PP COORDINATORS IN SOUTHERN HIGHLAND ZONE (MBEYA) TANZANIA			x		
6. MCH-PP HIS FOR MEDICAL OFFICERS TANZANIA				x	
7. MCH-PP MANAGEMENT TRAINING FOR FPPS HEALTH WORKERS IN KENYA	x	x	x	x	x

- Expenses were incurred by UNFPA/MOH Tanzania except for per diem and Air Travel for AMREF Technical Staff.

Training in MCH/FP Management Information Systems

Six training programs in MCH/FP MIS were planned by the Tanzania Ministry of Health, one for each zone. (A health zone in Tanzania comprises a group of Regions and Districts). Five of these programs were implemented by AMREF/HPMU. Each program was for one week.

Beneficiaries included

- 93 District MCH/FP Coordinators
- 15 Regional MCH/FP Coordinators; and
- 5 Zonal MCH/FP Coordinators.

The MCH/FP Coordinators in Tanzania are usually Public Health Nurses responsible for planning and implementing MCH/FP services at the District, Regional and zonal levels.

Course Sessions included:-

- identification of management problems in the MCH/FP services at each level;
- Orthodox methods of information gathering and presentation;
- Analytical procedures including
 - o summarization of data
 - o graphical presentation of MCH/FP information
 - o development/listing of indicators for MCH/FP services and
 - o report writing and dissemination.

Same course units apply in the program for the District Medical Officers (25 participants from 25 of the 106 districts in mainland Tanzania).