

PD-AM-110  
15.10.15.10

CLASSIFICATION  
PROJECT EVALUATION SUMMARY (PES) - PART I

Report Symbol U-447

1. PROJECT TITLE Tanzania Continuing Education for Health Workers' Project			2. PROJECT NUMBER 621-0154 / 15	3. MISSION/AID/W OFFICE Tanzania
5. KEY PROJECT IMPLEMENTATION DATES			4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) 83-2	
A. First PRO-AG or Equivalent FY 81	B. Final Obligation Expected FY 81	C. Final Input Delivery FY 83	<input type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION	
6. ESTIMATED PROJECT FUNDING			7. PERIOD COVERED BY EVALUATION	
A. Total \$ 2,728,500			From (month/yr.) August 1980	
B. U.S. \$ 2,206,000			To (month/yr.) Sept. 1982	
			Date of Evaluation Review 11/10/82	

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)

B. NAME OF OFFICER RESPONSIBLE FOR ACTION  
C. DATE ACTION TO BE COMPLETED

1. To assure housing facilities in time for expanded activities from Dar and a continued project base from Arusha, construction plans and implementation must be speeded up. Arusha construction to start Nov. 1, 1982 and Dar plans to be submitted to REDSO and construction to be started by Jan. 1983.	AMREF AMREF	Nov. 1, 1982 Jan. 1, 1982
2. Discussions should urgently be taken up to acquire additional space for the education unit office at Ocean Road Hospital Dar es Salaam.	MOH Dar	Nov. 1, 1982
3. (a) In view of delayed start on national program objectives, revised implementation plan with associated budget projections to be submitted. (b) USAID/T will review and decide on appropriate extension of PACD to achieve mutually agreed upon objectives.	AMREF Ehmer, AID/T	Jan. 31, 1983 Feb. 28, 1983
4. Selection of candidate for Project Manager/Administrative Officers.	Project Staff and AMREF	Jan. 1, 1987
5. For recommendations of minor nature (mentioned throughout evaluation) see Appendix B.		

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

<input type="checkbox"/> Project Paper	<input checked="" type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify)
<input checked="" type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C	<input type="checkbox"/> Other (Specify)
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P	

10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT

A.  Continue Project Without Change  
 B.  Change Project Design and/or  
 Change Implementation Plan  
 C.  Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)

Dr. Anita Mackie Health Economist REDSO/EA  
 Dr. Katja Janovsky Project Management Dir. AMREF  
 Mr. Paul Ehmer INP Officer AID/T  
 Dr. Sem Bhachu Medical Training Officer AMREF  
 Dr. R.S. Shoo MOH/Tanzania

12. Mission/AID/W Office Director Approval

Signature: *Barry M. Riley*  
 Typed Name: Barry M. Riley  
 Date: December 6, 1982

### 13. SUMMARY

The agreement between AMREF and the GOT was signed in February 1981 and, after a slow start, the project is progressing well. The degree to which the Continuing Education for Health Workers' team is an integral part of the Division of Manpower Development and Training is appropriate and commendable. Excellent progress is being made on the district implementation of the continuing education program in the Arusha pilot region. The continuing education team members, appointed by the MOH, are functioning well, and are appropriately utilizing their experience developed in the pilot region. Refresher and extension courses are being held for health workers and most workers have attended one. The pre and post assessment methods developed are proving useful tools to identify and correct deficiencies in the health delivery system. Teaching modules and distance teaching materials have not yet been completed, although components thereof have been developed.

Project housing has not been constructed and needs to be expedited as the CET team shifts its focus from the pilot phase to the national aspects. The Center for Educational Development in Health has provided an excellent living and teaching environment in Arusha. The office space allocated in Ocean Road Hospital in Dar will need to be expanded as the team moves the majority of its activities to the national level.

#### 14. EVALUATION METHODOLOGY

The purpose of the evaluation was primarily to measure progress to date on the project, which was approved August 15, 1980, through the signing of an OPG between the African Medical and Research Foundation (AMREF) and USAID/Tanzania. The agreement between the Ministry of Health (MOH) and African Medical and Research Foundation (AMREF) was not signed until February, 1981. This date then effectively marked the beginning of project implementation since no activities could occur before the signing of this agreement. As progress was assessed, the evaluation team expected to identify any problem areas, and suggest ways in which implementation could be improved. In addition, senior MOH officials were informed that if there were any areas where the original project design needed to be amended to take into account changed circumstances, these would be reviewed during the evaluation. Suggestions for specific areas of investigation were solicited by the team during their initial discussions with key MOH officials prior to flying to Arusha.

The evaluation team consisted of the following persons:

- Dr. Anita Mackie, USAID, REDSO/EA, Team Coordinator
- Mr. Paul Ehmer, USAID, Tanzania
- Dr. Katja Janovsky, AMREF, Nairobi
- Dr. Sem Bhachu, AMREF, Arusha
- Dr. Rumishael S. Shoo, MOH/Tanzania

The first three individuals met in Dar es Salaam on Sept 13 and 14, reviewed the project files and had meetings with senior MOH officials. A visit was paid to the Project Headquarters office located in the Ocean Road Hospital complex. Team members then flew to Arusha, the site for the pilot activities, where they were joined by Dr. Bhachu, AMREF Medical Training Officer. The team spent the remainder of the week through Sept. 17 interviewing the members of the Ministry of Health Continuing Education for Health Workers team (CET) in Arusha, visiting a local health facility, discussing the project with the Regional Medical Officer, and reviewing project materials and files at the project field office located in the Center for Educational Development in Health. During the field visit to the West Meru Health Center in Arumeru District, the team observed the planning phase for the follow-up health facility and manpower survey and, in addition, interviewed several members of different cadres of paramedical health workers who had received training under the Project.

On returning to Nairobi, further analysis was conducted of the financial data held at the AMREF headquarters and a draft of the evaluation report was prepared for review. This draft was presented and discussed at the Project Steering Committee meeting held in Arusha on October 12, 1982.

#### 15. EXTERNAL FACTORS

Tanzania has been facing a declining economic situation in recent years. Preliminary estimates for 1981 suggest a decline in real GDP of 3.6 percent from the previous year. Recent GOT estimates of the past year's inflation rate state it to be 30 percent while the actual rate is believed to be higher. The 1982/1983 budget has been described as a budget of rehabilitation, with a small increase in value terms for current expenditure planned (though less than the inflation rate), and major cuts in development expenditures. The 1982/83 development budget was cut 42 percent in real terms from the previous year. The annual development plan totals Shs. 7.3 bn (\$779 mn) of which Shs. 4.8 bn comes from the budget, Shs. 2.5 bn from parastatals and other institutions, and foreign aid contributes Shs. 2.6 bn. The GOT has now conceded several of the IMF requirements for renewal of assistance. However two issues, devaluation and further cuts in social expenditures, are still outstanding. Obviously, all of these negative factors have had their impact on the health sector.

Lack of foreign exchange constrains purchases of drugs and medical supplies from overseas. The high cost of petrol and vehicles has and will continue to inhibit adequate supervision and mobility of health workers. The rapidly rising cost of living resulted in declining living standards for health workers whose salaries were not adjusted to keep pace. Staff emoluments were found to be 46 percent of recurrent expenditures in both rural health facilities and Government hospitals in a recent study (Evaluation of the Health Sector, MOH, Sept. 1980). The recent cuts in development expenditure had less effect in the health sector where over 70 percent of capital expenditures are derived from the donor community. However, there is no adequate provision for maintenance of existing facilities or equipment in the health budgets, both nationally and regionally.

While the Tanzanian health sector faces a deteriorating situation with respect to financial resources, it is making an attempt to upgrade the quality of its personnel. This project addresses both this need and a second area of concern, the upgrading of administration and management. Both these objectives remain valid and could be attained without being directly affected by the decline in the GOT financial sector.

The Ministry of Health's priorities remain unchanged since the project was conceived and are very supportive of the activities. These include a commitment to emphasize primary health care in rural areas, extensive use of paramedical workers, decentralization of decision-making to the regional and district health offices, and development of preventive rather than curative services. One indication of how congruent the project is with the MOH, is the extent to which it is viewed as a Ministry activity rather than a "project" financed by an outside donor.

16. INPUTS

A. Technical Assistance

1. Long Term

The medical training officers, Dr. Bhachu and Dr. Shoo have been acting as project administrators in addition to his their technical roles. It has become increasingly apparent that the project manager slot should be filled, and the two physicians allowed to devote their time to more professionally oriented activities. The job has been advertised; numerous applications have been received. A short list is being prepared and the final choice should take place as soon as possible. When the administrative assistant for the Project was hired initially, it was thought that he could undertake some of the crucial administrative roles. However, he was found to lack the capacity to assume responsibility, and hiring a senior man has become a critical need.

2. Short Term

There has been almost no use of funds allocated to this category since the start of the project, because AMREF has used its own staff as short term consultants where needed. In addition, the project has not produced any teaching modules to date, nor has it focused on distance teaching, two areas expected to utilize this funding category. Most consultants required could come from locally available staff at a cost much lower than the \$5,000 per month budgetted. More of this activity will occur during the second half of the project period in connection with development of training materials for national use.

3. I/AMREF

Backstopping of the project by the Nairobi based AMREF staff has been appropriate and timely. Assistance from qualified staff has been given by individuals in health training, health behavior, health systems development and in management and accounting functions. The latter areas require some improvement. Bookkeeping functions could be improved by clearer instructions from the project field staff, a responsibility of the new Project Manager. Some undercharging to this project was noted. At the macro level, AMREF staff have not had either the time or staff resources to emphasize

financial management functions.

IMREF assists in overall management support and fiscal support. It would be beneficial if more timely summaries of financial reports were available from both the AMREF and IMREF offices, and if these could be forwarded directly to the USAID Dar office. Due to problems of the mailing systems used, the Health Officer was not always kept up-to-date on activities or financial status of the project.

#### Local Personnel

None of the local professional salaries were paid under the project because all staff are on the Ministry of Health payroll. This is particularly appropriate since the presence of a trained team on the MOH staff will assure continuity when the project is extended nationally. The following persons constitute the team:

Dr. R. Shoo	Senior Medical Officer - Education
Ms Margaret Mwaipopo	Public Health Nurse - Education
Mr. C. N. Kawacha	Senior Public Health Inspector - Education
Mr. G. Mhamella	Nursing Officer - Education
* Mr. Sidney Madimillo	Administrative Assistant
* Ms Magdalen Mujwahuzi	Secretary
* Mr. Abdallah Kallonga	Driver

#### B. TRAINING

Three types of Continuing Education courses were projected to occur during the initial phases of the project. Twenty refresher courses of one week in duration have been held between October 1981 and July 1982. Refresher courses are the continuing education input for the various cadres of medical and paramedical health workers. Their content is planned using the results of the baseline surveys described below. A total of 546 rural and urban health workers have participated in these courses which have been run with the help of facilitators. The cadres of health workers participating have included Rural Medical Aides (RMA's), Rural Dispensers Assistants (RDA's) Health Assistants (HA's), Village Midwives (VMW's), Maternal and Child Health Aides (MCHA's), Nurses (Grades A & B) and Medical Assistants (MA's). It is estimated that 59 percent of the health manpower in the Region has now attended at least one refresher course. Detailed schedules for each course with materials presented have been documented in project files. Refresher course attendances by date and

\* The three support staff salaries are paid by AMREF. The administrative assistant was not performing at the level desired and consideration was being given to replacing him.

numbers of cadres attending are summarized in Appendix A. The refresher courses appear to be on schedule as envisaged in the PP. The workload involved with their scheduling and making the necessary administrative arrangements was probably underestimated. It is hoped that the new Administrative Officer/Project Manager will assist in this area.

The field visit and other discussions revealed the need for and desire of lower level staff, such as ward attendants and cleaners to have relevant training. Since these lowest level staff are unskilled and have no medical training, it was not envisaged originally to include them in refresher training courses. Yet, since they are important members of the health team, after performing duties for which they have not been trained, some additional educational effort was viewed as desirable by the team, but should be undertaken in very localized surroundings, perhaps with one or two rural health facilities (RHF) arranging joint sessions. This education should be done by RHF senior staff. It is suggested that the project prepare simple guidelines for use by RHF staff on how to organize this, and in addition, some single page handouts for use in this refresher training on common topics be prepared. The MOH policy of creating upward mobility for everyone extends to these low-level cadres, so these staff members can show sufficient promise to be sent for paramedical training.

The second type of training being undertaken revolves around baseline surveys. In many ways, this should be the first type listed because the contents of the refresher training courses are based on the baseline survey outcomes. The baseline surveys attempt to assess the quality of health care being delivered in a random sample of the RHF's. Fuller details of the planning and management of these surveys and a copy of the questionnaire used are documented in monthly reports.

Several points should be noted with respect to baseline surveys. First, the importance of this tool was not recognized in the PP, and it was neither listed as a separate category nor given a separate budget. Baseline survey expenditures have therefore been included in the extension course budget. In any future amended budget they should be broken out separately. Secondly, the surveys cannot be regarded as tools for collecting data only. During this exercise, the senior regional and district staff often see for the first time on-site problems of the delivery system for health services. Thus, the surveys usually have many spin-off effects in the areas of administration, management and supervision. They also serve as both mini extension and refresher courses because poor health practices, lack of cleanliness in RHF's and other problems are often tackled

on the spot. Additionally, the visit to a RHF by a team of different cadres of health workers constitutes both a supervisory visit, and hopefully a morale booster, assuring rural health workers that they are not working in an isolated vacuum. The district health officials have never worked together as a team before or made joint site visits. This team approach is resulting in coordination of decisionmaking and assignment of responsibility for undertaking corrective action in problem areas in a manner which was impossible before. One final result of the findings of the baseline surveys and the refresher courses is to reveal needed changes in the basic training institutions for curricula review.

Baseline surveys have now been conducted in all districts, and follow-up surveys have been undertaken in two. Some consideration may have to be given to reducing the size of the sample of the RHF's visited, 50 percent being covered in most of the original baseline surveys. The resources required in terms of time, staff and the scarcity of transport and high costs for petrol make this a very costly exercise. The Regional Medical Officer commented on the similarity of problems encountered across districts, even in the remote areas inhabited by nomadic groups, which he had expected would be different.

The final category of training activities are the extension courses. These courses are defined as further training designed to provide new skills to cadres not acquiring these skills as part of their original basic training. To date, these have focused on the aims and objectives of the CET program. These courses were foreseen to be two week courses. In actual field conditions, health workers can rarely be absent from their posts for that length of time, and courses so far have all been one week. In future, more thought needs to be given to criteria to be applied to extension courses held by health groups other than the CET. Funding has already been requested from such groups, and a systematic procedure for reviewing course topics, course contents, adequacy of training and/or facilitating staff, number of participants expected and cost per participant should be instituted prior to authorization of payment using project funds. As the project begins to focus more on national CET requirements, this type of extension course could be expected to occur with increasing frequency..

Distance teaching by correspondence course and/or radio has not yet been tackled, though activities in this area are projected for later on in the time frame. Emphasis should now be placed on planning for the amount of time, staff and subject matter areas to be included in this area in the project.

Likewise the teaching modules necessary for the use of other newer trainers to extend skills nationally have not yet been developed. It is anticipated that the additional participant training courses in Dundee to be attended by 4 team members will constitute both training in module development and critiques of modules written while in residence. Distance teaching and module development will be areas of emphasis for the team members in 1983.

The CETU staff has participated, as appropriate, as resource persons in other related MOH training courses and programs. Individuals on the CETU staff have been given additional formal responsibilities and duties detailed in a recent publication of the Division of Manpower Development and Training. These primarily relate to curriculum development, evaluation and development of teaching materials for the initial training of the various cadres of paramedical health workers. The additional duties of the CET staff were not fully recognized in the PP since it was not foreseen that these key MOH staff would remain in line functions. It is suggested that in order to avoid conflicting demands upon their services, a fuller discussion be held at a steering committee meeting, and mutually agreed upon guidelines be developed on the percentage of time each individual is expected to devote to project vs. other national activities during the remainder of the period. Dr. Shoo in particular fills roles for the MOH beyond the boundaries of the CET project, though the activities can often be viewed as complementary. It would be possible to request AMREF to provide additional technical assistance to supplement Dr. Shoo. This additional funding would then shorten the LOP funding.

It should be stated that the complete involvement of the team to date in the development of the pilot model in the Arusha Region was viewed as essential. Without that amount of trial and error, experience and welding of different skills into a cohesive team, there would not be a replicable CET scheme developed that can be disseminated nationally. It has only been recently that the team can begin to address national issues.

One area of concern to senior MOH officials was whether staff attending refresher courses would expect or demand some type of reward. Team members explored this question with participants and trainers. All respondents felt that rewards were unnecessary. Most course attendees felt that both the baseline surveys and the courses gave a chance for persons performing at a higher than average level to demonstrate their potential. The MOH policy of all staff having a career ladder open to them where promotion and training was open to all meant that outstanding staff could continue their education. This was perceived as sufficient

reward. Members of the CET mentioned instances where innovative and hard working MOH staff had developed new or better methods of management or providing care. It may be desirable for the central level MOH staff to provide some national recognition to such persons or innovations, thus publicizing possibilities for suitable recognition.

## 2. Participant Training

Some participant training has already taken place. Mr. C. N. Kawacha and Ms M. Mwaipopo attended a 3 month course in Juba from February to April, 1982 entitled "Train the Trainers." There are problems associated with the post-degree training scholarships. Mr. Kawacha will be retiring soon, and it has been agreed that Mr. John Gwaha, Regional Health Inspector who will ultimately become a CET member will receive the training. Ms Mwaipopo has insufficient academic background to allow her to be easily placed or indeed to take the fullest advantage of additional training. It is suggested that the MOH be requested to discuss identifying another candidate (preferably a senior nurse tutor) who could later join the national team. Arrangements for placement must be made soon. The third candidate, Dr. Emmanuel Malangalila, MD. Dip.H. has been identified to take the Master's Degree program either at an Australian university or at some other suitable institution.

The observational training funding has been partially utilized (6 person months) for the Juba course. The remainder is expected to be utilized by Drs. Shoo and Bhachu, Mr. Kawacha and Mr. Mhamelea who will go to Dundee, Scotland, to receive training in preparation of the teaching modules. This is scheduled for March - May 1983.

## C. Commodities

### 1. Teaching Equipment and Materials.

Duplicating equipment has arrived and is in use. Audiovisual equipment has been ordered. Educational materials consist mainly of AMREF manuals and these are being supplied. Activities are underway to assess the needs of the various training schools for books, materials and necessary tools (especially for the HA's) prior to supplying them materials. Books and journals have been purchased for the Dar office to set up a reference library. Development and production of modules for teaching is lagging and will not occur until after the Dundee training.

The major remedial action which needs to be undertaken immediately in this area is the preparation of a comprehensive inventory of all items purchased in Categories 1, 3, 4, and 5 with their present status and location. AMREF staff should bring such an inventory up-to-date in the next 3 months.

2. Transport

Both the Land Rover and Peugeot are in use as project vehicles. Consideration should be given to hiring a second driver when the team moves to Dar.

3. Office Equipment and Materials

Necessary office equipment for the functioning of the Arusha office has been purchased. More will be needed when the team moves to Dar. A distinction should be made between materials needed to produce teaching materials and those used in normal office functions.

4. Camping Equipment

This was purchased at the outset of the project. However, in view of the assessment of their utility, it is recommended that any excess, such as the tents be sold and the money used for other necessary commodities. So far it has always been possible for visiting teams to sleep inside existing fixed health facilities.

5. Furnishings for Technician's houses.

Will be ordered prior to finishing construction.

D. Construction

The contractor's plans for the 3 bedroom house and office to be constructed at the school site in Arusha have been approved by the REDSO/EA engineer. Construction should commence in November. It is recommended that the funding be increased slightly to construct an improved driveway to serve both the school and the house. The present drive has a rough and dangerous exit from the main road. It should be noted that no office rental has been charged by the Center for Educational Development in Health (CEDH).

Completed plans for the 2 three-bedroom houses in Dar have not been submitted to the REDSO/EA engineering office. Plots have been allocated to the project. The building plans need to get priority attention in view of the increasingly frequent trips to Dar and the anticipated lengthy lead times required for the construction.

E. Other Costs

1. Transport

Petrol, insurance and maintenance costs for the two cars are being supplied. The POL for the Renault listed should be deleted and added to the Peugeot. Air travel costs, especially the use of Air Tanzania between Arusha and Dar will increase as the project continues.

2. Rentals

No rental costs are paid to the CEDH. It is recommended that in lieu of a temporary office rental in Dar, the acquisition of the additional room assigned to the EPI program (but only being used for junk storage) be discussed

with the MOH. Renovation costs for this space which is adjacent to the present office could then be undertaken instead of rent. The present space allocated to the team in Dar at the Ocean Road Hospital will be inadequate when all members are working there. The space issue in Dar should be discussed at the next Steering Committee meeting and options to solve the problem considered.

### 3. Other Costs

Travel expenses and per diems for CETU staff are those utilized for MOH staff. Both per diem expenses allocated for short term consultants, AMREF staff working on consultancies for the project, and CET staff when away from post seem adequate.

Telephone, telex, postage, accounting fees, etc., will be incurred in Arusha, Dar, Nairobi, and New York. It would be helpful to have a breakdown by location.

Utilities for technicians' houses is an item which will occur only after the construction has been completed.

#### Inflation

It is just noted that the inflation costs in Tanzania are exceeding 12 percent, but in view of the underspending this should not constitute a problem.

### 17. Outputs

The following outcomes/outputs will result from the project:

Planned

1. Education Unit established within the Ministry of Health Training Section and staffed with trained personnel;
2. Information gathered about other CET activities being carried out in Tanzania, both private sector and by government;
3. Needs assessment study carried out, both quantitative and qualitative, of CET requirements for pilot region and nationally;
4. Every rural health worker in Arusha region (461)\* will have received at least 3 refresher courses, this will require approximately 20 courses for 25 trainees each per annum;
5. All regional and district level management staff will have received extension course training, mainly in teacher training methodology in relation to CET programmes, and health centre staff in administration, etc., 6 courses per annum for 15 participants each are planned.
6. Correspondence courses developed to coincide with the refresher course program;
7. Teaching methods and materials developed and tested for CET programs and a distribution system established\* to disseminate the materials;

Actual

- Accomplished.
- Only available for Arusha Region for project period. Planning should start for rest of country. Private sector activities may be only relevant at District level for decision-making to assure no duplication of activities.
- Accomplished for pilot region through baseline surveys. Premature to start nationally.
- After two project years 22 refresher courses have been given. Due to 6 month delay in project initiation, full expectation of 30 planned courses has not been accomplished.
- Substantially on target for Arusha Region. National level will be tackled later. Support has been provided for:
  - . 7 baseline surveys
  - . 2 follow-up surveys
  - . 2 seminars for district teams
  - . 3 requests for specific extension courses
- Activity not yet started. Planning should commence soon.
- Teaching methods developing well. Modules will be produced after Dundee workshop. Distribution system established in Arusha Regional only to date.

\*according to Inventory of Health Facilities 1978, Arusha Region.

8. Evaluation methodology developed for CET programs;
  - Evaluation methodology progressing. Further work needed on long term benefits of training.
9. Regional and district health personnel in Arusha region capable of organizing and managing their own CET programmes, with technical support as required from MOH CETU.
  - Region and district ability to plan and implement CET programs progressing. Some districts on Phase II conducting own program with some assistance from team.
10. National CET program plan developed including action plans for implementation.
  - National interest in CET being developed quickly. Action plans require more experience from pilot region. More and better cost accounting required from pilot to assess what can be done nationally and whether lower cost modifications to existing model are feasible or desirable. More effort will be placed on supporting requests for assistance in developing CET programs in additional health regions during the 1983 year.

18. and 19. PURPOSE AND GOALS

Project Purpose

To help Tanzania develop a program of regular in-service training to maintain its rural paramedical workers' knowledge and skills at appropriate and current levels.

Specific EOPS

1. Continuing education training methods and materials will have been developed and tested in Arusha region through refresher, extension and correspondence course programs which involved all rural health workers in the region.

Comments: Refresher and extension courses, including surveys, have been carried out throughout Arusha region, involving all cadres of paramedical personnel as well as district and regional health teams. The target of reaching each health worker in the district at least once in a year is near attainment for the first two years. Materials and methods used in carrying out these courses have been tested throughout and are subject to continuous adjustment and expansion as the program goes on. A seminar to produce a final version for Tanzania of AMREF's draft model of district continuing education is taking place at this time (second half of September). A list of modules to be developed for refresher and extension courses has been put together and the CE team will develop and produce these modules during its three months work and study tour in Dundee, Scotland (March - May, 1983). Correspondence courses (distance teaching) have not been developed or offered so far, but it is intended that the team will also develop appropriate courses and distance teaching methods for Tanzania in Dundee. This EOPS condition is well on its way to being achieved by the end of the present project period.

2. Regional and district health staff in Arusha region will have the capability to organize, manage and evaluate their own continuing education training programs for rural health workers.

Comments: The period between October 1982 and March 1983 is now envisioned as a time for handing over the responsibility for conducting CE courses to the regional and district teams in Arusha. Already, two of the district teams have shown their capability for carrying out and assessing courses. The Regional Medical Officer has also expressed confidence that his team can handle CE courses on its own, and that the time has come for the regional team to gradually take on this responsibility with the role of the CE team changing to that of monitoring and troubleshooting. The stated EOPS is thus appropriate and attainable within the present project period.

3. Results of this project will have been continually assessed and utilized in the national program through the CES.

Comments: The purpose of extending the Arusha pilot experience to the entire nation continues to be considered desirable and appropriate. However, the Arusha regional CE project requires further assessment while the regional and district teams gradually take over, freeing up the CE team to develop and produce basic modules for the national CE programme. Thereafter, the CE team will work from Dar es Salaam to plan and organize extension courses in the 19 other regional capitals. These extension courses will form the basis for the regional and district initiatives in CE. Extension of the Arusha experience to other regions is not envisioned before July 1983, which leaves only three months of the present project period. Thus, for the project to achieve this purpose, an extension of 18 months will probably be required.

#### 20. BENEFICIARIES

The beneficiaries remain as outlined in the project paper:

- (a) improved skills imparted to regional health workers, most of whom have now attended a refresher course.
- (b) an improvement in the quantity and/or quality of health services rendered to the population.
- (c) additional training resources supplied to teaching institutions for health workers.

There is evidence in the progress reports that all three groups of beneficiaries are being reached. Further quantification will be more meaningful towards the end of the project.

#### 21. UNPLANNED EFFECTS

The major area where the full ramifications of this project were not foreseen is in its potential effect on the total restructuring of the health care delivery system of Tanzania. Already spin-off effects are causing reassessment of various aspects of the current system. Some concrete examples will be given:

- (a) The RMO in Arusha is extremely supportive of the project. His participation in the pre-assessment visits to RHF's has revealed deficiencies in the administrative and managerial areas which he has rectified. He now knows which staff in charge of specific facilities do not order or pick up drugs when the facility is out and has worked on this. The visits also provided a good opportunity to identify staff strengths and weaknesses, and to take action accordingly.

(b) The individual members of the CET are using the preassessment tools to assess health workers skills and thus identify basic changes needed in the national curricula for the various cadres. For example, workers are currently being taught sophisticated sterilization procedures, involving use of autoclaves. The team is suggesting revisions that involve use of boiling techniques using wood, charcoal or kerosene stoves and place less emphasis on autoclaves which are found in few facilities.

(c) The potentials for achieving cost efficiencies in some areas are now being realized. Upgrading of health workers diagnostic and prescriptive skills will result in savings: (a) from using appropriate drugs, (b) from utilization of lower cost drugs for specific cases and (c) from reduction in practice of giving all patients seen some drug, whether necessary or not. Use of intravenous fluids to rehydrate children who could manage with fluids given by mouth is another area identified where savings could be achieved.

The pre and post assessment surveys were never seen as research instruments designed to collect scientifically valid data which could be applied to given categories of workers or specific geographic areas. Yet, as the examples above illustrate, it may be desirable to conduct some "mini research" projects in the pilot area to demonstrate the effects of changes in the health delivery system in order to assist the MOH in its deliberations on whether these changes should be implemented nationally. This topic could be discussed in the Steering Committee, and if thought to be worth further investigations, topics could be suggested and cost estimates prepared. Since most of these "mini research" questions would be applied on operations research and inexpensive in scope, they could be financed using project funds.

## 22. LESSONS LEARNED

Premature at this juncture of the project implementation.

## APPENDIX A

## SUMMARY OF COURSES

(a) Refresher Courses

Dates	District Participating	Numbers of		Key Categories of Staff				
		Participants	Facilitators					
10/5-9/81	Monduli	27	12	RMA 18	RDA 7	HA 2		
10/19-23/81	Mbulu	21	12	RMA 19	HA 2			
10/26-31/81	Hanang	27	10	MCH 17	VMW 15	NO 12		
11/2-6/81	Mbulu (Karatu)	32	(6) 12	MCH 17	VMW 15			
11/9-13/81	Hanang	36	(6) 12	RMA 27	RDA 9			
11/11-13/81	Monduli	23	(8) 11	MCH 10	VMW 7	HO 2	HA 3	NA 1
11/16-20/81	Mbulu	34	8	HO 2	H/Ord. 28	HA 3	A/Aux. 1	
11/23-28/81	Arumeru	20	11	RMA 20				
1/25-29/82	Kiteto	12	7	RMA 11	RDA 1			
2/1-5/82	Kiteto	17	8	RMA 11	RDA 2	N/Aux. 4		
2/8-12/82	Arumeru	31	11	MCH 20	VMW 11			
6/21-25/82	Municipal & Hosp.	18	13	RMA 18				
6/28-7/2/82	Municipal & Hosp.	30	9	MCHA 15	VMW 15			
7/5-10/82	Hanang + Kiteto	13 3		Nurses 13	Grade A & B 3			

5-10/82	Whole Region	36	12	MA 36
13-17/82	Munic. & Reg. Hosp.	51	10	Nurses Grade A & B 51
19-23/82	Municipal Council	21	10	MCH      VWV 14        7
26-30/82	Mbulu	29	6	Nurses A & B 29
26-30/82	Whole Region (at Monduli)	35	7	H/Asst. 35
-do-	Munic. Coun. & Reg. Hosp.	34	9	Nurses Grade A & B 34
3-27/82	Mbulu			Nurses Grade A & B
-13/82	Anuseru/Monduli			Nurses Grade A & B

(b) Extension Courses

1. 7/27-8-1/81
2. 12/7-10/81
3. 8/28-30/81
4. 8/11-16/81
5. 9/14-17/81
6. 9/21-28/81
7. 9/18-19, 28-30/81
8. 10/12-15/81
9. 3/8-11/82
10. 7/27-30/82
11. 8/10-13/82
12. 8/2-7/82
13. 3/28-9/1/82
14. 9/6-10/82
15. 9/20-24/82

Regional & District Teams

Registered Nurses

Health Officers (FCMC)

Mbulu baseline

Monduli baseline

Hanang baseline

Arumeru baseline

Kiteto baseline

Arusha Municipal baseline

Ngorongoro baseline

Records baseline (?)

DNOs management

Mbulu follow-up

Hanang follow-up

Regional Dist. teams (DNOs)

APPENDIX B

SECONDARY LEVEL RECOMMENDATIONS

	<u>By Whom</u>	<u>Date Action to be Completed</u>
Develop criteria for support of "outside" extension courses using project funds.	(a) Draft by AMREF Staff and CET	March 31, 1983
	(b) Steering Committee notification	June 30, 1983
Comprehensive inventory developed of all items purchased on Project with status and present location.	Project Staff	Feb. 28, 1983
Priority emphasis on: (a) module development (b) Distance teaching in 1983	Project Staff	December 31, 1983
More timely and better quality accounting and financial analysis.	AMREF IMREF	N.A.
Develop job responsibilities and guidelines for all Education Unit Staff.	MOH and Project	Feb. 28, 1983
Training Plan for long-term training should be finalized as soon as possible in order to facilitate return of participants prior to PACD.	AMREF	January, 1983

Tanzania Continuing Education  
Health Workers' Project

USAID 621-0154

30 September 1982

SUMMARY TABLE

<i>Line Item</i>	<i>Total Budget</i>	<i>PY1 Actual Exp. 15/8/80-30/9/81</i>	<i>PY2 Actual Exp<sup>1</sup> 1/10/81-30/9/82</i>	<i>Unexpended Balance</i>	<i>Amount avail- able for re- allocation to activities after present PACD</i>
A Technical Assistance	549 500.00	33 471.26	78 018.21	438 010.53	205 000.00
B Training	206 000.00	6 720.94	71 288.61	127 990.45	—
C Commodities	229 500.00	30 591.82	38 554.91	160 353.27	28 000.00
D Construction	169 000.00	0	3 959.38	165 040.62	—
E Other Costs	257 000.00	24 579.65	42 968.43	197 091.95	112 000.00
F Overhead, Infl. & Cont.	794 500.00	16 211.81	40 904.36	737 383.83	612 500.00
	2 205 500.00	111 575.48	275 693.90	1 818 230.62	957 500.00

Expenditures: Budgeted, Actual and Anticipated (in US\$)

30 September 1982

A. Technical Assistance

Line Item	Total Budget	FY1 Actual Exp. 15/8/80-30/9/81	FY2 Actual Exp. <sup>1</sup> 1/10/81-30/9/82	Unexpended Balance	Present Status	Expenditure Anticipated for Remaining Project Period (Until 31/10/83)	Amount avail- able for re- allocation to activities after present PACD
A1 Long Term	270 000.00	(112 000.00 Bud) 8 390.77 Act	(90 000.00 Bud) 18 151.16 Act	243 458.07	Dr. Bhachu continues at present rate; project administrator to be hired starting 1/11/82;	below 50% of amount budgeted	135 000.00
A2 Short Term	30 000.00	(15 000.00 Bud) 0 Act	(10 000.00 Bud) 979.24 Act	29 020.76	Little used so far; use of consultants anticipated in PY3 and beyond;	as budgeted	0
A3 ANRRLF	210 000.00	(87 500.00 Bud) 24 701.28 Act	(70 000.00 Bud) 33 255.05 Act	132 043.67	Underexpended due to lower salaries than budgeted. Rate of use about 10 pm/ya junior staff time; rate of expenditure to increase when national program starts;	between 60 and 70% of amount budgeted	70 000.00
A4 Local Personnel	39 500.00 <sup>2</sup>	(10 500.00 Bud) 379.21 Act	(15 000.00 Bud) 5 632.76 Act	33 468.03	Admin. assistant to be replaced; secretary and driver to continue;	as budgeted	0
Sub-Total	549 500.00	(231 000.00 Bud) 33 471.26 Act	(185 000.00 Bud) 78 018.21 Act	438 010.53			205 000.00

<sup>1</sup>excluding INR/US\$ expenditure for the quarter 1/7-30/9/82

<sup>2</sup>49 000 transferred to D2 for renovation to compensate budgeted salaries paid by govt.

Expenditures: Budgeted, Actual and Anticipated (in US\$)

30 September 1982

B. Training

Line Item	Total Budget	PY1 Actual Exp. 15/8/80-30/9/81	PY2 Actual Exp. <sup>1</sup> 1/10/81-30/9/82	Unexpended Balance	Present Status	Expenditure Anticipated for Remaining Project Period (Until 31/10/83)	Amount avail- able for re- allocation to activities after present PACD
B1a Refresher courses	74 500.00	(26 000.00 Bud) 1 415.56 Act	(35 000.00 Bud) 61 589.12 Act	11 495.12	Slightly underexpended due to late start of project but about to catch up with tar- gets, both on number of courses and cost.	as budgeted	0
B1b Extension Courses	27 000.00	(10 500.00 Bud) 5 305.38 Act	(12 500.00 Bud) 9 699.49 Act	11 995.13	Same as above.	as budgeted	0
B1c Other Courses	2 500.00	(500.00 Bud) 0 Act	(1 000.00 Bud) 0 Act	2 500.00	No expenditure so far. Will be used in PY3	as budgeted	0
B2a Participant	54 000.00	(36 000.00 Bud) 0 Act	(36 000.00 Bud) 0 Act	54 000.00	Candidates for overseas selected. Placement to be identified and arranged. 1 of 3 candidates appears unplacable and may need to be changed.	as budgeted	0
B2b Participant Observational Training	48 000.00	(16 000.00 Bud) 0 Act	(16 000.00 Bud) 0 Act	48 000.00	Short course in Juba completed. Plans now being finalized with Dundee University in Scotland.	as budgeted	0
Sub-Total	206 000.00	(89 000.00 Bud) 6 720.94 Act	(82 500.00 Bud) 71 288.61 Act	127 990.45			0

Expenditures: Budgeted, Actual and Anticipated (in US\$)

30 September 1982

C. Commodities

Line Item	Total Budget	PY1 Actual Exp. 15/9/80-30/9/81	PY2 Actual Exp. <sup>1</sup> 1/10/81-30/9/82	Unexpended Balance	Present Status	Expenditure Anticipated for Remaining Project Period (Until 31/10/83)	Amount avail- able for re- allocation to activities after present PACD
C1 Teaching Equipment and Learning Materials	114 500.00	(56 500.00 Bud) 1 089.80 Act	(31 000.00 Bud) 22 351.52 Act	91 058.68	Assistance to training school, and production and distribution of train- ing materials unexpended but plans for implementa- tion will developed.	About 25% below budget	\$ 28 000.00
C2 Transport	25 000.00	(25 000.00 Bud) 24 686.53 Act	-	313.47	Have been purchased and are in use.	Expended	0
C3 Office Equipment	58 000.00	(33 000.00 Bud) 2 502.41 Act	(11 000.00 Bud) 14 060.41 Act	41 437.18	Equipment for present office complete. Supplies to be purchased at present rate.	Will be expended if additional room at Ocean Road is secured.	0
C4 Camping Equipment	4 000.00	(2 500.00 Bud) 2 313.08 Act	(500.00 Bud) 411.81 Act	1 275.11	To be sold with proceeds used for other equipment.	Expended	0
C5 Furnishing Staff housing	28 000.00	(28 000.00 Bud) 0 Act	( 0) 1 731.17 Act	26 268.83	To be purchased to com- cide with construction in completed.	as budgeted	0
Sub-Total	229 500.00	(145 000.00 Bud) 30 591.82 Act	(42 500.00 Bud) 38 554.91 Act	160 353.27			28 000.00

Expenditures: Budgeted, Actual and Anticipated (in US\$)

30 September 1982

D. Construction

Line Item	Total Budget	PY1 Actual Exp. 15/8/80-30/9/81	PY2 Actual Exp <sup>1</sup> 1/10/81-30/9/82	Unexpended Balance	Present Status	Expenditure Anticipated for Remaining Project Period (Until 31/10/83)	Amount avail- able for re- allocation to activities after present PACD
D1 Staff housing	120 000.00	(120 000.00 Bud) 0 Act	(0) 0	120 000.00	Arusha house plans REDSO approv. const- ruction to start October. Dar plans now being finalised;	as budgeted	0
D2 Renovation	49 000.00	(25 000.00 Bud) 0 Act	(20 000.00 Bud) 3 959.38 Act	45 040.62	To be used for renovation;	as budgeted if additional room at Ocean Road secured	0
Sub-Total	169 000.00	(145 000.00 Bud) 0 Act	(20 000.00 Bud) 3 959.38 Act	165 040.62			0 0

<sup>1</sup> transfer from A4 Local Personnel

## Expenditures: Budgeted, Actual and Anticipated (in US\$)

30 September 1982

## E. Other Costs

Line Item	Total Budget	PY1 Actual Exp. 15/8/80-30/9/81	PY2 Actual Exp. 1/10/81-30/9/82	Unexpended Balance	Present Status	Expenditure Anticipated for Remaining Project Period (Until 31/10/83)	Amount avail- able for re- allocation to activities after present PACD
E1 Transport	100 500.00	(44 000.00 Bud) 9 587.99 Act	(32 000.00 Bud) 11 631.25 Act	79 280.76	Underexpended	20% below budget	\$ 20 000.00
E2 Rental	103 500.00	(45 500.00 Bud) 0 Act	(34 000.00 Bud) 0 Act	103 500.00	Not expended	Not likely to be expended at more than 10% for Dar	93 000.00
E3 Travel expenses	22 000.00	(10 000.00 Bud) 8 177.08 Act	(7 000.00 Bud) 19 156.24 Act	(5 333.32)	About 30% overexpended		7 500.00
E4 Office Expenses	18 000.00	(8 000.00 Bud) 6 814.58 Act	(6 000 Bud) 12 180.94	6 644.51	Expenditure expected to continue at present rate	as budgeted	0
E5 Staffhouse Utilities	13 000.00	(5 000.00 Bud) 0 Act	(5 000 Bud) 0 Act	13 000.00	Not expended so far. Expenditure to start when staff housing completed	50% below budget	6 500.00
Sub-Total	257 000.00	(112 500.00 Bud) 24 579.65 Act	(84 000.00 Bud) 35 328.40 Act	197 091.95			112 000.00

Expenditures: Budgeted, Actual and Anticipated (in US\$)

30 September 1982

F. Overhead, Contingency, Inflation

Line Item	Total Budget	PY1 Actual Exp. 15/8/80-30/9/81	PY2 Actual Exp <sup>1</sup> 1/10/81-30/9/82	Unexpended Balance	Present Status	Expenditure Anticipated for Remaining Project Period (Until 31/10/83)	Amount avail- able for re- allocation to activities after present PACD
Overhead	240 000.00	(123 000.00 Bud) 16 211.81 Act	(52 500.00 Bud) 40 904.36 Act	182 883.83	expended as percentage of other expenditure	—	58 000.00
Contingency	164 500.00	(84 000.00 Bud) 0 Act	(36 000.00 Bud) 0	164 500.00	not expended		164 500.00
Inflation	390 000.00	(111 000.00 Bud)	(101 250.00 Bud)	390 000.00	not expended		390 000.00
Sub-Total	79 400.00	16 211.81 Act	40 904.36 Act	737 383.83			612 500.00