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NEPAL

CONTRACTOR'S REPORT #3

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FOR THE PERIOD

1 OCTOBER 1979 TO 31 MARCH 1980

RADIO EDUCATION TEACHER TRAINING PROJECT

PROJECT 367-0123

CONTRACT AID/ASIA -C-1352

AGENCY FOR INTERNATIONAL DEVELOPMENT

IN COOPERATION WITH

SOUTHERN ILLINOIS UNIVERSITY CARBONDALE

UNDER

MINISTRY OF EDUCATION

Background

The main objective of this project is to create the capacity for HMG of Nepal to train 2,500 in-service primary teachers per year via the media of radio broadcasts coupled with the use of self-instructional materials. To meet this objective the participation of various units of HMG is required. For example: 1) The Institute of Education (IOE) must select or prepare the appropriate curriculum materials for this project, then write, test and produce the radio scripts and the self-instructional materials. 2) The Curriculum, Textbook, Supervision Development Center (CTSDC) of the Ministry of Education (MOE) must record the scripts for broadcast. 3) Radio Nepal must broadcast the recordings at appropriate times. 4) The MOE field supervisors must be trained and prepared to conduct both the face-to-face instructional aspect of the teacher training and the field supervision of individual teachers in their regular classroom behavior. And 5) The MOE must train, in co-operation with Radio Nepal, staff for hardware maintenance. Several other supportive activities must be conducted to assist in meeting the main objectives: Participant training, completion of a suitable studio, procurement and testing of radio receivers and power packs, formative evaluation and general staff development.

Southern Illinois University at Carbondale (SIUC) participation includes 1) Providing long term advisors for self-instructional material preparation, radio-script writing, and evaluation, 2) Providing short term advisors for technical, supervisory, and other training, 3) Developing suitable participant training programmes for various

areas, and 4) Procuring, shipping, and testing project materials and equipment. In addition to SIU and HMG involvement, cooperation has been provided through other agencies such as the British Council, UNESCO, and UNICEF.

The SIUC Team Leader arrived in Nepal in September, 1978 and plans to continue in Nepal through the four-year life of the project. The Campus Coordinator of the project visited Nepal in October, 1978, September, 1979 and again in November, 1979 for the annual review. The President of SIUC visited Nepal in April, 1979. The Vice President for Academic Affairs and Research visited in November, 1979, in connection with the Annual Review.

Summary of Accomplishments

19 September, 1978 - 31 March, 1979

The contract was signed with Southern Illinois University at Carbondale on 19 September, 1978. The Team Leader arrived in Nepal on 28 September, 1978. The first six month period was one of considerable organization and administrative activity. An SIUC office was organized, equipped, and staffed on the campus of the Institute of Education at Sano Thimi.

The SIUC work plan was developed and approved by the HMG Radio Education Teacher Training Policy Committee Council. Seven research reports were written. Equipment for the project was selected, bid, and ordered. An advisory engineer to Radio Nepal came from the Harris Corporation, Quincy, Illinois.

1 April, 1979 -- 30 September, 1979

The second six months of operation of the Project were marked by a wide variety of creative activities, the arrival of three Specialists, and the launching of the writing and evaluation programmes.

The "B" Level Curriculum of the Institute of Education was revised and became the basis for the RETT curriculum. An Assistant Project Coordinator was selected along with a single counterpart for both the Self-instructional Materials Specialist and the Radio-script Writing Specialist. Several members of the writing team were selected and a workshop on the preparation of self-instructional materials was inaugurated.

The initial shipment of radios, antennae, batteries, and solar panels arrived and were tested in several field operations. Research reports eight and nine were completed on solar cell operation and attitudes of lower secondary school teachers respectively.

One participant started training at SIUC. Seven participants were sent to Asia for training in script-writing, radio production, and radio maintenance.

1 October, 1979 -- 31 March, 1980

The third six month period of operation of the Project was marked by the arrival and functioning of all the advisors including the Electronics Instructor for Radio Nepal. It was during this period that the basic Nepali staff was appointed. Seven Nepali staff completed

training in script-writing, radio production, and radio maintenance in Asia and returned to Nepal to begin their work on the Project. Staff development was continued.

The first Joint Annual Review was successfully completed in November, 1979, and greater understanding of the total project was had by the Policy Council. The project work plan was updated and refined. A more specific work plan for the pilot year and a plan of evaluation was adopted.

Two long term participants continued their studies in the United States. A total of eight research studies were completed and reported. Cooperation continued with staff from UNICEF, UNESCO, USAID/Nepal, and the British Council.

Project vehicles arrived facilitating travel and staff moral. Electronic equipment and textbooks arrived for the training of Junior Technical Assistants at Radio Nepal.

Accomplishments Against Work Plan
(1 October 1979 -- 31 March 1980)

Goals (Pre)

E. Short Term Consultants:

1. Arrival of Electronics Instructor
3. Arrival of Radio Engineer Consultant

Mr. Paul Caldwell arrived on 18 January to serve as both the electronics instructor and the Radio Engineer consultant. Furniture and Equipment for the classroom were procured and the room set up at Radio Nepal. Supplies and textbooks were received and the tentative training curriculum revised. Formal instruction for JTAs was ready to begin in April, 1980.

Assistance has been provided Radio Nepal and the recording studio of the MOE regarding maintenance and repair of equipment. Suggestions for staff development have been forwarded to both agencies.

Goals (Phase I) - Detail Planning for Pilot Year

A. Equipment Procurement

1. Project vehicles

A nine passenger van and a four-door chevotte arrived in December, 1979. This has greatly facilitated transportation of staff to the office. Use of the vehicles was curtailed by mid-January, 1980 due to a gasoline shortage in Nepal. This eased some by March, 1980.

B. Management Structure

3. Selection of Production staff
4. Selection of Evaluation coordinator
5. Selection of Evaluation Team
6. Selection of Field Operations Coordinator

HMG did attempt to complete the appointment of the minimum number of staff members for the project. It was decided to organize a radio script team and a self-instructional materials team but with close liaison between the two staffs.

The evaluation team consists of a coordinator and two additional staff for a total of three.

The Field Operations Coordinator was selected. His background in field supervision is limited to Vocational Agriculture. He has made one trip to survey the number of untrained teachers in one district. A special staff development program is being planned to prepare for the training of supervisors in the early summer of 1980.

D. Evaluation

2. Trial testing of radios
3. Trial testing of solar power packs
4. Formulation of general project evaluation plan

5. Formative evaluation

A total of eight research reports were completed during the six months of this report (See appendix A for the list of reports).

It was verified that signals from Radio Nepal could be received everywhere an operating radio was installed. Although medium wave could be received in much of the terrai area and sections close to Kathmandu, short wave reception was best in the hilly and mountainous regions. Except for a few listening posts, an external antenna was not required. The 49 meter band area seemed to be the best broadcast frequency for the new transmitter.

Dry cells available in the local market seemed to be a more reliable source of power than the solar panels which were difficult to attach correctly to the radio. Solar cells are still very expensive and can be ruined easily if hooked to the wet battery in reverse order. Wet batteries must be continually charged to keep them functioning.

On different occasions materials were taken to the field to test for usefulness in instruction. Both written and personal instructions on the operation of radio, antenna, and solar power cells were tried. Additional field testing of soft ware materials is planned as they are written and recorded.

E. Participant training (in-country)

1. Administrative training
2. Self-instructional materials writers training
3. Radio Nepal staff training
4. Radio production training
5. Evaluation team training
6. Script writing Team training

All training programs were continued despite a number of difficulties. Seven members of the writing teams were out of the country from October through December in special training in Asia. Gasoline shortages made it difficult for the Nepalese staff to reach the office. Absentecism was high.

There are signs of progress and it is anticipated that basic materials will be written as a result of training during this six month period. Also, a few materials relative to the future training of field supervisors were proposed.

F. Participant training (out-of-country)

3. Self instructional materials
4. Radio script writing
5. Radio production
7. Technical training Radio Nepal

A seven member team of self instructional writers, script writers, and one radio maintenance person completed a three month training program conducted by the Asia-Pacific Institute for Broadcast development.

One participant for Radio Nepal went to the US in August, 1979 and another in December, 1979.

Steps were taken to name more persons for 12 months training for Radio Nepal and for 12 months training for the Ministry of Education or the Institute of Education.

Goals (Phase II) Pilot year program

A. Background

1. Selection of 4-5 sites for group instruction
2. Selection of IOE staff for each site
4. Selection of 25-30 teachers for each site
5. Determination of broadcast schedule

The Policy Committee recommended that five districts be considered for the pilot year program. A survey of these districts was conducted with final selection to be made in April of 1980. Selection of the teachers will follow shortly after the selection of the trial districts. The trial teachers will be untrained with a valid eighth grade education, therefore a screening test is being formed for the selection process.

The project director has selected the hour of 4 p.m. to 5 p.m., six days a week for the actual broadcast time. Radio Nepal has not as yet approved this time nor have they made plans to extend their broadcast activities to this period of the day. Currently they are off the air during this time period.

A tentative broadcast year beginning in August, 1980 and continuing through June, 1981 has been designed. A General instructional format has been initiated. Instructional objectives in keeping with the "B" level curriculum in Primary Teacher Education have been drafted.

Major Items of the Work Plan
Scheduled for Completion by 31 March, 1980
and Not Completed

Although not a part of the SIU Radio Education Teacher Training work plan, the fact that USAID/Nepal was not able to start construction of the recording studio has meant a further delay in having more ideal recording facilities. Permission has been granted to use the facilities of the CTSDC on the Sano Thimi campus and this will be helpful during the early stages of the program. Initial sketches of the building were completed and approval of IMG to proceed with construction plans were obtained in March, 1980.

Word was received that the UNESCO designed radio receiver selected for this project was no longer being manufactured. Steps were initiated to find a suitable replacement. (Phase I, A 5).

The general plan for radio maintenance was initiated and approved by the then Secretary of Education but no action has been taken to implement the plan. (Phase I, A 6).

No really suitable lesson through self-instruction or complete radio script for one day's lessons was completed. First steps in staff development have taken more time than anticipated and beginning program development is difficult. Progress was made and it is expected that more complete materials will be produced during the coming six month period. (Phase I, C 2,3,4).

Actual teachers for the RETT and the control groups were not selected. Progress was made and hopefully this will be done in the late Spring of 1980.

Other Important Projects Completed
Not Outlined in the Work Plan

1. The first Joint Annual Review of the project was completed in November, 1979. The Vice President for Academic affairs and the Director of International Education for the Carbondale Campus came to help complete the review.
2. The "B" level curriculum for primary teacher training was rewritten in a style of suitable instructional objectives and sequenced into a pattern more suitable for radio instruction reinforced with self-instructional materials. This was a most important project that will facilitate the actual writing of radio scripts, self-instructional materials and evaluation test items.
3. HMG approved the initial plans for the recording studio.
4. The decision was made to use dry cells rather than solar cells based on cost and difficulty in using solar cells which may need to be moved frequently.
5. A refined work plan for the pilot year was designed for the project.
6. A follow-up was made to permit SIUC to secure bids for the new transmitter. Radio Nepal was encouraged to secure sufficient land for the new transmitter and antenna. The 49 meter band was recommended as the frequency to be used by the new transmitter.

7. Steps were taken to seek approval to extend the terms of the self-instructional Specialist and the Radio Script writing Specialist through June, 1981 the rest of the proposed pilot year.

Project Problems

1. Staff Development: The staff appointed to the project has little or no experience in teaching at the primary level or in the preparation of primary school teachers. Only one person has had experience in radio production and his skills are quite limited in actual recording of programs. The concept of establishing general course outlines followed by setting forth specific instructional objectives, actual instruction, and sample exercises is new to all the members of the writing team staff. Thus, staff development is very slow.

The evaluation team has basic skills in research and the coordinator has had extensive experience on working in the schools of Nepal, particularly outside the valley. Experience in test construction and test analysis is very limited.

The coordinator of supervision has had very little experience in teacher supervision and no experience in primary education.

All of the above means that staff development must start at a lower level than originally anticipated and must proceed at a slower and more deliberate pace than was originally planned.

2. Eighth Grade Achievement of Teachers in the KETT: In some ways it will be helpful to gain some indication of the educational level of teachers nominated for the program. There are no standardized achievement tests in Nepal. The construction of the test will be a valuable learning experience for the evaluation team. The question still remains as to the estimated level of achievement of the majority of untrained primary teachers and the problem of deciding on a suitable "cutting score" for admission to the program. Also, what are the implications of any action taken during the pilot year on selection of teachers in the more remote areas in the succeeding years of the project. Indirectly what effect will this have on the level of instruction planned for the radio broadcasts and self-instructional materials? Research during the pilot year becomes very important.

3. Delay in studio construction: The quality of the radio broadcasts will depend upon the availability of suitable radio studios. The delay in construction now means that these studios will not be available until after the pilot year and after the departure of all advisors except the team leader. Staff development in the best use of this equipment will be difficult.

4. Participant training: Special participant training in India for three or four people was missed last year because no nominations were made by the project administrators. Three programs are being offered again for 1980, but with all the difficulty in selecting Nepali staff one wonders if appropriate personnel can be selected for this year either.

In October of 1978 the IOE was requested to nominate two persons for participant training in the United States, to date these people have yet to be nominated. It now appears that when they are selected, their training will take so long that they will return to Nepal after the SIU team has departed.

5. Qualified Nepali typists: HMG has had difficulties finding qualified typists to prepare stencils for radio scripts, self-instructional materials, and assessment and evaluation instruments. More materials will need to be produced during the next six months.

6. Energy shortages: There is still some question about the availability of gasoline to operate the vehicles. This relates to training, field work, workshops, and supervision whether project vehicles or public transportation is used. Should an additional gasoline shortage come to Nepal it will effect the progress of the project and modify the way it is conducted.

Electric shortages also effect the project in that the shodding program disrupts activities such as photo copying and recording.

Telephone outages also effect the project in that meetings and material deliveries are missed because of lack of communication.

Next Actions

1. Recording studio: Start construction on recording studio.
2. Transmitter: Encourage SIUC to prepare bid documents for a suitable 1000 watt short wave transmitter. Have Radio Nepal purchase land on which to place the new transmitter antenna.
3. Radio receivers: Secure specifications on available radios of a quantity sufficient for the REIT project. Test new radios in US and Nepal and complete order for balance of radios needed for the project.
4. Participant training: Complete nomination process for the balance of the training required under the project.
5. Staff development: Continue all staff development programs.

6. Pilot year instructional format: Plot out a rough outline of the year's curriculum using the instructional objectives that have been sequenced and new information about possible amount of material that can be included in one broadcast and one self-instructional lesson.
7. Radio receiver training: Using radios without solar power packs or external antenna, determine how well a sample of teachers can tune in Radio Nepal.
8. Select RETT teachers: Finalize selection of districts and teachers for the pilot year program.
9. Design, test, and administer 7th grade achievement test: Complete first draft of the 7th grade achievement test and set up initial standardization. Set up plans for screening the nominees for the pilot year program.
10. Orientation workshop: Organize details of the two week orientation program for the beginning of the pilot year.
11. Radio scripts and self-instructional materials: Complete 35% of radio scripts and self-instructional materials for the pilot year.
12. Broadcasting: Formalize plans for starting broadcasts one hour a day, six days a week beginning August, 1980.
13. Field supervision: Plan training program for field staff trainers to be held during late Spring, 1980.
14. Achievement tests: Continue writing suitable test items that match the instructional objectives for the pretest, posttest, and teacher observational scales.
15. Formative evaluation: Continue field testing and revisions of self-instructional materials and radio scripts.

APPENDIX A
LIST OF RESEARCH STUDIES

<u>NUMBER</u>	<u>TITLE</u>
10	Evaluation of First Portion of the Writers Workshop July-September 1979
11	Recommendation of Broadcasting frequencies for proposed shortwave transmitter and type of reception antenna for Eastern Nepal
12	The use of Radio and Self-instructional materials in Education
13	Zones of Nepal with Greatest need for additional trained primary teachers
14	Recommendations of Broadcasting frequencies for proposed shortwave transmitter and type of reception antenna for western Nepal
15	Comparison of costs per hour of various dry cells for radio reception
16	Radio reception throughout Nepal
17	Primary School Teachers in Nepal and their potential as change agents