

MART TRAINING REVIEW

A consultancy Report

by

Dr. John L. Woods

March, 1990

PARC • USAID • MART • WINROCK

PN-ABS-814
iss 90692

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The MART (Management of Agricultural Research and Technology) Project is funded by the United States Agency for International Development (USAID). The MART Project's chief link to the Government of Pakistan is through the Pakistan Agricultural Research Council (PARC). A MART Project Coordination Committee composed of federal, provincial, and university representatives coordinates and guides project activities. Its purpose is to assist the Pakistani agricultural research system to strengthen its research management capabilities, and to improve communications, training, farming systems research, arid zone research, and research in the rural social sciences. Winrock International, through a contract with USAID, has responsibilities to assist with the first four of these tasks. Two international agricultural research centers, the International Maize and Wheat Improvement Center (CIMMYT) and the International Center for Agricultural Research in Dry Areas (ICARDA), are responsible for the other two tasks.

The mission of Winrock International Institute for Agricultural Development is to help reduce poverty and hunger in the world through sustainable agricultural and rural development. Winrock International assists people of developing areas - in Asia, Africa and the Middle East, Latin America and the Caribbean, and the United States - to strengthen their agricultural institutions, develop their human resources, design sustainable agricultural systems and strategies, and improve policies for agricultural and rural development. As an autonomous, nonprofit organization, Winrock International provides services independently as well as in partnership with other public and private organizations. The institute is recognized as a private voluntary organization.

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SUMMARY

1. Introduction

Since the consultant had several tasks, this report is organized so that different sections address specific programs and can be utilized by the particular involved groups. The report is organized in the following sections:

- a. Summary -- This section provides an overview, summary of the recommendations, and follow up to the training component of the 1989 MART Project review. This section of the report is intended for senior management of PARC, MART Project Personnel and USAID officials.
- b. Re-Entry Program -- Annexes #1 and #2 focus on the Re-Entry Program for participants sent abroad for professional training and degree programs. Annex #1 recommends specific actions which should be initiated immediately and is intended for PARC Chairman, International Cooperation and Training (IC&T) staff, MART project personnel, and USAID staff. Annex #2 describes in detail the background, problems and a wide range of activities that could be initiated in a comprehensive re-entry program. It is intended for IC&T staff, MART and DSTP project personnel, USAID ARD and HRD staff, and TIPAN project personnel.
- c. NARC Training Institute -- Annex #3 focuses on the NARC/TI and provides recommendations on staffing and their training, suggests a program development framework, and recommends other activities such as supporting the research system training network. This section is intended for the NARC/TI staff, NARC DG, PARC senior staff, MART project personnel and USAID staff.

It is recommended that copies of these sections be duplicated and provided to the specific groups for which they are intended so that they can concentrate on implementing the recommendations related to their particular programs. Obviously, the overall report should be distributed to these and other groups.

2. Consultant's Terms of Reference

The Terms of Reference for this consultancy assignment contained the following three tasks:

- a. To recommend specific procedures and administrative measures needed to be taken by the Pakistan Agricultural Research Council (PARC) to successfully implement the re-entry and absorption into their parent organization of Pakistan agricultural scientists returning after completing overseas education and training programs.
- b. To review the on-going and planned training activities under the MART Project to determine the extent to which these activities conform to the scope of work prescribed in project documents and meet the current needs of the project.
- c. To recommend an adequate and cost effective staffing pattern for the National Agricultural Research Centre Training Institute and a training program for the existing and proposed staff.

Annex #4 contains the full Terms of Reference.

3. People Worked With

The overall guidance to the consultant was provided by Dr. C.M. Anwar Khan, PARC Chairman; Dr. Bill C. Wright, MART Chief of Party; and Dr. Curtis Nissly, USAID MART Project Officer. The work on the Re-Entry Program was done in close cooperation with Mr. Talib Hussain Sial, Director, PARC IC&T, and his staff. The NARC Training Institute work was done with Mr. Tariq Hassan, Training Officer, and other staff at the NARC/TI. Many other people were consulted and materials studied. Annex #5 provides a detailed schedule of the consultant and the names of the people met. This consultant greatly appreciates the generous giving of time and information which all these officials provided. Annex #6 contains a bibliography of some of the key documents studied.

4. Participant Re-Entry Program Summary

Millions of dollars and years of research man-years are being invested by donor agencies and the Government of Pakistan in sending research personnel overseas for degree and non-degree training programs. It is widely recognized that the returned participants are not as productive as had been desired. (It should be pointed out that this problem is not unique to Pakistan.) Annex #2 describes the problem and outlines a broad-based approach to increasing the productivity of returned participants. This includes refining the selection process, better defining the training needed, maintaining communications with the participants while overseas, establishing links with their home institute for dissertation research, removing the administrative problems faced by returnees, using returnees in continuing education programs, establishing research networks with other scientists in the same field, helping with start up assistance for their new research programs, promoting twinning arrangements with their overseas university, and many other activities which could be undertaken in a comprehensive re-entry program.

Annex #1 recommends 11 specific activities which should be initiated immediately to start the re-entry program. These include appointing a IC&T Deputy Director for Re-Entry Programs, having the PARC Chairman send all overseas participants letters, having a PARC representative visit the participants in the U.S., having an internship with the Pakistan Participant Training Program which is handled by AED/Winrock, maintaining a computerized data base for tracking the participants, and other activities which will provide a base for a comprehensive re-entry program. A draft job description for the Deputy Director for Re-Entry Programs is attached to Annex #1.

5. NARC Training Institute Summary

Dr. Frank Byrnes' September 1988 consultancy report and the February 1989 Review of the MART Project stressed the need to better define the role of the NARC Training Institute (NARC/TI), to provide a focus for the training it conducts, and to strengthen the training skills of the staff. Annex #3 recommends that the staffing of the NARC/TI be immediately filled to the level recommended in the PP/PC-1 which involves hiring a Director, one Training Coordinator and two administrative assistants. The job responsibilities should be adjusted so that the majority of the Training Coordinators' time is devoted to identifying and organizing courses. A major issue which needs to be address is the decision making process for determining which courses will be conducted by the NARC/TI. The course should reflect the priority needs established in the Master Plan. A major task of the TI Director is to work with the institutes, departments and programs to identify areas where training should be

organized. The role of the training coordinating committee needs to be reviewed and a workable system of identifying and monitoring course offerings.

Approximately 35 difference categories were identified where courses could be organized by NARC/TI. The first priority of the TI should be to organize courses for NARC staff. The second priority should be devoted to organizing courses for the research system training network, including providing assistance for strengthening training capabilities at the ARIs. The third priority should be assigned to courses for public and private sector technology transfer agencies. It is felt that the provincial ARIs are better suited to organize most of the technology transfer courses. NARC/TI should focus more on the continuing professional education courses for the NARC/ARI staffs--scientists, managers, program support, technical support, and administrative support personnel. NARC/TI should also support the research systems training network through offering training of trainers courses for ARI and university training centre personnel, serving as a clearinghouse for the network, and promoting quality training throughout the system.

It is recommended that five participants--two from NARC/TI and two from the Training Coordinator group (who are really training centre directors) which would be funded through MART, and one or two from NWFP Agricultural University Continuing Education Centre funded through the TIPAN Project--be sent to the University of Illinois Training of Trainers short course which is to be held in June. The five participants would specialize on specific aspects of training trainers and as a team project would prepare a training of training course which would be given in Pakistan to the research system training network. This training of trainers course would be a logical follow up to the MART Training Coordinators course which is currently under way. Since there may be some problems of sending the same people involved in the Training Coordinators course overseas twice, alternative approaches may have to be used to do the detailed training of trainers course, such as bringing the course organizer to Pakistan.

It is recommended that follow up work be done to establish a research system training network, help the NARC/TI with detailed job descriptions prepared, and introduce a series of management tools (such as a management matrix).

6. MART Project Training Component--Further Recommendations

Since this consultant was involved in the January 1989 MART Project Review, a number of activities have taken place in the training component. The purpose of this section is to highlight some of the accomplishments during the past year and up-date the recommendations made in the review report.

Among some of the highlights of activities initiated since January 1989 are: (1) Mr. J.M. Dukesbury has done three consultancies to refine the manpower survey data base and begin to produce reports; (2) Dr. Donald Barton and Dr. Abdus Salam Akhtar have conducted two management workshops for research station managers; (3) Dr. Larry Littlefield and Dr. James White have initiated a Training Coordinators workshop which has much potential for stimulating the creation of a research system training network; (4) the communications and training building at NARC is almost completed; (5) Dr. Roger Peterson, with assistance from Mr. Naseer Khan, prepared two excellent training manuals/reference books on statistics which can be used in training courses; (6) Dr. James B. Barnett did a review of the training needs in Sind and Baluchistan and made recommendations about how NARC/TI could support those training programs; and (7) a number of other activities were also carried out by MART which is enhancing the training efforts of the Pakistan research system.

Following upon the recommendations made in the 1989 review, the following are suggestions of further training areas which MART should address:

- a. Shifting Some Training Resources to In-Service Training -- While there is a continuing need to send participants out for degree programs, the numbers in many fields are reaching a saturation point. Therefore, it is recommended that in the future, the disciplines selected for this type of training be based upon Master Plans with demonstrated needs for developing new fields or filling gaps in existing fields.

It is recommended that more resources and attention be placed in two areas: (1) build up the in-country in-service training programs to reach large numbers of ARI staffs--scientists, managers, program support, technical support and administrative support personnel; and (2) initiate a program for identifying and sending abroad key scientists for one-year post doctoral studies.

- b. Personnel Needs Assessment -- It is recommended the Institutional Manpower Inventory data base be used to print out a summary of training which all the institutions conducted the previous year and the requests for courses these institutions want organized. This information should be analyzed and compared with needs identified through Master Plan exercises and requests received through the training network. It should be pointed out that this data may not be analytically sound, but with little effort to output the data it could provide another source of information for making decisions in developing in-country in-service training programs.

- c. Training Plans -- The recommendations in the 1989 review regarding developing training plans for individual research institutions appear to still be valid. The categories outlined for the NARC/TI and management matrix could be used by all ARIs to develop their training programs. Each Training Coordinator should develop and display in his/her office a large (i.e. 1 meter wide by 2 meters high) training management plan listing all the courses planned for the year along with strategic management information on each course.
- d. Establishing Training Centres throughout the Research System -- There is a need to institutionalize training within the ARIs and agricultural universities (through their continuing education centres) to focus on the in-service training needs of the research system. The Training Coordinators workshops initiated by MART is a very promising start in this effort. However, there is a major concern that most of the Training Coordinators identified at this time will have dual jobs--doing their research and overseeing the training program. This will most likely lead to both programs suffering. It is strongly recommended that the larger ARIs and university continuing education centres designate a full-time Training Coordinator. The follow up work shops in the Training Coordinators contract should focus on institutionalizing these ARI/university training centres, developing an initial training plan, determining staffing needs, doing an inventory of available facilities and equipment, recommending additional facilities and equipment needed, and preparing proposals for securing funding to establish and operationalize these training centres.
- e. Creating a Network of Training Centres -- As part of the Training Coordinators contract and follow up to it, there should be a concentrated effort to institutionalize establishing a network of the training centres at the ARIs and continuing education centres at the agricultural universities. The information transfer network may provide some experience in how to pursue establishing a viable training network and having it serve many functions including a clearinghouse of courses and materials, providing professional development/training for staff, and promoting the concept of training being a discipline and the need for human resource development approaches being introduced into the Pakistan research system. The decision must be made about the focal point for such a network. There is some logic for PARC to be the facilitator and clearinghouse, but this would require a major addition to the role currently performed by the IC&T Directorate. The other option would be to have NARC/TI be the focal point for the network.

- f. Training of Trainers -- There still remains a major need for conduct training of trainers courses for staff at NARC/ARI training centres and continuing education centres at the agricultural universities. Unfortunately, there is little understanding or appreciation of the need to introduce the basic approaches and concepts of adult and continuing professional education into the research system. The Training Coordinators workshops are introducing some of the key elements of training methodology, but the main function of these workshop is, or should be, to focus on identifying individuals in the key research institutions and universities who will be the focal point for developing training programs. Therefore, these Training Coordinators workshops need to concentrate more on organizational issues, management of training programs, training centre program development, etc. The training of trainers activity recommended in the NARC/TI report is envisioned as a very important, if not essential, next step to begin creating within the ARIs and universities a professional cadre of trainers.
- g. Overseas Training for Training Personnel -- Dr. Frank Byrnes and the MART review reports recommended that immediate attention be given to identifying candidates for advanced degrees in the HRD and continuing education fields. Little progress has been made in this area, mainly because there are few people identified in the research system as being full-time career trainers. Therefore, it is recommended that an inventory be made to identify individuals in the research system and among agricultural universities who have training in education (particularly in adult/continuing/extension education and agricultural education) or closely associated fields who have an interest in helping establish the training network for the research system. If people are identified with some basic qualifications and interest, then a concerted effort should be made to get them into appropriate positions at the NARC/TI and other training centres in the network. This pool should be used to identify persons for professional training opportunities abroad (such as the last Training Coordinators course which will be held in the U.S. and the University of Illinois training of trainers course) and to nominate candidates for degree courses.
- h. Technical Assistance -- A considerable amount of effort has been expended by MART to bring in short term consultants to address specific areas related to training. It is recommended that this be continued using consultants who can visit Pakistan on a recurring basis. This continuity is important.
- i. In-Country Teaming Arrangements for Training -- The MART review recommended that universities and other training institutions (such as NIPA, LUMS, etc.) be teamed up with ARI training centres in conducting courses on

subjects outside the technical agricultural field. This is very important in fields such as management, English language, communications methods, administrative support skills, technician training, equipment repair, etc. As the training program plans begin to emerge at NARC and the ARIs, an effort must be made to identify these training resources which are outside the research system, and means found to involved them.

- j. Creating Centres of Excellence -- Research institutions and universities in other countries, including those in developed countries, have had some success in identifying centres of excellence which provide the leadership in training and research for that particular field. The basic premise is that all the research institutes and universities cannot do everything in every program. There just isn't the financial and human resources available. Possibly, the Master Plan exercise could assist in identifying the unique strengths of the institutions and what is needed to make them a centre of excellence in a particular field.

7. Establishing a Focal Point for Human Resources Development

Dr. Byrnes (page 7) made the following comment on the magnitude and urgency of personnel development, "Further planning and implementation of a personnel development program commensurate with the needs of the Pakistan agricultural research system requires the highest priority within PARC." The MART project review suggested that, "By having PARC focus on overall HRD issues should lead to a logical sequence of inter-related activities concerning institutional role reviews (centres of excellence), institutional master plans, training plans, and other HRD issues being studied and acted upon."

It is recommended that PARC accept the challenge of having a senior level official, with support staff, focus on the broad issues of improving the effectiveness of the "human capital" in the research system. This would include overall manpower planning, increasing the quality and relevance of agricultural education in Pakistan, identifying priority needs for overseas training, ensuring that the training network is functioning effectively, and identifying administrative matters which are hampering the effectiveness of ARI personnel (such as pay levels, career opportunities, performance reviews, etc.) and on behalf of the entire research system take these issues up with the proper government agencies. The IC&T Directorate, Personnel Division, and possibly some other functions could be placed under this HRD umbrella.

8. Follow Up Action

It is recommended that there be follow up to this consultancy assignment in the following areas:

- a. NARC/TI -- Additional work is needed to develop the overall training program management plan (especially linking course identification with the Master Plan), creating detailed job descriptions of TI staff, restructure the responsibilities, and provide on-the-job training in management of a training institute. A follow up assignment should also explore the status of creating a research system training network and draw up the terms of reference for the role of MART and PARC in this network. During this assignment one institute or program should be selected and a detailed review be done to determine which courses should be organized and this experience be used to develop the methodology on how to identify what courses should be organized by NARC/TI.
- b. Re-Entry Program -- The progress made in implementing the Phase 1 re-entry program plan should be reviewed and refinements made, identify additional activities that should be introduced, and work out the implementation guidelines, explore linking the participant data base with the PARC personnel data base and USAID participant data base, and review the structure and job descriptions of IC&T. Attachment #1 is a copy of a memo to Mr. Sial suggesting a review of the functions of IC&T and forms for job descriptions.
- c. Continue MART Training Review -- To up-date the status of the training component of MART and make recommendations for refinement.

It is recommended that a one-month follow up consultancy take place around September 1990 and be repeated approximately every six months.

ATTACHMENT #1

22 March 1990

TO: Mr. Talib Hussain Sial

FROM: John L. Woods

SUBJECT: Review of IC&T Structure and Staff

The portion of my assignment related to the Re-Entry program focused on the activities you and your staff are responsible. I am recommending as a follow up to that effort there be a broad review of IC&T program and staffing. Hopefully this would provide PARC and MART a clearer idea of how to strengthen your operations. As part of this review I suggest to you and your staff the following items:

1. The role of IC&T within PARC and the Pakistan research establishment.
2. The accomplishments, achievements, and outputs of IC&T for the past 6-12 months. Is there available a semi-annual report for IC&T? Should one be prepared?
3. The plans and targets for the coming year. Is there an Annual Work Plan for IC&T? Should one be prepared?
4. The responsibilities and specific tasks assigned to each of the staff. Are there job descriptions for the staff? If not, attachment #1 is a suggested format for preparing job descriptions.
5. The capabilities, skills and interests of the staff. I would like to have brief resumes on each of the staff. Attachment #2 is a suggested outline for the resumes.
6. Review with them preliminary ideas on the re-entry program for the returning participants based upon discussions I have had to date and to get their suggestions on specific activities which should be included in this program. I will provide you a separate memo giving some of my preliminary ideas for the re-entry program.

ATTACHMENT #1a

22 March 1990/JLW

SUGGESTED JOB DESCRIPTION FORMAT

It is suggested that the following information be prepared for each of the positions in PARC IC&T:

1. NAME OF STAFF MEMBER: _____

2. TITLE OF POSITION: _____

3. NAME AND TITLE OF SUPERVISOR: _____

4. PRIMARY JOB RESPONSIBILITIES AND TASKS (please list in outline form):

- a.
- b.
- c.
- d.
- e.
- f.

5. PROJECTED OUTPUT/ACCOMPLISHMENTS PER YEAR (list in same order as given in #4):

- a.
- b.
- c.
- d.
- e.
- f.

6. SPECIAL SKILLS/TRAINING NEEDED FOR THIS POSITION:

- a.
- b.
- c.

ATTACHMENT #1b

22 March 1990/JLW

RESUME BRIEF

NAME: _____ TITLE _____

BIRTH DATE: _____ PLACE OF BIRTH: _____

CURRENT ADDRESS: _____

ACADEMIC TRAINING:

Degree

School

Year

<u>Degree</u>	<u>School</u>	<u>Year</u>

WORK EXPERIENCE/JOBS HELD (list current job first and others in reverse order):

Dates Title and Brief Description

PUBLICATIONS/PAPERS PRINTED (Title, Publishers, Date, etc.):

SPECIAL QUALIFICATIONS FOR CURRENT POSITION HELD:

LONG-TERM CAREER GOALS:

INCREASING RESEARCH PRODUCTIVITY THROUGH RETURNED PARTICIPANTS: PHASE 1

The purpose of this paper is to present the key recommendations for initiating a broad-based re-entry program for Pakistani participants returning from overseas graduate degree programs, and in some cases non-degree training programs. These recommendations have been formulated in close cooperation with Mr. Sial and his staff in the IC&T Directorate. They have also been discussed with returned participants and with officials of MART, AED, USAID, World Bank and other organizations. The specific recommendations contained in this paper have been reviewed with PARC Chairman who requested that this consultant and Mr. Sial prepare this paper presenting the activities to be initiated in the re-entry program and who would be responsible for them.

The participant training program in Pakistan has now emerged to the point where it must move from being concerned with identifying and processing maximum numbers of participants being sent overseas to how can the participant training program, and specifically the returnees, make maximum contributions to the productivity and relevance of agricultural research in Pakistan. There have been more than 200 Pakistani agricultural researchers sent overseas for graduate degree programs. Based upon the experience to date, there are re-entry problems for the participants which result in their productivity and contributions to agricultural research being less than desired. Difficulties in re-entry can be traced to problems in the selection process, specifying the training needed, inadequate communication with participants while away, administrative snarls upon return, lack of recognition or acceptance by their colleagues and program leaders, inadequate resources to initiate their research, and others.

The focal point for the re-entry program is the PARC International Cooperation and Training (IC&T) Directorate. IC&T will provide the leadership in developing the program recommended in this paper and the full program, which is described in Annex #2. It is expected that financial and other assistance will be provided to this program through the USAID funded MART Project and assistance through the USAID funded Development Support Training Project (DSTP), which is being implemented by the Academy for Educational Development (AED) in association with Winrock International. The World Bank projects as well as other donor sponsored projects will also be linked to this re-entry program.

Annex #2 provides additional information on the recommendations presented in this paper and suggests a number of other activities which should be periodically reviewed for possible inclusion in the re-entry program during the next couple years. This paper focuses on the activities which should be initiated during the next six months.

1. Create a IC&T Deputy Director Position for Re-Entry -- Any new program as important as this re-entry program will require a full-time leader. Therefore, it is recommended that a position of Deputy Director for Re-Entry Programs, IC&T, be created. It should be a grade 18 position. This position could probably be created through restructuring of the Directorate. There needs to be a job description prepared for the position--the responsibilities should include overseeing communications with participants while they are overseas, ensuring the administrative matters are addressed in a timely manner before participants return home, organizing the re-entry seminar, arranging for returnees to meet researchers in their fields, working with the home research institutes to ensure that the job assignments and logistical arrangements are finalized, and overseeing the other activities involved in a comprehensive re-entry program.

REQUIRED ACTION: IC&T needs to finalize the job description for the position and determine funding arrangements for the position--through restructuring the IC&T, additional funds from PARC or special funds from a donor agency. Attachment #1 is a draft job description. Once the position is created, a recommended candidate should be presented to the PARC Chairman for appointment.

2. Communications with Participants -- Maintaining effective two-way communication links with participants is one of the most important activities for ensuring a smooth re-entry. The first activity to be undertaken is a personalized computer generated letter from the PARC Chairman to all participants who are studying overseas on degree and non-degree programs. The letter should introduce the new Chairman, provide news about what is happening in PARC and the overall research establishment, stress the importance of the participants and their anticipated contributions to Pakistan agriculture research, etc. Along with the letter there should be enclosed the PARC annual report and possibly other brochures. A letter from the Chairman should be sent at least once a year. Work also should be started on developing a newsletter for participants which would be sent to them at least three times a year.

REQUIRED ACTION: IC&T should immediately draft a letter for the Chairman. The arrangements with the Chairman's office or the publications unit (which has a laser printer) must be made for printing individualized personal letters to each participant (using the mail merge provision in Word Perfect or some other word processing program). The mailing addresses should be pulled from the participant data base and confirmed as being accurate (by checking with the donor agency records and/or home research institute). The letter should be sent to all participants from all research institutions who are currently studying abroad, with copies also sent to the participant's home institute director and program leader. Winrock

International and/or AED should be requested to help with the mailing of the letter and attachments to the participants in the United States.

IC&T should work with the PARC/NARC communications support units to design a newsletter, determine how it will be written and reproduced, the mailing procedures and cost. This information should be reviewed with the MART project Chief of Party and Information Transfer Advisor and funds secured.

3. PARC Representative Visit Participants in U.S. -- It has already been recommended that the Director of IC&T visit participants in the United States. This should be done as soon as possible. It is recommended that this type of visit be done once a year with participants being brought to three or four "hub" universities. The official should also visit the AED/Winrock Pakistan Participant Training Program (PPTP) team in Washington, D.C. and if time permits to visit Winrock International Headquarters. These annual visits--could be done by Members, Secretary, DGs as well as IC&T Director--should provide opportunities for two way exchanges of information and particularly for the PARC representative to learn more about the needs, interests and problems of the participants. A detailed terms of reference should be drawn up for this visit and the specific subjects to be covered.

REQUIRED ACTION: The Director of IC&T should be sent to the U.S. as soon as possible to visit participants. The terms of reference should be finalized in consultation with the MART Chief of Party and the PIO/P prepared. Winrock International should make the arrangements in the United States for the participants to visit at the hub universities and other arrangements required. There should be an evaluation of this visit with IC&T, MART, DSTP and USAID officials involved to revise the terms of reference for the next visit, and to set the time for the next visit. This review should also suggest additional re-entry activities which need to be initiated.

4. Establish an Internship with the AED/Winrock DSTP/PPTP -- It is recommended that a member of the IC&T be placed as an intern for six months with the Development Support Training Project (DSTP), operated by AED in association with Winrock, to work with the Pakistan participant training program. It is suggested that this staff member spend one month working with Dr. Janet Paz Castillo and Dr. Hank Schumacher in the DSTP Islamabad office followed by five months in the U.S.--approximately four months with the AED/Winrock team in the Pakistan Participant Training Program (PPTP) in Washington, D.C. helping process participants and establishing communications with them; helping Winrock organize and conduct a professional development seminar; organizing the visit of the PARC representative and going with him to the "hub" universities; and spending a couple weeks with a university training coordinator who is working with a large number of

Pakistani participants. A detailed terms of reference should be drawn up for this activity. This may be repeated for other members of the IC&T staff in future years.

REQUIRED ACTION: IC&T working with Dr. Janet Paz Castillo, with assistance from the Winrock MART and DSTP team, prepare a detailed terms of reference and budget for this internship. The MART project should provide the funds. The PIO/T should be prepared and AED/Winrock make the arrangements. This first internship should be evaluated by all concerned before the final decision is made for having other IC&T staff be sent on similar programs.

5. Prepare Information Packet for Participants to Take to the U.S. -- Each participant should take with them to their overseas university a packet of information containing: (1) description of the training they need and the anticipated work they will perform upon return; (2) information on the Pakistan research system; and (3) a slide set on Pakistan agriculture and the research programs. The participants should present this information to their faculty advisors and department heads upon arrival in the U.S. and they should also be encouraged to give briefing presentations to faculty and students at their American university. The purpose of this activity is to help the American university personnel to better understand the needs for the participant's educational program.

REQUIRED ACTION: IC&T working with the PARC and NARC communication support units, and through them with the NARC Information Transfer Advisor, design a package of brochures and an audio-visual presentation (probably slides) for the participants to carry to the United States. The cost of the publications and AV presentation materials will have to be determined and explored with the MART project for funding. Specific assignments will be needed on who is responsible for preparation and duplication of materials. The briefing materials on the participant's program and information for the university program will have to be prepared with assistance from AED/Winrock DSTP. This consultant would also be willing to react to and make suggestions on these materials prepared as it is of special concern to the American university as it is to the Pakistan research establishment.

6. Encourage Winrock to Continue Conducting Professional Development Courses -- Winrock International conducted last December a professional development course for 22 Pakistani participants on the subject of writing and marketing research proposals. Winrock should be encouraged to continue conducting special short courses on research management, grantsmanship, research methods and other subjects to enhance the formal education the participants are receiving and help them with the re-entry process. A list of suggested subjects is included in Annex #2.

REQUIRED ACTION: It is recommended that IC&T appoint a task force with representatives from NARC and provincial research institutes and several returned participants, to review the consultant's recommendations for professional development courses (Annex #2, section 10.h.) and identify additional subjects, and select three or four priority subjects. The PARC Chairman should send a letter to Winrock and USAID requesting these courses be continued once or twice a year and provide the list of priority subjects as determined by the task force. It should be noted that Winrock will have to make the final decision on which subjects are actually presented, due to availability of experts in the field and other factors. Funding arrangements for this activity will have to be worked out between Winrock and USAID.

7. Establish a Re-Entry Seminar for Returnees -- It is recommended that PARC IC&T Directorate organize a re-entry seminar at least twice a year for returnees. This seminar would include briefings on the Pakistan research establishment, priorities and new programs; how to use the NARC Library and Information Services; communications/audio visual and other support services available; information transfer responsibilities of researchers; techniques for establishing effective working relationships with their supervisors and colleagues; techniques for developing a research plan and determining resources needed; and an initial review of their anticipated continuing education needs. The detailed curriculum and reference materials for this seminar needs to be prepared. Funds need to be secured for this seminar.

REQUIRED ACTION: IC&T should appoint a Re-Entry Seminar Task Force group to design the seminar, identify resource persons, and prepare the materials needed. This task force should also draw upon the experience of the Winrock, AED and USAID/HRD personnel. The task force must prepare a detailed outline for the seminar, determine timing and duration, the venue, resource persons, logistics for bringing in the returnees, and the costs involved. Funding of the seminar should be discussed with MART Chief of Party and USAID. The first seminar should be conducted before the end of 1990.

8. Maintaining Computerized Data Bases -- The IC&T Directorate is responsible for maintaining a computerized data base on all participants. The data base needs to be reviewed to insure it is meeting current needs. The data must be continually up-dated. This data base should be made compatible with the personnel data base files maintained by PARC and the research institutes. The participant data base is the primary means for tracking the participants. It should also be used for generating mailing lists for sending materials to participants and returnees. The USAID/HRD and DSTP participant data bases are being merged and greatly expanded in the near future. It is important that PARC and DSTP officials know what each other has in their data bases and to explore the possibility of sharing information, especially follow up on returnees and estimated dates for participants completing their degree programs.

REQUIRED ACTION: The DSTP Participant Training and Agricultural Units, and USAID HRD participant training staff should be invited to PARC to be briefed on the data bases maintained by IC&T and Personnel Administration Directorate. The IC&T and Personnel staff should then be briefed by the DSTP and USAID/HRD officials on their current data bases and future plans. These briefings should be repeated at least every six months with discussions on how to share information. Reports generated by each of these programs, that are related to agricultural research participants, should be shared with the other.

9. Follow up Surveys -- USAID/HRD in association with DSTP is planning to appoint a full time person to follow up on all participants funded by USAID. This will probably include conducting follow up surveys of returnees. The information gathered on participant returnees in the agricultural research field should be shared with IC&T and if possible the data be copied onto the IC&T participant data base and the PARC Personnel Administration Directorate data base (and made available to the research institutes).

REQUIRED ACTION: IC&T should contact USAID/HRD (Dr. David Esch) and DSTP (Dr. Janet Paz Castillo) to find out when the new person for follow up will be starting to work. This person should be invited to PARC to be briefed of the new re-entry program and to discuss how information can be shared. IC&T should use the same survey questionnaires for sending to returnees sponsored by non-USAID donors. There should be review meetings between IC&T and the USAID follow up staff member at least every three months.

10. Meeting with Returnees -- A meeting, or series of meetings, should be arranged as soon as possible for the Chairman to meet with all returnees. This should be for participants of degree programs who have returned during the past five years. Non-degree participants may also be invited, especially if the meeting is held at both the federal and provincial levels. Ideally, it would be best to have a series of meetings--one at the federal level for PARC, NARC and federal research institute returnees and one in each province--with the PARC Chairman and other appropriate officials presiding. The meeting should involve briefings by the Chairman and other officials on the current concerns of the research establishment, the important contributions the participants can make to Pakistan, etc. Time should also be set aside for the returnees to brief the Chairman and other officials on their experiences with re-entry and suggestions on how the participant training program can be improved.

REQUIRED ACTION: IC&T should prepare a list of all returned participants for the last five years and their current jobs and addresses. IC&T, with assistance from several returnees, should prepare an agenda for this meeting(s) and make the arrangements. The costs should be determined and MART project be approached for possible funds. This meeting should be held within the next three months. If the provincial meetings can also be arranged, they should be done in connection to the Chairman's visits to those provinces.

11. Periodic Review of Re-Entry Program -- A formal review every six months should be made of the re-entry program. It is recommended that the IC&T Deputy Director for Re-Entry Programmes should prepare a semi-annual progress report for the past six months and an up-dated plan of work for the coming year. A formal review meeting should be held involving PARC and appropriate representatives from research institutes (including some returnees), donor agencies (USAID and World Bank), MART and DSTP project personnel, and others. The review meeting should discuss the progress report and work plan and help decide on priorities for new activities which should be initiated in the re-entry program.

REQUIRED ACTION: Once the Deputy Director for Re-Entry Programmes is appointed a review meeting should be scheduled within six months. During the last meeting with the IC&T staff, they suggested that this consultant should return intermittently for these reviews, evaluate the re-entry program, and help initiate new activities. This possibility should be reviewed with the PARC Chairman, MART Chief of Party and USAID.

The above activities should be started as soon as possible. They serve as a base for developing an effective and comprehensive re-entry program for the Pakistani agricultural research establishment. If this program can be started, PARC will be at the forefront not only in Pakistan but in most countries, who have yet to address the re-entry issue in a meaningful manner.

The attached job description contains more information about specific activities and expected accomplishments for this program. Annex #2 of this consultant's report contains additional information on the activities listed in this paper and many additional activities which should be considered for a full scale re-entry program. Some of these additional activities should be initiated as soon as possible--including pre-departure orientations, review of selection procedures, semi-annual reports by participant's on their research interests, visits by returnees to Pakistani scientists in the same field, link dissertation research with home institutes, establishment of twinning arrangements, and follow up programs with returnees.

ATTACHMENT #1

20 March 1990

DRAFT JOB DESCRIPTION

1. TITLE OF POSITION: Deputy Director for Re-Entry Programmes
2. PARC UNIT: International Cooperation and Training (IC&T) Directorate
3. TITLE OF SUPERVISOR: Director, IC&T
4. OVERALL RESPONSIBILITIES: Under the guidance of the PARC Chairman and IC&T Director, this person will be responsible for developing and operating a comprehensive re-entry program for the Pakistan agricultural research establishment for participants returning from overseas educational programmes. He/she will development and operate the programmes in association with appropriate PARC/NARC support units, with full involvement of the directors and programme leaders at the participants' home research institutes, and in cooperation of the involved donor agencies and their contractors.
5. PRIMARY JOB RESPONSIBILITIES AND EXPECTED ACCOMPLISHMENTS PER YEAR:
 - a. Provide the leadership in identifying appropriate activities in the re-entry programme to initiate and ensure they are implemented. The activities described in Annex #1 are to be initiated within the first six months the person is in this position.
 - b. Prepare draft letters for Chairman to send participants and, working with the communication support units, prepare periodic newsletters for distribution to the participants. During the first year, this person will be responsible for sending to all overseas participants (degree and non-degree) one letter with attachments from the PARC Chairman and three newsletters.
 - c. Working with the data base personnel of IC&T and the donors, maintain a tracking of participants, with special emphasis of their projected return date and mailing addresses (including their advisors and department heads). Once a month a list should be prepared of returnees anticipated during the next six months with their estimated time of arrival. This list should be circulated to the PARC Chairman and appropriate administrative support units; the home research institute directors, programme leaders and administrative units; and donor agencies (and contractors).

- d. Ensure the home research institute and administrative units are informed at least three months prior to a participant's return and oversee the administrative arrangements. Special notices will be given with follow up discussions to the appropriate administrative units at PARC and the home research institute three months prior to a participant's return and upon confirmation of his/her actual arrival date.
- e. Organize a re-entry seminar at least twice a year and ensure all returnees during that period are involved (make sure the administrative and financial arrangements are completed). The first re-entry seminar will be organized within 9 months after the person assumes the position and at least two seminars will be organized each year thereafter.
- f. Maintain constant contact with the donor agency contractors who are responsible for placement and backstopping participants overseas and the officials responsible for follow up monitoring of returnees. Ensure there is a constant exchange data between the PARC and donor agencies data bases. Collect the information from USAID follow up surveys and provide the information to PARC and home research institutes. There should be formal reviews of the status of participants and follow up surveys at least every three months with each of the donors and contractors.
- g. Be responsible other activities in the re-entry programme and organize the semi-annual review of the programme. Prepare a semi-annual report on activities completed, statistical data, problems encountered and proposed new work plan for the coming year. Organize, with the IC&T Director serving as chairman, a formal review every six months involving appropriate PARC and institute personnel, a sample of returnees, donors and, if available, an outside recurring consultant. This review will look at the progress made in the re-entry program and make suggestions for the coming year's work plan.

6. SPECIAL SKILLS/TRAINING NEEDED FOR THIS POSITION:

- a. A dedication to improving the quality and relevance of Pakistan's agricultural research system.
- b. An efficient and effective manager who can work with administrative support units at PARC and at federal and provincial research institutes.
- c. Effective communicator through written correspondence and reports and skills for organizing meetings and seminars.

- d. Ability to work with senior management, scientists, institute directors and programme leaders, data processing staff, communication support units, donor agencies and their contractors, and others who will be involved in implementing the re-entry programme. This will require skills needed to plan programmes and administrative/financial arrangements, to delegate authority, and to monitor and evaluate a series of activities for the re-entry programme.
 - e. Ability and willingness to take the initiative, under the guidance of the PARC Chairman and IC&T Director, to develop new activities, secure funding, and ensure they are implemented.
7. TERMS OF EMPLOYMENT: (to be filled out by PARC)
8. STARTING DATE: As soon as possible.

INCREASING RESEARCH PRODUCTIVITY THROUGH RETURNED PARTICIPANTS: AN OVERVIEW OF THE RE-ENTRY PROGRAM

I. INTRODUCTION

The purpose of this paper is to describe a series of activities which could contribute to increasing the productivity of participants returning from overseas study. Annex #1 lists 11 activities, which are also listed in this paper, that should be given priority in initiating this re-entry program. The list in this paper is presented for study and review for the long-term program that could be carried by PARC and other institutions in the Pakistan research establishment.

This paper is the result of extensive reading of reports from Pakistan and other countries; discussions with officials associated with PARC, NARC and other government research agencies, including returned participants; personnel with donor agencies including USAID, CIDA and the World Bank; project personnel with MART, DSTP and TIPAN; and drawing upon this consultant's experience as an administrator of international programs at an American university and working overseas with several international development agencies. The recommendations contained in this paper have been reviewed with government and donor agency officials. The recommendations are in line with the broad guidelines spelled out in the "Follow-Up" chapter in the USAID Handbook 10 and similar guidelines of other donor agencies.

1. Definition of Re-Entry Program -- A re-entry program, as envisioned, is not a one-time "workshop" or activity initiated at the time a participant returns to Pakistan after receiving training abroad. Every aspect of the process needs to be looked at including selection, writing the PIO/P, continuous communication while away, special professional enhancement training while away, briefings on similar research done in Pakistan, administrative/logistical arrangements upon return, professional recognition by peers, job counselling, special resource needs for intended research, etc. In other words, what can be done to facilitate maximum research productivity of returned participants?
2. Target Audience -- The primary group to focus on are personnel who go abroad for degree (normally MS and PhD) training from Pakistan agricultural research institutions affiliated directly or indirectly with PARC. These persons can be sponsored by GOP, USAID, World Bank, CIDA, GTZ, ODA, or other agencies. A secondary group includes those research staff and administrators who go on non-degree training programs, especially for periods of more than 4 months. It should be noted that some of the recommendations, especially those related to the academic research, are most appropriate for PhD candidates rather than those in MSc or short-term non-degree programs.

3. Justification for Establishing a Re-Entry Program -- Under the World Bank ARP-I and USAID research projects, approximately 200 Pakistani participants have been sent to other countries, mostly to the United States, for graduate degrees. Donor agencies and Government have invested millions of dollars in this program and hundreds of man-years of lost research time have been allocated for this educational endeavor by GOP. The cost for a PhD participant is estimated to be greater than \$80,000. During the early days of the World Bank and USAID projects, the major emphasis of GOP and the donors was on identifying potential participants, processing, and placing them--trying to get the maximum number of participants, in any subject, overseas for training. The emphasis must now be shifted to looking at determining priority field to send participants, the quality of the participants, the relevance of the overseas education, and how to increase the research productivity of the returnees.

In the future, there will be less need to for sending large numbers of participants overseas for degree programs. However, there will be a need to more carefully identify gaps or new areas where Pakistan will have trained expertise. The biggest issue needed to be addressed right now is the re-entry of participants. There are clear indications that many returnees are not as productive as desired, for reasons explained in the next section. Therefore, the entire participant training process needs to be carefully examined to determine how maximum returns can be obtained from this major investment of time and money.

II. THE PROBLEM

The consultant talked to government, contractors and donor officials who are involved in participant training programs; read evaluation reports; and met with a number of returnees to ascertain the nature of the problem. The problems in Pakistan are similar to those which exist in other countries, many who recognize the problem but have yet to develop re-entry programs. The following is a brief summary of some of the key problems related to re-entry:

4. Administrative Problems -- The returnees and other involved persons reported serious administrative and financial frustrations encountered by returning participants. The consultant learned that it took up to six months for some returnees to get back on the payroll, to secure housing and transport, and many other similar difficulties. In some cases, the participants lost accumulating seniority and pension benefits while overseas on training. There appears to be variations in these administrative matters among different institutions and when they were selected. The policy should be uniform for all participants going out on the same program.

Many participants remarked that they came home to find that they had no offices, laboratories or other facilities to do their research because it had been given to someone else during their absence. These administrative problems occur at a time when the returnee is at his/her maximum enthusiasm for getting on with developing a research program, particularly to follow up on his/her thesis/dissertation research. It appears that this frustrating experience is a major contributor to returnees losing interest in their research job and motivation to make contributions to the Pakistan agricultural research establishment. This problem could be one of the easiest to solve.

5. Resources for Start-Up Research Activities -- Almost all the participants complained about the lack of sufficient resources (funds, support personnel, equipment, etc.) needed to do their research. This problem is more complicated. It will be difficult for Pakistan to match the resources which many of the participants had grown accustomed to while overseas--an indication that their training may not have been entirely relevant to Pakistan conditions and needs. Part of the problem is that their home institution had not prepared for their return or the participant had not communicated their needs in advance. The exact nature of the problem varies by discipline and institute. It is a serious problem which must be addressed by government, the overseas education institution and donor agencies. Donor agencies also must consider how they can help overcome this problem.
6. Acceptance by Research Colleagues and Supervisors -- Participants reported to varying degrees cool attitudes on the part of their colleagues and supervisors to what they learned while overseas and to allow/encourage them to initiate new programs. In some cases it was clearly jealousy on their part of their colleagues and supervisors and resentment that they had not been selected for participant training. In other cases the returnees appear to have not been very tactful in communicating with their peers or they were promoting ideas which were clearly not relevant to the Pakistani situation. The psychological acceptance by supervisors, and to a large degree by their colleagues, is a very important part of the re-entry process. Both sides need to be encouraged to make it successful. The returnees have the potential to share valuable new knowledge and skills to fellow researchers which could have a multiplier effect on the quality of research in Pakistan.
7. Relevance of their Educational Program -- There are examples where participants did not receive training that was relevant to Pakistani conditions or needs. In some cases participants were selected in fields where there is little or no need for additional scientists. In other cases, the specifications for the training program was not spelled out sufficiently and it was not monitored during the training. The consultant also ran into cases where the American university did not make sufficient effort to help the participant design the academic experience (selection of courses and research subjects) so that it was relevant for Pakistan. In one case observed by this consultant, the main focus of the degree program was changed

after one year, because of the particular interest of an advisor was in a subject area not suitable for Pakistan, leaving the returnee alienated from his program leader and colleagues.

8. Loss of Contract while Overseas -- All the returnees, as well as Pakistani participants the consultant knows in the U.S., feel the lack of contact with home to be a major problem while studying abroad. This is a two-way process and the resulting problems caused are with both the participant and his/her home institute. Participants do not appreciate the developments that take place during their absence and, thus, give the impression that his professional colleagues are out-of-date. The program leaders and institute directors often are not kept up-to-date on the activities and interests of the participants and, therefore, do not have an opportunity to provide feedback to help make the participants educational and research focus relevant to the job to which they will return. In other cases, the institute directors or program leaders do not respond to correspondence from participants. This communication problem is a very important, but is one which can be overcome.

The 1986 evaluation report of the earlier USAID Strengthening Agricultural Research Project, by Susan Gant, listed the following constraints to the participant training program (pages 8 and 23): (1) under utilization of returned participants; (2) lack of research facilities and supplies for the returnees to initiate meaningful research; (3) personnel assignment system which is archaic and arbitrary; (4) cumbersome GOP processing of participants going and coming home; (5) poor information exchange between agricultural stations throughout the country (no networking); (6) while overseas contact with home institutions was poor; and (7) information on the job for which they would return was lacking or insufficient. It appears that work on overcoming these problems is still needed.

III. POTENTIAL ACTIVITIES

Based upon the information gathered, the following lists potential activities which can become part of a comprehensive re-entry program for the Pakistan agricultural research network. The process for making re-entry a positive and productive experience should start when a participant is selected and carry through at least the first year after he/she returns home. The following list should be reviewed periodically and decisions made on additional activities to be initiated.

9. Potential Activities: Pre Departure -- There are a series of activities that can be under taken before a participant goes abroad for training that could affect the re-entry process:

- a. Participant Selection -- During the selection process it should be made clear what is expected of the participant (the research institute's needs), the focus of course work and thesis/dissertation research, and the expectations (both scientific and managerial functions) of the work he/she is to undertake after returning home. The participant's supervisor and institute director should be involved in these deliberations. The participants selected should be in priority program areas either filling gaps in the existing system or introducing new fields. The entire selection process needs to be reviewed by the PARC International Coordination and Training (IC&T) Directorate in association with the research institutes at the federal and provincial levels. More emphasis needs to be placed on meeting the home institute's research needs in the disciplines selected and on merit for selecting individuals.

- b. Briefing Packet for Participants to Take Overseas -- The participants should take to their overseas university an information packet which contains: (1) a clear description of the educational experience which is needed and the job for which they will return; and (2) a presentation describing Pakistan and its agricultural research program. The packet also should include suggestions on how the American university can make the participant's training more relevant and facilitate the re-entry process. An explanation is also needed regarding the funds that are available for the participant's research and special training activities would be important information to the host university. The presentation on Pakistan and agricultural research could include a slide set and publications which the participant can use for briefing seminars to faculty and fellow students while abroad. The PARC IC&T Directorate, with assistance from the PARC and NARC communication support units, will be responsible for preparing this briefing packet. An outside consultant, who understands the Pakistani conditions and American universities, might be drawn upon to help with designing the sections related to describing the educational experience required and where the university can help in the re-entry.

- c. Contract with Home Research Institution -- There should be a formal agreement drawn up between the participant and his/her research institute describing the primary focus of the training and thesis/dissertation research, and a description of the job (including research and administrative responsibilities) that the participant is to have upon return from his/her overseas training. This should be done with full involvement of the participant, his supervisor/program leader, and institute director. Obviously, as the graduate training program progresses there may be a need to make adjustments in the agreement. This should be done as part of the continuing dialogue between the participant and his/her home research institute.

- d. Selection of University & Degree Program -- Care should be given to select a university and a degree program (and if possible, also the participant's advisor) based on the agreed upon focus of the training and availability of funds, especially for research. The university department, and primary advisor, must be committed to providing the participant a quality and relevant degree program. There must be flexibility in the graduate program for the participant to make adjustments to fit the needs of his/her home research institute. In the 1986 USAID evaluation report returnees indicated that PARC determined the program and there was little involvement by the research institute director and the participant. This process should be reviewed.
- e. Briefing by PARC -- In addition to the discussions that the participant has with his/her supervisor and institute director (items 9.a. and 9.c.), it is important that PARC personnel in the IC&T Directorate and the particular research discipline (i.e., crops, livestock) also brief the participant prior to departure. This should be designed to open a channel of communication for the participant to maintain contact with Pakistan and the overall research establishment (it should not restrict the participant from having continuous communication with his/her home research institute). PARC IC&T personnel should make sure each participant has and understands the information in the Pre-Academic Orientation Handbook, which was prepared by the MART project. In the 1986 USAID evaluation, 87 percent of the participants indicated they received no pre-departure orientation. It was recommended in the same report that pre-departure orientation programs should make use of returned participants.
- f. Briefing by Sponsor and Contracting Agency -- The participant also should be briefed by the sponsor and contracting agency (i.e., USAID, AED, Winrock) prior to departure. The focus of this briefing should be on how American (or other countries) universities operate and possibilities the participant has for adjusting the course work and thesis/dissertation research to meet the needs of Pakistan. Often participants from Pakistan, and other countries as well, are not aware of how American universities operate, the flexibility that exists (particularly at the PhD level), and the role a faculty advisor performs. The orientation program (either in Pakistan or upon arrival in the U.S.) should also contain some briefings on U.S. culture and customs.
10. Potential Activities: While Abroad -- Frank Byrnes' September 1988 consulting report and other MART reports stress the need to maintain communication links between the Pakistan research establishment and the participants while they are abroad. This is very important. There are other activities that can be done while the participant is abroad that also will contribute to a successful re-entry process and the long-term research productivity of the individual participant and the overall research program at his/her home research institution.

- a. News from the Home Research Establishment by PARC -- The PARC Training Directorate, in association the communication support services, should send to all participants studying abroad (long- and short-term) a "AgriResearch News From Home" newsletter at least twice a year providing information on what is happening at home in the research establishment, new personnel (i.e., new PARC Chairman), review of research highlights in Pakistan, news from present and past participants and their research activities, and information on the re-entry process by former participants. Copies of this newsletter also should go to the research institute directors, participants' supervisors, funding agencies and contractors, host university advisors and department heads, and possibly returned participants. The mailing list for this newsletter and other mailings to participants should be generated from the IC&T computer data base on participants.

Other forms of communication to the participants also may be explored. Frank Byrnes suggested a video tape showing research and other activities in Pakistan. This consultant suggests that the PARC Chairman should send a computer generated "personally addressed" letter to each participant once a year (at an auspicious time) stressing the importance of their education to Pakistan, assuring them an important role in Pakistan's research program, providing them with news from his office, and enclosing the PARC Annual Report and other appropriate brochures. The first of these letters from the Chairman should be sent fairly soon.

- b. Pakistani Officials Visit Participants in the U.S. -- Once a year the Director of Training or a senior PARC official should visit the United States (and possibly other countries) to meet with the Pakistani participants who are from the research establishment. There are several purposes for these visits: (1) to learn about the participants' degree programs and the universities they are attending (for future placement of participants); (2) to assess if they are having any problems in their program; (3) to review their research topics and help facilitate linkages with their home research institutes and other organizations/ individuals who can help them; (4) to discuss the re-entry process so that some work can be initiated prior to their return; and (5) other subjects of interest to the participants. During these visits there also should be briefings on what is happening in Pakistan (this might be the most appropriate time to use a video tape presentation).

Because of the travel time required in the U.S., participants should be brought to three or four universities for these meetings. It is recommended that these "hub" universities be changed each year so that the maximum number of American university personnel are also exposed to the Pakistani officials to learn about the needs of the research establishment and expectations of GOP/PARC for the participants' education. These visits should be arranged at times when the participants are not in classes or involved in field research.

PARC has requested USAID/MART to have the IC&T Director make a three week visit to the U.S. to meet with participants, university officials and AED officials. He should also meet with Winrock officials who are involved in backstopping the DSTP and MART projects. This visit should be initiated as soon as possible.

- c. Periodic Reports on Training & Research Activities by Participant -- Besides the course information, grades and other administrative information, the participants should be required to submit a semi-annual report (following the fall semester and spring semester/summer school session). Part of the purpose of this activity would be to give the participants practice in reporting on their academic pursuits and research achievements. These reports should clearly spell out the research interests that the participants are developing and the research they want to pursue at home. These semi-annual technical reports should be submitted to the participants' home research institute supervisor/program leader and director, PARC, sponsor, contractor and American university advisor and department head.
- d. Continuous Communications between Participants and Their Home Institute Supervisor/Institute Director -- The participants' home research institutes should be encouraged to maintain constant contact with the participants through formal and informal communications. Simultaneously, the participants should do more than periodic reports to their home institutes (item 10.c.). More work needs to be done on exploring how this communication exchange can be strengthened because it is probably the most important single activity for ensuring more effective re-entry by the participants.
- e. Formal Links of Home Research Institute in Participant's Graduate Program -- Efforts should be made to establish formal links with the participant's home institute and the department or major professor in the U.S. university. The next two items list two possibilities of specific linkages. There are probably others. The more each institution understands the other the more likely that the U.S. education will be relevant and the participant's re-entry be successful. Exchanges of information and scientists between the institutions should be encouraged.
- f. Thesis/Dissertation Research Done in Association with Home Institute -- It is becoming more accepted for participants' research, especially for the PhD dissertations, to be done in Pakistan. This should be encouraged. If possible, this research should be done in association with the participant's home institute. Besides this, it is strongly recommended that a senior scientist from the participant's home institute be on the Graduate Committee, if such arrangements can be made, and be involved in the review of the research design, help supervise the research at the home institute, and help in the final defense of the dissertation. It is also highly recommended that the

participant's primary advisor visit Pakistan once or twice while the dissertation research is being done in order to have a better appreciation of the conditions, help modify the research design as needed, and to meet officials at the home research institute.

- g. Provision of Establishing Twinning Arrangements with University and Home Institution -- If the linkages described in the above three items are done correctly, there is a good opportunity for establishing a long term twinning arrangement between the department or program area in the American university and the participant's home institute. The returned participant should be the focal point this continued twinning arrangement. His/her dissertation research could be the initial focal point for the twinning arrangement, which would expand as the two institutions got to know each other better. This consultant feels that twinning arrangements can provide the credibility and visibility needed by returned participants and in the long term will contribute much to raising the quality of research at the Pakistani research institute.

One person this consultant interviewed, who was very positive on promoting institutional twinning arrangements, also suggested that the advisors/mentors should visit the participants three to six months after they return to review their research plans, help determine resources needed and funding, help explain the research and its potential to program leaders and institute directors, and discuss how to implement and fund a twinning arrangement in that particular research field.

This consultant has observed that there is a considerable amount of confusion on what is an twinning arrangement between an American university and an institution in Pakistan. First of all, such arrangements must not be thought of as being traditional technical assistance projects, such as the MART or TIPAN projects. They must focus on programs--collaborative research, joint educational endeavors, information and materials exchanges, etc.--that over the long-term will be mutually beneficial. Each institution should be willing to provide staff time free of charge and provide the leadership for managing the twinning arrangement. Twinning arrangements cannot be established and managed by a donor agency or contractor. Once common areas of interest are determined the partners then can seek funds--usually small amounts for travel and out-of-pocket expenses--to implement the twinning arrangements.

This consultant has found a number of sources of funds for twinning arrangements which are outside the normal USAID/World Bank/UNDP technical assistance projects. However, it should be noted that the new World Bank ARP-II project has a twinning component and other donors are expressing interest in making funding available for this type of programs. It is recommended that the twinning partners seek funding from multiple donors and avoid large projects which could force the twinning arrangement into a

more rigid direction than is suitable for a dynamic joint research and education program.

This discussion of twinning does not imply that there is no need for technical assistance in the Pakistan research establishment. Where technical assistance is needed it should be financed in a more traditional manner. However, this consultant feels that the technical assistance and twinning arrangement can be integrated--with the long-term relationship between the partners being the twinning modality. Pakistani research and educational institutions, as with similar institutions through out the world, must open up their communications and maximize the professional interchange with other institutions if they expect to grow and keep up-to-date in their particular field. Any analysis of top researchers in most fields reveals that they are in constant contact with their colleagues throughout the world. The twinning arrangements help institutionalize this interchange.

- h. Special Professional Enhancement Activities while Abroad -- Last December (1989) Winrock organized a one week professional development course on "Developing, Writing, and Marketing Agricultural Research Proposals" for 22 Pakistani participants who are studying in the United States. The evaluation indicated that this was a very successful course and all indications are that more are needed to: (1) fill in gaps in the participants' degree programs; and (2) to contribute to the re-entry process. The following are some ideas for other professional development courses that could be organized at Christmas time and/or during summer breaks:

- (1) Accessing World Technical Information Data Bases
- (2) Organization & Management of U.S. Research Establishments
(suggest this be a cooperative undertaking with USDA ARS/CSRS and a state experiment station)
- (3) Technical Communications (report writing, seminar and other types of presentations, organizing field days, etc.)
- (4) Collaboration Between Public-based Agricultural Research and Industry (example case studies may be a university corn breeding program and a commercial seed company, insect control programs and chemical companies, or veterinary research links with drug companies)

- (5) Understanding the U.S. Technology Transfer System and Its Interface with the Research Establishment (the links between researchers and extension specialists/agents, private sector, mass media, and other groups with examples of actual programs such as professional conferences, field days, technical publications, etc.)
- (6) Introducing Change in Your Home Institution--what this consultant normally calls "Massaging the Bureaucracy!" (focusing on well established change agent methodology)
- (7) Identifying and Formulating Donor Agency Project Proposals
- (8) Strategic Planning, Management Information Systems, and Decision Making Processes
- (9) Establishing Twinning Arrangements with U.S. Universities/ Research Institutions (using case studies such as the University of Illinois-Egerton University or University of Minnesota-Morocco program)
- (10) Special skills training such research methods, computer utilization, statistics, etc.

Host universities should be encouraged to arrange briefings or seminars for international graduate students on these subjects and discuss in detail the operations of their institution, policies, support services, budgets, personnel practices, etc. In fact, this type of professional development activities would also be relevant to American as well as international students.

11. Potential Activities: Upon Return -- The most crucial time for the participant is the first couple days after returning home. This often sets the tone for the entire re-entry process. The actual re-entry process goes on for some time and involves many elements, some are listed below.
 - a. Administrative and Financial Arrangements -- Probably the most common complaints revolve around the initial administrative matters such as pay, personnel records, incentive payments, housing, etc. One returnee reported to this consultant that it took six months before he was returned to the payroll, much longer than a new employee. Every effort should be made by PARC and the home research institute to have the administrative and financial arrangements worked out and ready when the participant arrives home. These administrative problems are extremely frustrating to returnees, at a time when they are at their maximum excitement level for developing a research program at their home institute. This situation appears to have greatly dampened the enthusiasm of many returnees which resulted in greatly reduced productivity

and motivation. There is no excuse for delays and complications with these administrative matters. These matters can be solved with proper management procedures.

- b. Office Space and Facilities Required for Expected Research Program -- The participants are usually away from their home institute for several years and upon returning often find that their office, laboratory and other physical facilities have been allocated to other staff. This is an issue similar to the administrative and financial arrangements. It should be known in advance when the participant is returning. Therefore, there is no excuse for waiting until after the participant returns home to begin to figure out what to do. This reflects inadequate management. Simultaneously, the participant has an obligation to keep PARC and his/her home institute supervisor and director fully informed on the projected return date and the specific needs for space and other resources. This information is needed well in advance.
- c. Reporting on Thesis/Dissertation Research at the Federal Level and Home Research Institute -- It should be made clear from the time the participant is selected for training that he/she will be responsible for presenting seminars and papers on the research done during his/her degree program. There should be at least one seminar given at the national level (PARC or NARC sponsored) and one or more at the participant's home institute. The participant also should present information on the American university where he/she studied and its research programs. This activity is important to help the participant reestablish contacts and should contribute to the continuing professional education for Pakistani researchers. It is recommended that each returnee be asked to prepare a 2-3 page summary of their thesis/dissertation research which briefly describes the findings and current issues in that particular field. This "research brief" can be used in many re-entry activities, as indicated in below items, by the returnee and distributed widely.

Several people this consultant interviewed also suggested that the returnees should be used as much as possible as resource persons for in-service training programs, especially for subjects on research methodology, statistics, computer utilization as well as their own research field. The participants should be among the most up-to-date in these fields at the time of returning home. It would also give them visibility and credibility among their colleagues.

- d. Briefing on Research Literature Available in Pakistan in Same Field -- Immediately upon return to Pakistan, the participants should visit the NARC Library and Publications units to review what research in his/her field is being done in Pakistan and what literature is available (from outside as well as in the country). During this activity the participant should determine how he/she can continue to keep up-to-date with the literature in his/her field after returning to his/her home research institute.

- e. Helping Returnees Maintain Professional Contacts -- Many of the returnees this consultant talked with felt they were cut off with their profession after returning to Pakistan. They were not able to maintain their membership in professional societies, keep up the subscriptions to professional journals, or allowed to attend professional meetings/seminars. According to the USAID Handbook 10, there are provisions for USAID funded participants to have membership fees in professional societies and subscriptions paid for a couple years following their return. Other donors may also have similar provisions, or could be built into the projects they fund. In the long-run the Government of Pakistan is going to have to ensure funds are available for researchers to belong to professional societies, they have access to professional journals, and travel funds made available for attending professional meetings and seminars. Pakistani must interact with fellow researchers throughout the world, or otherwise they will rapidly slip behind in the agricultural research field.
- f. Meeting Pakistan Researchers in Same Field -- Before the participants begin their research work at their home institutes they should tour Pakistan to visit all the key researchers who are working in their field. This also would be an excellent opportunity for the participant to present seminars on his/her dissertation research at other institutes. The primary purpose for this tour would be to bring the participants up-to-date on what is happening in Pakistan, encourage the establishment of an in-country network, and to provide a means for the participants to receive some visibility. The donor agency should provide the funds for this activity.
- g. Re-Entry Seminar for Returnees -- It is recommended that PARC IC&T Directorate organize a re-entry seminar periodically for returnees. This seminar would include briefings on the Pakistan research establishment, priorities and new programs; how to use the NARC Library and Information Services; communications/audio visual and other support services available; information transfer responsibilities of researchers; techniques for establishing effective working relationships with their supervisors and colleagues; techniques for developing a research plan and determining resources needed; and an initial review of their anticipated continuing education needs. A detailed curriculum and reference materials for this seminar needs to be prepared. Also funds need to be secured for this seminar.
- h. Re-Entry Interview at PARC -- Each participant should have a formal re-entry interview with a member of the PARC IC&T Training Section and with someone from the technical field (i.e., crops, social sciences, animal science, etc.). During this interview a questionnaire could be administered evaluating the overseas training program and the backstopping provided by PARC and the participant's home institute. The questionnaire and interview also should seek information on the returnee's research interests and needs for a smooth re-entry (both administrative and technical needs). There is an advantage,

however, of having an outside independent person handle the evaluation aspects of this activity--could be done by the donor agency or an outside consultant.

- i. Establishment of Career/Personnel Data File at PARC and Home Institute -- During the re-entry interview the personnel file should be up-dated to include data on special skills and technical capabilities as well as administrative information. This personnel file should be shared with the participant's home institute. The file should be designed and maintained cooperatively with the PARC IC&T and Personnel Division and continuously up-dated with links to the participant's home institute. This file also should monitor the continuing education activities of the participant so that new skills or capabilities are captured. It should also record information related to their participation in professional meetings, having papers published, and research grants received. Therefore, if special expertise is needed within the research system persons can be identified for possible utilization in a particular program. For this activity to be successful, it will require compatible data bases at the PARC IC&T Directorate, Personnel Division, and the participants home research institutes.
- j. Re-Entry Interview at Home Institution -- It is important that immediately upon return to the home institute the participant have detailed discussions with his/her supervisor/program leader and the institute director. These discussions should include a thorough briefing of the degree program, research interests, and desires for developing future research. These discussions also should include briefings by the home institute administrators on priorities they have and how the participant will fit into these priorities. The administrative and physical resource needs of the returning participant should be worked out as quickly as possible. The participant should present at least one seminar for the staff and administrators of his/her home institute on his/her dissertation research and plans for follow up research.
- k. Preparing a Research Plan of Work -- Each participant should be required to prepare a research plan for discussion with his/her supervisor and institute director (and submitted to PARC, the degree program sponsor, contractor and his/her former primary advisor/mentor) outlining the research program he/she intends to establish and describing the needed resources (equipment, field plots, animals, laboratory, analytical equipment, funds, travel support, technicians, etc.). Where possible, this proposal should show links with the participant's overseas educational experience and where twinning arrangements can be initiated with the foreign university and other institutions (such as International Agricultural Research Centers) to conduct this research. As mentioned in item 10.g. an additional activity would be to have the participant's academic advisor/mentor visit Pakistan three-six months after his/her return to help with the research plan, determining resources needed and funds, and discuss further possibilities for twinning arrangements.

- l. Meeting with Returnees -- A meeting, or series of meetings, should be arranged as soon as possible for the Chairman to meet with all returnees. This should be for participants of degree programs who have returned during the past five years. Non-degree participants may also be invited, especially if the meeting is held at both the federal and provincial levels. Ideally, it would be best to have a series of meetings--one at the federal level for PARC, NARC and federal research institute returnees and one each in the provinces--with the PARC Chairman and other appropriate officials presiding. The meeting should involve briefings by the Chairman and other officials on the current concerns of the research establishment, the important contributions the participants can make to Pakistan, etc. Time should also be set aside for the returnees to brief the Chairman and other officials on their experiences with re-entry and suggestions on how the participant training program can be improved. IC&T should prepare a list of all returned participants for the last five years and their current jobs and addresses. IC&T, with assistance from several returnees, should prepare an agenda for this meeting(s) and make the arrangements. The costs should be determined and MART project be approached for possible funds. This meeting should be held within the next three months. If the provincial meetings can also be arranged, they should be done in connection to the Chairman's visits to those provinces.
- m. Follow up Survey at 6 Months and 2 Years -- PARC should establish a computerized data file on each participant prior to their departure. This file should be up-dated throughout the time the participant is overseas and after returning. Six months after returning home each participant (and possibly also their supervisor and institute director) should fill out a questionnaire that focuses on: (1) what research they are doing; (2) how this matches up to their degree program and thesis/dissertation topic and the research interests as specified in their Research Plan of Work; (3) problems they encountered in the re-entry process; and (4) suggestions for improving the entire participant selection, backstopping and re-entry process. A member of the IC&T Directorate should visit a sample of the participants to observe their situation and research program and interview them and their superiors in-depth.

After two years each participant should be sent another questionnaire that focuses on: (1) their current job as contrasted with the position they had immediately upon return; (2) reflections on their overseas training experience and re-entry; (3) suggestions for improving the participant training program; (4) their needs for continuing professional education; and (5) suggestions for improving agricultural research in Pakistan.

An attachment is included with this paper which provides examples of questions that can be drawn upon for these surveys. This attachment is a series of questions prepared by this consultant which could be used for returnees. Another example of a returnee questionnaire is in Annex 5 of the evaluation of the USAID Strengthening Agricultural Research Project, which was prepared by Susan Gant. A third source of information can be found in USAID Handbook 10 which contains three generic follow up questionnaires. None of these examples are designed specifically for the follow up surveys, but they should provide valuable information for those persons who would prepare and administer the survey questionnaire(s). NOTE: A MINIMUM NUMBER OF QUESTIONS SHOULD BE USED IN ANY QUESTION FOR RETURNEES. USAID is intending to hire a person who will conduct surveys and oversee other follow up monitoring of participants. The PARC IC&T Directorate should establish contact with this person and investigate the possibilities of drawing upon the information collected from returnees in the agricultural research field. If the data bases are compatible, the data could be directly ported into the IC&T data base.

- n. Periodic Review of Re-Entry Program -- A formal review every six months should be made of the re-entry program. It is recommended that the IC&T Deputy Director for Re-Entry Programmes should prepare a semi-annual progress report for the past six months and an up-dated plan of work for the coming year. A formal review meeting should be held involving PARC and appropriate representatives from research institutes (including some returnees), donor agencies (USAID and World Bank), MART and DSTP project personnel, and others. The review meeting should discuss the progress report and work plan and help decide on priorities for new activities which should be initiated in the re-entry program. During the last meeting with the IC&T staff, they suggested that this consultant should return intermittently for these reviews, evaluate the re-entry program, and help initiate new activities. This possibility should be reviewed with the PARC Chairman, MART Chief of Party and USAID.

IV. INSTITUTIONAL RESPONSIBILITIES

12. PARC -- The focal point for this program is the PARC International Cooperation and Training (IC&T) Directorate which will be responsible for designing and managing the re-entry program. IC&T will work closely with the donor agencies, contractors, overseas universities, and Pakistani research institutions. Links also will have to be maintained with the personnel units at PARC and federal and provincial research institutions that have staff going on participant training programs.

- a. Maintaining Computerized Data Bases -- The IC&T Directorate is responsible for maintaining a computerized data base on all participants. At the moment it has three data bases: (1) a comprehensive data base on participants and information on American universities; (2) data on research institutes and personnel needs; and (3) a personnel data base provided by Winrock International. These data bases must be reviewed and the types of information being collected to meet current needs. The information contained the data bases must be continually up-dated. The participant data base should be made compatible with the personnel data base files maintained by PARC and the research institutes. The participant data base is the primary means for tracking the participants. It should also be used for generating mailing lists for sending materials to participants and returnees. It should be investigated if the PARC participant and personnel data bases could be linked the data bases kept on participants by USAID and AED.
 - b. Creating IC&T Deputy Director for Re-Entry Position -- Any new program as important as this will require a full-time leader. Therefore, it is recommended that a position of Deputy Director for Re-Entry Programs, IC&T, be created. It should be a grade 18 position, and could possibly be secured through restructuring the Directorate. There needs to be a job description prepared for the position--the responsibilities should include overseeing communications with participants while they are overseas, ensuring the administrative matters are addressed in a timely manner before participants return home, organizing the re-entry seminar, arranging for returnees to meet researchers in their fields, serve as the liaison with the federal and provincial research institutes for returning participant matters, and overseeing the other activities involved in a comprehensive re-entry program.
13. Home Research Institute -- As mentioned throughout this paper the program leader and institute director should be completely involved in drawing up the terms of reference for the participant's overseas education program, maintain constant contact with the participant, be associated with the dissertation research, and facilitate the re-entry.
 14. Contractors -- The contractors, in this case Winrock International and the Academy for Educational Development (AED), have a major responsibility in helping creating a successful educational experience and facilitating the re-entry process. The contractors can provide valuable assistance in facilitating the continuous communication between the Pakistan research establishment and participants while their are overseas. They can also assist Pakistan scientists maintain professional contacts with the outside world through bringing in top researchers in various fields, through invitational travel grants, to sponsoring seminars, and facilitating the establishment of twinning arrangements.

15. Donor Agencies -- In addition to providing funds for the various activities listed in this paper, the donor agencies should take the lead in insisting that the participant training program is operated in a manner that enables the returned participants contribute the maximum to Pakistan's agricultural research program. The emphasis in the future should be on quality of research, productivity of the researchers and strengthening the management and research support capabilities of the research institutions. This consultant feels strongly that the numbers game--how many participants we sent out--should be dropped. Reducing the actual number of participants can be justified if the funds saved are used for activities that will increase quality, relevance and productivity. The following are some of these activities:
- a. Dissertation Research Linked with Home Institute -- This involves having the participant return to Pakistan for his/her dissertation (probably not as feasible for MSc) research. It should also involve one or more visits by his/her primary advisor/mentor during the research and a follow up visit three-six months after the participant returns home. A senior Pakistani scientist in the same field should participate in the program and visit the U.S. university once or twice during the period that the participant is overseas. While the initial impression is that these additional trips are expensive, they could make major contributions to the relevance and quality of the research, and facilitate a successful re-entry by the participant. This travel could be handled through invitational travel funds available from several donors.
 - b. Encouraging Twinning Arrangements -- A major problem of most returnees, and this is reflected in the overall image of the Pakistani research and educational institutions, is the inability to maintain professional interactions with fellow researchers around the world. Technology is changing very fast. The amount of money and time spent by researchers in developed countries on communications, travel, scientific literature, and other activities that facilitate constant interactions with fellow researcher around the world is very large. And, they are fortunate to have access to high quality, low cost communications facilities. The twinning arrangements appear to be the wave of the future for researchers, and their institutions, in both the developed and developed countries--just as industries in developed countries link with the resources and low cost labor in developing countries. There are many advantages for research/educational institutions in U.S., and other developed countries, to enter twinning arrangements with Pakistani institutions. The donors should provide the seed money and encouragement for this to take place.

- c. Seed Money Grants -- A major problem mentioned by most returnees this consultant talked with was the lack of resources and funds to initiate a viable research program after returning home. It is recommended that the donor agencies, working with GOP, make provisions in their projects for funds to cover minimum start up costs for returnees to establish their research programs. This could cover the costs for some basic equipment, supplies and other costs. It should not include funds for salaries, incentive payments, and other items which the research institute should provide. This must be considered purely as "start up funds" with the understanding that the returned participant must immediately set out to prepare proposals for major funds needed for the continuation of his/her research program.
16. Overseas University -- The primary responsibility of the overseas university is to ensure that the participant's education is of the highest academic standards and that it is relevant to the needs of the participant and Pakistan--these two criteria can complement each other if handled correctly. The department and involved faculty must be interested in learning about Pakistan and agricultural research in the country, especially at the participant's home research institute. There must be flexibility in the program to allow the participant to focus on problems he/she will face at home. Hopefully, the department or faculty member will also be interested in having the research done at home and in exploring twinning arrangements.

V. IMPLEMENTING A RE-ENTRY PROGRAM

If a successful re-entry program is to be implemented there is a need to institutionalize the program and provide the mechanisms for monitoring and modifying the program.

17. Institutionalizing the Re-Entry Process within PARC -- It is recommended that the following actions be taken:
- a. Create a Position of IC&T Deputy Director for En-Entry Programs -- Detailed information on this recommendation is contained in item 12.b.

- b. Participant Training Internship -- It is recommended that a member of the IC&T be placed as an intern for six months with the Development Support Training Project (DSTP), which is operated by AED in association with Winrock, to work with the Pakistan participant training program. It is suggested that this staff member spend one month working with Dr. Janet Paz Castillo and Dr. Hank Schumacher in the DSTP Islamabad office followed by five months in the U.S.-- approximately four months with the AED/Winrock team in Washington, D.C. helping process participants and establishing communications with them; helping Winrock organize and conduct a professional development seminar; organizing the visit of the PARC representative and going with him to the "hub" universities; and spending a couple weeks working with a university training coordinator who is working with a large number of Pakistani participants. A detailed terms of reference should be drawn up for this activity. This may be repeated for other members of the IC&T staff in future years.
- c. Provide Administrative Commitment and Funding -- No program, especially as important as the re-entry program, can be successful with the commitment of senior management and the provision of sufficient funds. Many of the activities contained in this paper either do not cost anything or can be funded initially through donor supported projects. However, over the long-term there must be sufficient commitment on the part of PARC top management to encourage the continuation of the re-entry program and GOP funds provided for it to continue.
18. Monitoring and Modifying the Participant Training/Re-Entry Program -- There are undoubtedly other activities that should be added to this list. A task force should review the participant training program, and this paper, twice a year and provide the PARC Chairman, donor agencies and contractors recommendations for modifications in the overall program as well as the re-entry program. Members of this task force should include the IC&T Director, two research institute directors (one from a federal institute and one from a provincial institute), a representative from an agricultural university, two returnees, representatives from the involved donor agencies and contractors, and possibly a recurring outside consultant.

ATTACHMENT #1

20 March 1990

QUESTIONS FOR RETURNED PARTICIPANTS

This attachment is not a questionnaire, but a list of questions which can be drawn upon when interviewing returned participants who have been overseas on long-term degree programs.

DATE OF INTERVIEW: _____ NAME: _____

TITLE: _____ INSTITUTE: _____

1 BACKGROUND:

- 1.1 How long were you away from Pakistan?
- 1.2 Did you receive a degree?
- 1.3 Degree and name of university.
- 1.4 Did you do your thesis/dissertation research in Pakistan?
- 1.5 How long have you been back in Pakistan after your training?
- 1.6 Your present position and title.
- 1.7 Name of research institution with which you are working.
- 1.8 Institution and position at time of your departure for training, if different.
- 1.9 Are you a member of any professional association in Pakistan or in other countries. If so, please name and give country.
- 1.10 Do you subscribe to any professional journal? Please list.

2 PROBLEMS YOU ENCOUNTERED WHILE AT THE UNIVERSITY:

- 2.1 Describe any problems you had while studying abroad.
- 2.2 Was the degree program of the subject you wanted?
- 2.3 Were the courses relevant to Pakistan conditions?
- 2.4 Was your thesis/dissertation research subject relevant to Pakistan conditions and to your current job?
- 2.5 Did your teachers know anything about Pakistan?
- 2.6 Were they interested in learning more about Pakistan?
- 2.7 Were you able to keep up-to-date about what was happening in Pakistan, and in particular with your home research institution? (If yes, how were you able to do this?)
- 2.8 Was there regular exchange with your supervisor/institute director in Pakistan? How many times did you receive information from your supervisor and/or institute director per year?
- 2.9 Were you able to do your thesis/dissertation research in Pakistan? (If yes, where there any assistance provided by your home research institute and did your faculty advisor visit Pakistan)?

3 PROBLEMS YOU ENCOUNTERED DURING FIRST TWO MONTHS AFTER RETURNING HOME:

- 3.1 Describe any problems you encountered upon return home.
- 3.2 Problems related to administrative/logistical matters--
 - 3.2.1 Describe any administrative/logistical problems you had.
 - 3.2.2 Were there any problem related to payroll?
 - 3.2.3 Did you have office space?
 - 3.2.4 Other problems?

- 3.3 Problems related to starting your research program--
- 3.3.1 Describe any problems you encountered in beginning your research program upon return home.
- 3.3.2 Did you and your supervisor and/or institute director discuss what research which you will be responsible?
- 3.3.3 Do you have a job description which describes the research you are responsible and your duties?
- 3.3.4 Do you know and have you met other Pakistani researchers in your field?
- 3.3.5 Is the research you are to do related to your studies? To your dissertation research?
- 3.3.6 Do you have the correct equipment needed to conduct the research you are assigned?
- 3.3.7 Do you have the correct and adequate supplies needed for the research you are doing?
- 3.3.8 Do you have adequate budget for the research you are doing?
Do you know what your budget is? What control of the budget do you have?
- 3.3.9 Do you have technician and administrative (i.e. secretarial) support available to you?
- 3.3.10 What other problems did you encounter with your research?

4 RECEPTION BY YOUR SUPERVISOR AND COLLEAGUES:

- 4.1 Do you feel that PARC and your research institute had prepared adequately for your return and helped you re-enter into your job?
Please give examples of where they did helpful things and where more effort was needed.
- 4.2 Did you supervisor and/or institute director welcome you back home and help you with the re-entry process?
- 4.3 Did you have an opportunity to present a seminar on your thesis/dissertation research to your supervisor and colleagues?

- 4.4 Did your supervisor and/or colleagues ask you to advise for improving their work and the research being done at the research institute?
- 4.5 Did you feel that your colleagues were glad you are home and were interested in learning about what you learned abroad?
- 4.6 What are your general feelings about the reception you received after returning home?

5 RECOMMENDATIONS

- 5.1 What could be done prior to your departure which would make the re-entry be more easier and faster?
- 5.2 What can PARC and your research institute do to help you while away from Pakistan?
- 5.3 What can Winrock and/or AED do to help you keep in contact with your home research institute?
- 5.4 What can Winrock and/or AED do while you are in the United States which would help you with your job at home--such as professional seminars (please give specific subjects)?
- 5.5 What can PARC and your research institute do to speed up and make easier the administrative procedures of re-entry?
- 5.6 What can PARC and your research institute do to help you begin your research program?
- 5.7 Please give us any other suggestions related to making your overseas training more effective and relevant to Pakistan's needs and the research you are doing?

NARC TRAINING INSTITUTE: INCREASING PRODUCTIVITY OF STAFF AND TRANSFERRING TECHNOLOGY

1. Introduction

Dr. Frank Byrnes' September 1988 consultancy report and the February 1989 Review of the MART Project stressed the need to better define the role of the NARC Training Institute, to provide a focus for the training it conducts, and to strengthen the training skills of the staff. Dr. James Barnett in his September 1989 consultancy report provided some suggestions for programs the NARC Training Institute could initiate which would serve the emerging training network in the Pakistan research system.

Dr. Byrnes and others have commented on the magnitude and urgency for developing in-service training. This consultant feels that some money and effort which has been allocated to overseas pre-service degree programs should be shifted to in-country in-service training which can benefit very large numbers of existing personnel. This shift has been initiated by the MART project and should be continued. The "bang for the buck" is in in-service training, particularly if the overall objective of PARC and the research system is to increase productivity and research results/relevance. The NARC Training Institute should be the "flag ship" in establishing a comprehensive results-oriented in-service training thrust.

2. Consultant's Terms of Reference

One of the assignments for this consultant in the Terms of Reference was, "To recommend an adequate and cost effective staffing pattern for the National Agricultural Research Centre Training Institute and a training program for the existing and proposed staff.

3. Role of NARC/TI

Training institutes within the research establishment should have as their first concern internal staff development--in the case of the NARC Training Institute (NARC/TI), organizing training for the NARC staff. This should be the first priority for the NARC/TI. A second role is providing professional training for staff in other institutions in the research system. A third role, and one which the provincial institutes should provide the leadership, is to help in the process of technology transfer by conducting training for staffs of public and private agencies who can relay the technology on to farmers.

The general feeling still persists that the NARC/TI is teaching extension type courses. Frank Byrnes stated, and this consultant completely concurs, that extension oriented courses, for the most part, should be the domain of the provincial ARIs. The NARC/TI should provide the leadership in what is often referred to as Continuing Professional Education (CPE)--upgrading the professional levels and productivity of the various staff categories within the research system. The field of agricultural research is changing so fast there is an urgent need to continually provide opportunities for staffs of research institutions to learn current technology, research methods and other skills. It is also important that the managers and support personnel be trained continually in order to make all aspects of the research institute function efficiently.

The primary role of the training carried out by MARC/TI (and the training programs in other ARIs) is to increase the productivity of the staffs through introducing new job related knowledge and skills. This role is often not reflected in the process of identifying training courses to offer or even in the content of many courses.

4. Current Situation at NARC/TI

The NARC/TI for various reasons has received little attention from the MART program in terms of enhancing staff capabilities. The new Communications Centre and Training Institute building is within a month or two of being completed. This will provide a much expanded facilities for the NARC/TI. Therefore, there is an urgency to address staffing and NARC/TI program development issues.

- a. Staffing -- The PP/PC-1 specified 14 staff for the NARC/TI including 6 Scientific Officers (2 each in English Language, Evaluation, and Training), 2 Administrative Assistants, 2 Junior Assistants, and 4 Drivers.

At the current time the NARC/TI Director's position is vacant. Four of the Scientific Officer/Training Officer positions are filled--one is Officer-in-Charge, one training officer, one responsible for computer courses, and one in evaluation. The two Administrative Assistant positions are vacant. The two Junior Assistants (secretary and clerk) are filled. The four driver positions are vacant.

None of the NARC/TI staff have received overseas degree or short term training in the training field. Two training officers are participating in the Training Coordinators Training Course currently being conducted by MART.

- b. Training Program -- During 1989, the NARC/TI organized 18 different courses. This included 14 agricultural courses. The 4 computers courses were held a total of 16 times. Therefore, a total of 40 courses were conducted for a total of 591 participants. There were also seminars,

meetings and other activities which TI was responsible for organizing. The clientele for the agricultural courses were: 1 for managers, 7 for scientists, 1 for program support personnel, 1 for technical support personnel, 2 for extension personnel, and 2 for special groups (in this case women's groups). The 16 computer courses had the following mix of participants: 79% were scientists, 1% administrators, and 20% were support personnel.

5. Training Program Priorities and Strategy

The mix of training as described above in #4 is good. A variety of clientele groups are being served. There is also a good mix between federal and provincial research staffs being involved in the NARC/TI program. The biggest problem is the number of courses being offered is not even scratching the surface into terms of the needs that exist. This consultant, in association with the NARC/TI staff, prepared two documents which focus on identifying areas where possible courses should be organized by the Training Institute. Attachment #1 describes categories of CPE courses by clientele groups. Attachment #2 is a recommended management matrix which the NARC/TI Director and NARC DG should use for monitoring the mix of courses by clientele group and management information needs for the overall training program. The following is the consultant's recommendations for addressing priorities to the NARC/TI program:

- a. NARC Staff -- The first priority for identifying courses to conduct should be given to various groups within NARC--scientists, managers, program support, technical support and administrative support personnel. NARC/TI (and the other ARI training institutes) must provide leadership in upgrading the knowledge and skills of their research institute's staffs, thus making major contributions to increasing the productivity and relevance of the research program.

It is strongly recommended that the NARC/TI Director be an integral part of implementing the NARC Master Plan with training priorities based upon program priorities and assessment of human resource needs. The Director should provide the leadership working with senior NARC management and program leaders to identify courses which NARC/TI should conduct.

It is envisioned that many of the courses organized for NARC staff will have vacant positions where staff from other ARIs could be invited to participate, thus serving the research system training network. However, as compared with the next category, these courses would be identified upon the needs of NARC.

- b. Research System Training Network -- The CPE/in-service training needs of the Pakistan research system are so great that no single training institution could come close to being able to organize all the courses. It is also recognized that various ARIs, universities and other training institutions (such as NIPA) have unique capabilities which should be utilized. The current MART training program for Training Coordinators could be the beginning for establishing a Research Training Network which would identify training needs for the research system, serve as a clearinghouse for letting the system know of training programs available at other institutes, and other important functions to improve the quantity, quality and relevance of training in the research system.

NARC has some unique strengths in the research and support fields. These should be identified and articulated, and used in making decisions on what courses should be organized for the research system training network (and what courses should be organized by ARIs, universities or other training institutions). Again, there should be a logic in the identification of courses NARC/TI organizes for the network and then a major effort made in getting the correct participants and making the course relevant to their needs.

In terms of supporting the research system training network, NARC/TI should provide the leadership in:

- i. Specialized Technical Training -- NARC should identify the specialized subjects it can offer training to ARIs and universities, which are not available elsewhere in Pakistan.
 - ii. Training of Trainers -- As the research system training network emerges, NARC/TI can perform a very valuable service in enhancing training capabilities of the research system by conducting training of trainers courses for the training centre personnel at ARIs and universities and helping them to build capabilities to train instructors at these institutions.
 - iii. Network Clearinghouse -- NARC/TI should serve as the facilitator for creating a research system training network and act as the clearinghouse for course information, teaching materials that other training centres can use, and promoting excellence in training.
- c. Technology Transfer Agencies -- As stated above, this clientele group should not be a high priority for NARC/TI as compared with the provincial ARI training programs. Obviously, there will be some areas where NARC has unique capabilities to serve this clientele group. This consultant feels that

NARC should focus its training on the Subject Matter Specialists (SMSs) and similar technically oriented staff in other private and public agencies. It is important that this group be thought of as being more than public extension personnel. As Attachment #1 (para 3) points out, private sector and other groups are very important channels for transferring technology to farmers.

- d. Special Groups -- These include a variety of groups within Pakistan and international seminars/workshops, etc. For the most part, NARC/TI would be responding to requests from these groups rather than consciously developing programs, on a priority basis, for them.

6. Recommended Staffing--Near Term

There is an urgent need to greatly expand the number of courses being offered by the NARC/TI, increase the quality of the courses, and to provide leadership in integrating the course offerings into implementing the NARC Master Plan and the priority needs of the research system. Therefore, the following staffing recommendations require immediate attention:

- a. NARC/TI Director -- This position needs to be filled immediately with a senior level person who (1) understands training and the broad human resources development (HRD) field (or is willing to learn this field); is dedicated to enhancing the research system and is accepted by scientists and managers of the research institutions; and (3) wants to make a career in the training/HRD field. It would be preferred to find a person who is out of the agricultural/continuing education field--possibly a person who is currently at one of the agricultural universities. The Director should provide the leadership within NARC/TI for working with senior management, program leaders, and other groups in identifying courses which needed to be conducted. He/she should work closely with the Training Coordination Committee and ensure that training priorities are established and that TI serves as many clientele as possible. There is a need to review the job description for the Director.
- b. Training Coordinator -- The remaining vacant Scientific Officer position should be filled as soon as possible. This person could come from a research background or the education field. He/she should be interested in the training field and want to make it a career. There is a need to revise the job descriptions for all the Training Coordinator positions.
- c. Administrative Assistants -- These two positions should be filled as soon as possible. One should be office manager and oversee personnel matters. The second should be responsible for financial matters.

- d. Drivers -- It is recommended that only one driver position be filled and that the other three positions be cancelled. When additional drivers are needed for courses or special events they be drawn from the pool.

The logic for these recommendations is to fill the existing positions as soon as possible and focus on increasing the productivity and quality of the training program by this core staff. For the most part, the long-term staffing levels should be based upon demonstrated demand for NARC training and measurable productivity of the staff.

7. Recommended Job Assignments for Training Coordinators

As recommended below (in section on other follow up action), there is a need to do a thorough review of the job descriptions and match them up with the program priorities of the NARC/TI. This is best done after there is a NARC DG and TI Director appointed. At this point it is recommended that the five Training Coordinators (referred to in the PP/PC-1 as Scientific Officers, which should be changed) be given the following assignments:

- a. Training Courses for Scientists -- One Training Coordinator should be made responsible for organizing courses for scientists, at NARC and for the training network.
- b. Training Courses for Managers and Administrative Support Personnel -- This Training Coordinator would focus on management and administrative training subjects and, because of this, would establish close working relationships with management training institutions in Pakistan, and possibly outside, and be fully conversant in the various teaching materials/modules that are available in management training field.
- c. Training Courses for Program and Technical Support Personnel -- This Training Coordinator would ensure that these two important groups are not forgotten in the NARC in-service training program.
- d. Liaison with the Training Network and Training of Trainers Courses -- This Training Coordinator should serve as a clearinghouse for informing other research institutes and universities of NARC courses which have vacant positions. He/she should also inform appropriate NARC staff of opportunities for training at other ARIs, universities or other training institutions. It is envisioned that NARC will perform an important role in establishing the research system training network, which will be one of the responsibilities of the NARC/TI Director with major involvement by this Training Coordinator. One of the important activities in establishing the

training network will be to conduct training of trainers courses for ARI/university training centres and help them to train scientists (and others) who will be course instructors. Therefore, it is logical for this Training Coordinator to have this dual responsibility.

e. Evaluation and Training Courses in Statistics and Related Subjects --

Evaluation is an important function. However, this consultant feels that assigning two out of the six training positions to evaluation is too much. Each Training Coordinator should handle the routine evaluation for his/her courses. This Training Coordinator would help the others in the formulation of special questionnaires and carry out special evaluations and follow up studies when needed. Since evaluation and the statistics field (and possibly other research methods subjects) are compatible (and this particular staff member is from the statistics field) it is recommended that this subject area be assigned to him to develop courses. There is a wide-spread feeling that statistics, research methods and other subjects is a very high priority area for developing courses.

The consultant observed that the NARC training staff have some non-training responsibilities such as handling visitors, preparing a very large annual report, follow up studies, duplicating training materials, etc. A careful review of all these activities should be carried out while preparing detailed job descriptions for all the staff. Where possible, the non-course development and management functions should be kept to a minimum.

The job descriptions for these positions need to be revised and to clearly spell out the responsibilities and where possible quantify the outputs expected. Attachment #4 contains a suggested form for preparing job description. The Training Coordinator should be responsible for: (1) working with the TI Director, identify courses that should be offered in the particular field assigned to him/her; (2) working with the course instructors carry out a needs assessment analysis of the trainees; (3) help design the curriculum and lesson plans; (4) coach the instructor on appropriate and effective teaching methods to use; (5) help in the design and production of instructional materials--printed, audio-visual and other forms); and (6) handle the routine evaluation of the course. (There may be some confusion on this consultant's use of "Training Coordinator" and the MART short courses for Training Coordinators, which for the most part are training centre directors. Training Coordinators, as used in this paper, refer to the people who actually organize and oversee the conduct of specific courses, usually with other people being the instructors.)

8. Recommended Staffing--Medium Term

It is certainly envisioned that the number of staff at NARC/TI will have to be expanded in the future. As mentioned above, this should be based upon demand and other objective criteria. The consultant feels that the Training Coordinator positions will have to be increased--such as having two for scientists (one in crops and one in livestock) and eventually having one each in for management and three support groups. As the NARC/TI program develops other tasks will emerge needing full or part-time attention, such as training of trainers, training network clearinghouse coordination, instructional modules design and distribution, etc. As the number of Training Coordinator positions increase there will have to be a proportional increase in the administrative support personnel in the NARC/TI.

9. Recommendations for Staff Training

There is an urgent need to provide training to the NARC/TI staff. None of the current staff have any formal training in the training/HRD field. This is resulting them focusing too much effort on bureaucratic tasks rather than providing the creative leadership in the identification, design, and conduct of effective continuing professional educational programs. As an initial set of recommendations, the consultant suggests the following training be done during this year:

- a. University of Illinois Training of Trainers Short Course -- Attachment #3 is a copy of the short course announcement. This short course will be held June 4-29, 1990. Therefore, action will have to be taken very quickly on this recommendation. It is recommended that the following participants from Pakistan be sent to this course:
 - i. NARC/TI Staff -- The two NARC/TI staff who are participating in the MART Training Coordinators course (Mr. Tariq Hassan and Mr. Javeed Nasim) should be sent by the MART Project to this short course.
 - ii. Training Network Coordinators -- Two additional participants from the Training Coordinators course should be nominated for the University of Illinois short course, and funded by the MART project. They should be selected on their performance in the Training Coordinators course and potential to make their career in the training field.
 - iii. TIPAN Funded Participant -- One of two staff from the NWFP Agricultural University Continuing Education Centre should be sent through the TIPAN Project.

The University of Illinois course is designed to allow the participants to focus on special projects or develop special skills in the training field. It is recommended that the five Pakistani participants each focus on one of the following training areas: (1) needs assessment; (2) curriculum development and preparing lesson plans; (3) teaching methods; (4) instructional materials (working with the University of Illinois instructional media staff and particularly studying the extensive use of audio-tutorial program in the Agronomy Department), and (5) training evaluation. The five participants should develop as a team project a Training of Trainers course which they would conduct for the Pakistan research system training network. This activity would be the logical next step to the Training Coordinators course. This consultant, who is involved in University of Illinois international programs, would be willing to work with Dr. Violet Malone, course organizer, to develop the tailor made program for the Pakistani participants.

Since there may be problems associated with sending the same participants to both the Training Coordinators U.S. training and the University of Illinois course, an alternative could be to bring Dr. Violet Malone to Pakistan to give a 3-4 week training of trainers course. In either case, action should be taken fairly soon to organize the training of trainers course.

- b. Nominations for MS Degree Programs -- It is recommended that Dr. Violet Malone (who has worked with the TIPAN Project in Pakistan) be asked to provide recommendations on one or two of the Pakistani participants to be nominated for MS degree programs in adult and continuing education. She should also be asked to recommend which university they should be sent to and the specific focus of their degree program.
- c. In-Country Training of Trainers Course -- The five participants should immediately upon return conduct a training of trainers course at NARC/TI for the other two staff and training coordinators and staff from other ARIs and universities. The course should be repeated in other locations, and at NARC, for additional training staffs and for scientists who will be instructors in up-coming courses.

Any further recommendations for short-term and degree training should wait until a clearer picture emerges on the NARC/TI staffing and program, and the evolution of a viable training network in the research system.

10. Program Development Recommendations

It appears that to-date there has been primarily a ad hoc approach to identifying courses which the NARC/TI conducts. This must change. The following recommendations should help move the selection of training activities to a more logical approach:

- a. Identifying Courses NARC/TI Should Offer -- As mentioned before, priority should be given to conducting courses which fit the needs of NARC, as determined through the Master Plan exercise and by other means. The NARC/TI Director must be accepted as a senior level manager within NARC and provide leadership in working with NARC senior management and program leaders to identify courses that should be offered. Increased research productivity and relevance will be achieved only through the efforts of NARC staff and their capabilities. There is an urgent need to develop a system for identifying subjects which courses are to be organized and assigning priorities to the course needs. As part of this process the institutes, departments and programs should be fully involved. The role of the Training Coordination Committee needs to be reviewed and better defined.
- b. Establish a Research System Training Network -- As stated above, the magnitude of the training needed by the research system is so great that no single training institute can come close to meeting the demand, nor has access to the range of expertise needed. The Training Coordinators course provides an excellent opportunity for beginning to institutionalize a training network to serve the research system. Every effort possible should be made to move forward the creation of such a network with a viable organizational structure, clearly defined mandate, relevant program, and the required resources. NARC/TI could serve as the focal point for this network and provide the clearinghouse functions required.
- c. Categories of Training Courses -- Attachment #1 outlines the various categories of courses which NARC/TI could conduct. There are approximately 35 difference categories, divided by clientele groups and subjects. The NARC/TI staff should review these categories with NARC senior management and, with the Master Plan and training planning mechanisms as a base, establish goals for numbers of courses and subjects in the various categories. This discussion should also include decisions on where other training institutions (such as other ARIs, universities or outside training organizations) should be requested to conduct courses.

- d. Training Management Matrix -- It is recommended that the matrix shown in Attachment #2 be made into as large poster in the NARC/TI Director's office (and possibly a duplicate in the NARC DG's office so that there is a constant awareness of the categories of training needing attention and the current courses to be conducted. The training management plan also provides summaries of other vital information such as clientele groups served, subjects, budgets, funding agencies, etc. This large poster presentation is very useful for presenting an overview of the training program to visitors from other ARIs, universities, other government agencies, donor agencies, etc.
- e. Links with Communication Support Services -- Dr. James Barnett recommended that NARC/TI should provide the lead for the development and distribution of audio-tutorial modules on various subjects for the training network. This is particularly relevant with the completion of the combined communications and training building. The consultant feels that the task is much more involved than just producing an audio-visual package--a proper needs assessment should be conducted, materials tested, teacher guides prepared, teachers trained, etc. Before this type of program can be undertaken in any major way, there will have to be additional staffs in both the Audio-Visual Centre and Training Institute.

In addition to the audio-tutorial program, there is a need for developing close working relationships between the communication and training staffs. Printed reference materials and audio-visuals are vital to the training program. Supporting training should be one of the highest priorities for the communications programs.

11. Other Follow Up Action

In addition to the above recommendations, there are two others which this consultant wishes to present related to the NARC/TI:

- a. Restructure NARC/TI -- Since at the current time there is no NARC DG or TI Director, it was not feasible for the consultant to get heavily involved in structural changes and job descriptions for TI staff. Attachment #4 is a copy of a memo, with attachments, to Mr. Tariq Hassan who is Officer-in-Charge of NARC/TI. A meeting was held with the TI staff and these subjects were discussed, but in general terms. Copies of the current job descriptions were given to the consultant and the training and capabilities of each staff member were reviewed. It is obvious that much more time is needed to thoroughly review the six areas outlined in the memo. It is recommended that after the NARC DG and TI Director are appointed that this review be initiated.

- b. Recurring Consultancy Assignments -- Dr. Frank Byrnes (page 18 and elsewhere) recommended the use of consultants who can make recurring visits over a 2- or 3-year period to work with the NARC/TI and other aspects of the research system training program. The experience of this consultant clearly confirms this approach as being cost effective and making significant contributions to program development. There should be follow up consultancy inputs with the NARC/TI to focus on clarifying the role and formulating an action program plan, review the TI structure and job descriptions, further review the training needs of TI staff, and provide on-the-job training to the staff in program development and management.

ATTACHMENT #1

21 March 1990
Dr. John L. Woods

NARC TRAINING INSTITUTE CATEGORIES OF CONTINUING PROFESSIONAL EDUCATION (CPE) COURSES

The purpose of this attachment is to outline the categories of in-service training/continuing professional education (CPE) courses which the NARC Training Institute should organize. These categories are organized by clientele groups to be served by the NARC Training Institute:

1 NARC STAFF:

The first task for the Training Institute is to organize training to increase the knowledge and skills, thus the productivity of the NARC staff. (This responsibility is the same for training centres at other ARIs.) The training courses in this category should be identified based upon the needs and priorities of NARC. If there are not sufficient numbers of NARC staff to fill the courses, participants should be invited from other institutions in the Pakistan research system and universities. The process of identifying courses for NARC staff should be linked to implementing the Master Plan.

The following lists groups of NARC staff for which training should be conducted:

1.1 Scientists -- The heart of a research establishment are the scientists who design, conduct and report on the research. Scientists need several types of continuing professional education:

1.1.1 Technical -- Technology in the agricultural field is changing so fast there must be constant attention given to keeping the scientists up to date. This can include seminars and work shops conducted by fellow scientists, visiting scientists, and recently returned participants from overseas advanced degrees.

1.1.2 Research Methodology -- This includes a wide range of subjects such as research design, statistics, computer analysis of data, etc. to improve a scientist's research skills and ability to analyze and interpret data.

1.1.3 Communication Skills -- Doing the research is not enough.

Scientists must also report their findings to fellow researchers and make it available to extension and other public and private technology transfer agencies. Scientists need training in scientific writing, public speaking, organizing field days and seminars, etc.

1.1.4 Research Management -- A number of subjects fall into this category including research proposal writing/securing funds, planning and tracking research projects/programs, managing technicians and other support personnel, etc. This is not institutional management, but managing research projects/programs.

1.2 Managers -- Training courses in this category would be for research station DGs, institute heads, department heads, program leaders and others who oversee groups of scientists and must make decisions on personnel, finance and program priorities. Some of these courses could be organized and conducted by other training institutions such as NIPA, etc. There are several levels of training which can be organized in this category:

1.2.1 Organizational Development and Change -- This is the most complex and sophisticated level of management training. Often, training is used as a venue for stimulating organizational development and change. There are fairly well established change agent methodologies which can be taught. This type of training should be combined with institutional strategic planning or master plan development programs where the managers and program leaders would receive special "process skills" training.

1.2.2 Institutional Management -- This training would be specifically designed for research station DGs and institute heads, and would cover all aspects of their management jobs.

1.2.3 Management of Support Services & Farms -- Many research stations have sizable service units and farms which require special skills training for the managers.

1.2.4 Program Development and Management -- This type of training should be directed towards department heads and program leaders, and include program development methods, program/project planning, tracking methods, program monitoring/evaluation, etc.

- 1.2.5 Personnel Management -- This training is for any managers who are responsible for hiring and supervising staff. It should include personnel management procedures (specific to the Pakistani situation), human relations, participatory management, performance rating, etc.
- 1.2.6 Financial Management -- Managers should have a general understanding of financial procedures so they can effectively communicate with the financial administrative personnel, use financial information for decision making, "what if" techniques, etc.
- 1.2.7 Program Monitoring/Evaluation -- Managers must also understand how to utilize Management Information Systems (MIS) data, when to collect additional information, survey methods, and how to use monitoring/evaluation information in program development/revision.
- 1.3 Program Support -- Groups in this category include those professionals working in Audio-Visual Communication, Library Services and Documentation, Statistics and Data Processing Centre, National Herbarium, Training Institute, Germplasm Centre, and other units which directly support and enhance the research program.
- 1.3.1 Technical -- Staff in these units will require training in their particular technical field which might be organized by NARC or outside training organizations (or another ARI or university in the network).
- 1.3.2 Program Planning -- Each of these units should be involved in the Master Plan exercise and other program planning activities--thus they need program planning skills, with special emphasis on their particular fields of specialization and where it fits into the overall program development efforts of NARC.
- 1.3.3 Management -- The staff in these units have unique management responsibilities and, therefore, will need special training in human relations, financial procedures, record keeping and reporting, etc.
- 1.3.4 Monitoring/Evaluation -- These support programs must be monitored carefully to ensure they contribute to the overall objectives and missions of NARC. Therefore, staff in these units must have the skills to evaluate their programs and use the results to improve their future efforts.

1.4 Technical Support -- The productivity of many research institutions is often low because of the lack of sufficient number and properly trained technicians in the laboratories, farm workers, storekeepers, equipment repairmen, equipment operators, etc. These groups should be identified and training needs assessment be conducted on them to determine the training which should be organized.

1.5 Administrative Support -- This important group are vital to the productivity of scientists, managers and program support units. They include secretaries, procurement personnel, finance staff, clerks, personnel staff, transport staff, etc. A training needs assessment should be conducted to determine priorities for training which could include computer skills, typing, accounting practices, GOP administrative procedures, etc.

2 SUPPORT TO THE RESEARCH SYSTEM TRAINING NETWORK:

The Training Coordinators program is emerging a network of training centres which conduct training for their own institutions and for staff from other institutions in the Pakistan research system. A means needs to be developed where the training centres, working with their institute directors and program leaders, would identify unique strengths of their institutes where they could organize training for the network. At the same time they should identify areas where they have staff need training which could more logically be conducted by some other training centre in the network.

As a starting point, it is recommended that the NARC Training Institute perform the function of being the clearinghouse for the training network. All the training centres would periodically provide a list of course being offered, number of available trainee positions, venue, and dates. This information will periodically be circulated to all the research institutes, universities and PARC to inform them of training opportunities. The NARC Training Institute could also collect, duplicate and disseminate reference materials, teaching modules, audio-visuals, course outlines and other training materials developed which could be used by other training centres.

The categories and subcategories of training for the network are the same as for NARC.

2.1 Scientists

- 2.1.1 Technical
- 2.1.2 Research Methodology
- 2.1.3 Communication Skills
- 2.1.4 Research Management

2.2 Managers

- 2.2.1 Organizational Development and Change
- 2.2.2 Institutional Management
- 2.2.3 Management of Support Services and Farms
- 2.2.4 Program Development and Management
- 2.2.5 Personnel Management
- 2.2.6 Financial Management
- 2.2.7 Program Monitoring/Evaluation

2.3 Program Support

- 2.3.1 Technical
- 2.3.2 Program Planning
- 2.3.3 Management
- 2.3.4 Monitoring/Evaluation

2.4 Technical Support

2.5 Administrative Support

3 TECHNOLOGY TRANSFER AGENCIES (Public and Private):

Training can be an important mechanism for the research establishment to transfer "mature technologies" into a series of networks which eventually transfer the information to farmers and other users of technology. Courses and other activities should also be organized based upon the requests from various clientele groups who are involved in technology transfer programs. The types of training for this function can be specially designed short courses, seminars, field days, etc. Programs related to technology transfer can be made more effective if the scientists and training staff also involve the communication support personnel in the effort.

Farmers seek information from many sources. According to a recent study conducted in the Punjab by Dr. Oguz B. Nayman, the most important source of information for farmers are other farmers (91%) followed by private market (61%), On-Farm Water Management Officers (55%), Extension Field Assistants (10%), Agricultural Officers (3%) and Mobile Credit Officers (2%). Therefore, the technology transfer training activities should be organized for multiple groups from the private and public sectors. Special groups such as school teachers, local leaders, religious leaders, cooperatives, etc. should also be considered as target groups in addition to the groups which Dr. Nayman identified. For the most part, the NARC Training Institute and training centres with other research institutions are not responsible for farmer training. That is the responsibility of the

groups identified above who serve as intermediaries between the research establishment and farmers.

4 SPECIAL GROUPS (Pakistani and International):

The NARC Training Institute is requested by various groups, from within Pakistan and abroad, to organize special training courses. An example during 1989 special courses were organized for women's groups and two international seminars held. For the most part, these training activities should be considered low priority and dealt with on a case-by-case basis.

21 March 1990

Dr. John L. Woods

For (year)

 (ARI Name)
TRAINING INSTITUTE MANAGEMENT PLAN

COURSE TITLES	STARTING DATE & DURATION	TARGET GROUP	APPROX. NUMBER	NEEDS ASSESSMENT CONDUCTED	VENUE	COURSE COORDINATOR & INSTRUCTORS	INSTRUCTIONAL MATERIALS NEEDED	EVALUATION PLANNED	FUNDING AGENCY	APPROX BUDGET
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1 INSTITUTE STAFF1.1 Scientists

- 1.1.1 Technical
- 1.1.2 Research Methodology
- 1.2.3 Communication Skills
- 1.2.4 Research Management

1.2 Managers

- 1.2.1 Organizational
Development and Change
- 1.2.2 Institutional Management
- 1.2.3 Management of Support
Services and Farms
- 1.2.4 Program Development
and Management
- 1.2.5 Personnel Management
- 1.2.6 Financial Management
- 1.2.7 Program Monitoring/
Evaluation

1.3 Program Support

- 1.3.1 Technical
- 1.3.2 Program Planning
- 1.3.3 Management
- 1.3.4 Monitoring/Evaluation

1.4 Technical Support1.5 Administrative Support

BEST AVAILABLE DOCUMENT

COURSE TITLES	STARTING DATE & DURATION	TARGET GROUP	APPROX. NUMBER	NEEDS ASSESSMENT CONDUCTED	VENUE	COURSE COORDINATOR & INSTRUCTORS	INSTRUCTIONAL MATERIALS NEEDED	EVALUATION PLANNED	FUNDING AGENCY	APPROX BUDGET
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2 RESEARCH TRAINING NETWORK

2.1 Scientists

- 2.1.1 Technical
- 2.1.2 Research Methodology
- 2.1.3 Communication Skills
- 2.1.4 Research Management

2.2 Managers

- 2.2.1 Organizational
Development and Change
- 2.2.2 Institutional Management
- 2.2.3 Management of Support
Services and Farms
- 2.2.4 Program Development
and Management
- 2.2.5 Personnel Management
- 2.2.6 Financial Management
- 2.2.7 Program Monitoring/
Evaluation

2.3 Program Support

- 2.3.1 Technical
- 2.3.2 Program Planning
- 2.3.3 Management
- 2.3.4 Monitoring/Evaluation

2.4 Technical Support

2.5 Administrative Support

3 TECHNOLOGY TRANSFER AGENCIES

4 SPECIAL GROUPS

BEST AVAILABLE DOCUMENT

TRAINING OF TRAINERS FOR AGRICULTURAL AND RURAL DEVELOPMENT

Staff performance is the key to the success of agricultural and rural development programs. Leaders in many developing countries and international agencies recognize the importance of human capital in implementing development projects and, therefore, place high priority on staff training.

What is the best way to train people so that the training is both program and cost effective?

The answer to that question is the central theme of the short course, "Training of Trainers for Agricultural and Rural Development," organized by the University of Illinois International Program for Agricultural Knowledge Systems (INTERPAKS).

The short course is designed to provide participants with an opportunity to strengthen their competencies to design and implement training programs for staff and clientele in a variety of organizational settings. The focus will be on the process which supports participants' subject matter concerns. Certificates will be awarded to participants who successfully complete the short course.

WHO SHOULD ATTEND?

The short course is designed specifically for the following people: (1) training directors of agricultural extension and national and international research organizations, (2) principals, head masters and senior trainers of extension training institutes, (3) training scientists at international agricultural research centers, and (4) teachers of adult or extension education at colleges and universities. Because the participants are professionally involved in the training process, each will be asked to take an active part in determining his or her own specific areas of study, subject matter for special projects and the content of the seminar. Part of the short course will be tailor-made so that participants can work individually or in small groups with university faculty members on specific subjects. Field trips to urban and rural sites are included.

OBJECTIVES/GOALS:

The short course, which will be presented in English, will enable participants to improve their abilities to do the following:

- Understand the nature of effective training to help staff members to perform better;
- Use innovative teaching methods for groups and individuals;
- Develop course outlines and lesson plans;
- Evaluate the knowledge, attitude and performance levels of trainees;
- Prepare printed and audiovisual teaching aids and materials.

DATES

The four-week course will be offered June 4 - June 29, 1990. Participants should arrive on June 2 and depart on June 30. Enrollment is limited to twenty (20) participants. Names and biographical data of participants should be submitted by April 1, 1990.

COURSE COSTS

The course fee is US\$2,550 which covers training costs, university health services, transportation during the course, instructional materials and library on-line computer searches. International travel and living expenses are not included in this fee. The suggested living allowance is US\$1,400 (US\$50 per day) plus US\$100 for books, mailing, photocopying, etc. This allowance should be given to the participant by his/her sponsor. Course fees should be remitted in the form of a check payable to the University of Illinois.

Participants must arrange their own financial support. INTERPAKS does not provide scholarships. Sponsors for other INTERPAKS short courses have included employers, governments and international agencies such as the World Bank, IFAD, the Asian Development Bank and other regional development banks, FAO, UNDP, USAID and various foundations.

TRANSPORTATION

Participants should have a round-trip ticket from their home countries to Champaign, Illinois. Once travel schedule is firm, please telex or cable arrival date, time and flight number so that we can arrange housing and transportation from the airport.

COURSE ORGANIZER

Dr. Violet M. Malone, Professor and Specialist in Adult and Extension Education in the Office of Agricultural Communications and Education.

HOW TO APPLY

Because of the expected high interest in this short course, we urge individuals who want to participate in this short course to apply without delay by letter, telex or cable to:

John W. Santos
Training Officer, INTERPAKS
University of Illinois
113 Mumford Hall
1301 West Gregory Drive
Urbana, Illinois 61801 USA

Telephone: 217-333-3638
Telex: 206957
Cable: INTSOY

BEST AVAILABLE DOCUMENT

ATTACHMENT #4

21 March 1990

TO: Mr. Tariq Hassan, Training Officer
NARC Training Institute

FROM: John L. Woods, MART Training Consultant

SUBJECT: Organizational Review of NARC/TI

As part of the follow up to my assignment I am recommending that there be a review of the structure and staffing the NARC/TI. Hopefully, this will enable NARC to fill the vacant positions and look at how to strengthen the TI in the future. I feel that we need to review the following items:

1. The role of the Training Institute within NARC and the Pakistan research establishment.
2. The accomplishments, achievements, and outputs of TI for the past 6-12 months. Is there available a semi-annual report for TI? Should one be prepared?
3. The plans and targets for the coming year. Is there an Annual Work Plan for TI? Should one be prepared?
4. The responsibilities and specific tasks assigned to each of the staff. Are there job descriptions for the staff? If not, attachment #1 is a suggested format for preparing job descriptions.
5. The capabilities, skills and interests of the staff. I would like to have brief resumes on each of the staff. Attachment #2 is a suggested outline for the resumes.
6. Review with them the role of NARC TI, staffing requirements, and what the MART project can do to strengthen TI.

ATTACHMENT #4a

21 March 1990/JLW

SUGGESTED JOB DESCRIPTION FORMAT

It is suggested that the following information be prepared for each of the positions in PARC Training Institute:

1. NAME OF STAFF MEMBER: _____

2. TITLE OF POSITION: _____

3. NAME AND TITLE OF SUPERVISOR: _____

4. PRIMARY JOB RESPONSIBILITIES AND TASKS (please list in outline form):

- a.
- b.
- c.
- d.
- e.
- f.

5. PROJECTED OUTPUT/ACCOMPLISHMENTS PER YEAR (list in same order as given in #4):

- a.
- b.
- c.
- d.
- e.
- f.

6. SPECIAL SKILLS/TRAINING NEEDED FOR THIS POSITION:

- a.
- b.
- c.

ATTACHMENT #4b

21 March 1990/JLW

RESUME BRIEF

NAME: _____ TITLE: _____

BIRTH DATE: _____ PLACE OF BIRTH: _____

CURRENT ADDRESS: _____

ACADEMIC TRAINING:

<u>Degree</u>	<u>School</u>	<u>Year</u>
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WORK EXPERIENCE/JOBS HELD (list current job first and others in reverse order):

<u>Dates</u>	<u>Title and Brief Description</u>
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PUBLICATIONS/PAPERS PRINTED (Title, Publishers, Date, etc.):

SPECIAL QUALIFICATIONS FOR CURRENT POSITION HELD:

LONG-TERM CAREER GOALS:

Terms of Reference

Training Consultant

The purposes of this consultancy are:

1. To recommend specific procedures and administrative measures needed to be taken by the Pakistan Agricultural Research Council (PARC) to successfully implement the re-entry and absorption into their parent organization of Pakistan agricultural scientists returning after completing overseas education and training programs.
2. To review the on-going and planned training activities under the MART Project to determine the extent to which these activities conform to the scope of work prescribed in project documents and meet the current needs of the project.
3. To recommend an adequate and cost effective staffing pattern for the National Agricultural Research Centre Training Institute and a training program for the existing and proposed staff.

In the beginning MART Project had a long term training advisor assigned to it by Winrock. For several reasons it was decided to manage project training activities through short term consultants. This consultancy is part of the process of employing short term consultants to manage the training component of the project.

PARC is conscious that it needs to strengthen its ability to (i) keep track of the progress of its scientists deputed for overseas training, (ii) keep them informed about professional developments in Pakistan while they are abroad, (iii) arrange for them to acquire specifically needed skills not usually acquired in Ph.D. and M.Sc. studies, and (iv) welcome the scholars back and absorb them in the research system smoothly and with as little trauma as possible. The consultant will review the entire process, including activities in the United States and recommend specific measures that need to be taken to improve and strengthen PARC's re-entry procedures.

The MART Project Paper and PC-1 (a Government of Pakistan document) prescribe three kinds of training to be provided to the narc training institute staff: long term degree training (Ph.D and M.S.), study tours, and traveling seminars. The PC-1 also indicates that 14 additional staff members (6 scientific officers, 2 administrative assistants, 2 junior assistants, and 4 drivers) are to be added to the TI staff. To this date no training has been offered to the TI staff, and no new staff have been added. The consultant should re-evaluate the need for TI staff training and make specific recommendations to meet training needs. In doing this he should consult the PC-1, the proposed PC-1 amendment, the MART mid-term evaluation, and reports by Francis Byrnes and James Barnett.

This consultancy will require about four weeks in Pakistan. Before departing Pakistan the consultant will prepare a report describing his findings and giving detailed recommendations on the three purposes outlined above.

CONSULTANT'S SCHEDULE

Wednesday, 21 February 1990

- 1:30pm Depart residence for airport
- 2:25pm TWA7449/720 St Louis and London

Thursday, 22 February 1990

- 7:35am Arrive London
- 2:30pm Depart London BA119 for Islamabad

Friday, 23 February 1990

- 6:10am Arrive Islamabad
- 8:30am Check into hotel and rest

Saturday, 24 February 1990

- 8:30am MART project administrative offices for registration and collect MART report
- 9:00am Dr. Bill Wright, MART Chief of Party and Mr. J.M. Dukesbury, Manpower Analysis Consultant to review manpower survey
- 10:00am Dr. Bill Wright to discuss consultant's assignment
- 1:00pm Lunch with Dr. Wright and Dr. Guy Bard, Consultant on NARC Master Plan Implementation
- 2:30pm Dr. Abdul S. Alvi, MART Project Secretary
- 3:00pm Mr. J.M. Dukesbury to brief him on my assignment and collect information on manpower survey
- 4:00pm Hotel to read papers

Sunday, 25 February 1990

- 8:00am Go to NARC and read papers
- 9:00am Dr. Cordell Hatch, Information Transfer Advisor, NARC, to review assignment
- 11:00am Dr. Bill Wright and Dr. Curtis Nissly, USAID MART Project Officer and Mr. Mohammad Saeed, Program Officer
- 1:00pm Lunch with Dr. Bill Wright, Dr. Curtis Nissly and Mr. Mohammad Saeed
- 2:00pm Dr. Hank Schumacher, Director, Agricultural Training, Development Support Training Project, AED/Winrock
- 4:30pm Ms. Jane Johnson, Information Science Consultant, TIPAN Project
- 5:30pm Ms. Jane Johnson and Dr. Cordell Hatch to review information science programs at NWFP and NARC

Monday, 26 February 1990

- 8:00am Dr. Cordell Hatch, visit NARC Training Institute and Communications/Training Centre and meet staff
- 2:00pm Dr. Bill Wright to review progress in assignment

2:30pm Mr. Jack Dukesbury to review manpower data base and its implications on in-service training

Tuesday, 27 February 1990

8:15am Dr. Bill Wright to review information on survey
9:30am Mr. Sial, Director, PARC International Cooperation and Training (IC&T) Directorate, and Mr. Sanaulah Khan, Deputy Director
11:30am MART Admin. Office to print materials and read reports
7:30pm PARC dinner hosted by for workshop group

Wednesday, 28 February 1990

8:00am PARC read documents related to Winrock winter short course for participants
9:00am Mr. Sanaulah Khan, Deputy Director, PARC Training Directorate
11:00am NARC, Dr. J. Cordell Hatch to prepare for seminar and review materials
1:00pm Mr. Talib Hussain Sial, Director, PARC IC&T
1:30pm Mr. Mahmood ur Rehman, Program Officer for Short Term Training, PARC IC&T
3:00pm MART office lining up future meetings and administrative matters
4:00pm Hotel to prepare slide presentation for seminar
7:30pm Dinner at Curtis and Vi Nissly

Thursday, 1 March 1990

8:00am MART Office Dr. Bill Wright and Dr. Takumi Izuno to prepare for Dr. Bill Wagner's trip
9:00am Prepare questionnaire for use in interviewing returned participants
1:00pm NARC to prepare for seminar
2:00pm Present seminar for MART team on the INTERPAKS analytical framework of agricultural technology system
6:30pm Dinner at Bill and Willy Wright

Friday, 2 March 1990

7:00pm Dinner with Cordell and Nancy Hatch

Saturday, 3 March 1990

8:00am PARC to print questionnaire for returnees
9:00am Begin writing preliminary ideas on re-entry program
1:00pm Lunch with Dr. Donald W. Barton, MART Consultant in Management Training, and Dr. Bill Wright
2:30pm Continue writing preliminary ideas for re-entry program

Sunday, 4 March 1990

- 8:00am NARC and print memos for PARC Training Directorate
- 9:00am USAID for seminar on farmers' information seeking patterns
- 12:00pm Lunch with Dr. Curtis Nissly, USAID
- 1:30pm Continue writing memo on preliminary ideas for re-entry program
- 4:00pm Discussion with Dr. Donald Barton on management training course he conducted

Monday, 5 March 1990

- 8:00am NARC to continue writing preliminary ideas for re-entry program
- 8:30am Mr. Zubair Alam, Assistant Director, Training Section, PARC IC&T
- 11:00am Meet with Dr. C.M. Anwar Khan, Chairman, PARC and Dr. Bill Wright to review assignment
- 12:30pm Lunch with Dr. Larry J. Littlefield and Dr. Bill Wright to discuss the training of training coordinators
- 2:00pm Continue writing and editing re entry report

Tuesday, 6 March 1990

- 8:00am PARC to print and distribute preliminary report on re-entry program
- 9:30am Mr. Sial and Mr. Alam to set up a meeting of IC&T staff
- 10:00am Begin reading reports on training network and NARC Training Institute
- 12:30pm Lunch with Dr. Larry J. Littlefield to review the Training of Training Coordinators
- 1:30pm Dr. Harry Dickherber, Agricultural Development Office, USAID to review research-technology transfer models
- 2:30pm Continue reading training network reports
- 5:00pm Review with Dr. Larry Littlefield the course outline for Training Coordinators

Wednesday, 7 March 1990

- 8:00am NARC continue working on training network materials
- 9:30am Dr. Bill Wright to review progress on re-entry program
- 10:30am Dr. Curtis Nissly, USAID and review progress on re-entry program
- 11:00am NARC to review with three returnees their graduate degree programs in the U.S. and re-entry problems
- 12:30pm Lunch with Dr. Gil Kroening, Chief of Party, and Mr. Ron Diedred, Outreach Advisor, TIPAN Project
- 2:30pm MART office to print materials and get copies of materials for meetings

3:00pm Reading materials on training network and NARC
Training Institute

Thursday, 8 March 1990

7:30am Dr. Gene Saari, CIMMYT; Dr. Chuck Anholt, World Bank
Asia Research-Extension Program; and Dr. Dave Seckler,
Agriculture Policy Program, Winrock International
8:00am NARC and meet with Dr. Dave Seckler, Winrock
International
10:00am Mr. Sial & IC&T Directorate Staff to discuss re-entry
program
2:00pm Mr. Peter Nottidge, World Bank Agricultural Officer
6:00pm Dr. Larry Littlefield and Dr. Gene Saari, CIMMYT for
dinner

Friday, 9 March 1990

6:10am Pick up Dr. Bill Wagner on BA119

Saturday, 10 March 1990

8:00am PARC to copy materials for distribution
9:00am Meet with Dr. Bill Wagner, University of Illinois, and
Dr. Bill Wright
9:30am Read reports and work on re entry reports
6:00pm Dinner with Dr. Warwick Davidson, Asian Development
Bank

Sunday, 11 March 1990

7:30am Breakfast with Mr. Joep van Arendonk, Deputy Executive
Director, UNFPA, New York
8:30am PARC to finish reading documents
9:30am Dr. Bill Wright to review recommendation for
re-entry program
10:00am Dr. David Esch, USAID Human Resources Development to
review re-entry program
11:30am Review with Dr. Curtis Nissly recommendations for
re-entry program
1:00pm Begin final version of re entry paper and memo with
recommendations to PARC Chairman

Monday, 12 March 1990

8:00am Write memo to PARC Chairman on re-entry program
1:00pm Rotary Meeting
2:00pm Finish drafting paper on re entry program

Tuesday, 13 March 1990

8:00am PARC to edit memo to Chairman re-entry
recommendations
9:00am Edit full paper on re-entry program

Wednesday, 14 March 1990

- 8:00am PARC to distribute re-entry reports
- 10:00am NARC Training Institute and talked with participants of the Training Coordinators course
- 1:00pm Dr. Guy Baird to review in-service as part of implementing the NARC Master Plan
- 2:30pm Dr. C.M. Anwar Khan, PARC Chairman, Mr. Sial and Dr. Bill Wright to review initial recommendations for re-entry program
- 3:45pm Dr. Bill Wright to review program for remain part of assignment
- 6:30pm Dinner at Bill and Willy Wright to greet Henk Knipscheer

Thursday, 15 March 1990

- 7:15am Dr. Littlefield to outline the approach for the Training Coordinators session on Monday
- 8:00am Dr. Jim Barnett, MART Provincial Advisor to review training network needs
- 9:00am Mr. Sial to review action plan for re-entry program
- 10:30am Ms. Cindy Brown, Deputy Manager, Participant Placement Division, and Dr. Hank Schumacher, Agricultural Division DSTP, to review their involvement in the re-entry program
- 12:00pm Dr. Curtis Nissly, USAIA to review progress on re-entry program
- 1:00pm Dr. Harry Dickherber to discuss the UAF strategic planning program
- 2:00pm NARC Training of Training Coordinators workshop
- 3:00pm Mr. Tariq and Mr. Rana, NARC Training Institute
- 4:00pm Dr. Cordell Hatch and Dr. Guy Baird to review training programs in NARC

Friday, 16 March 1990

- 8:00am Holiday

Saturday, 17 March 1990

- 8:00am PARC--give admin officer ticket to reconfirm and passport
- 8:30am Dr. Bill Wright to review special requests for assistance
- 9:00am Begin drafting final version of phase I recommendations for re-entry program
- 11:00am Meet with Dr. Murray Dawson and Dr. Cordell Hatch to review training approach
- 12:00pm Continue drafting final version of phase I and full re-entry program papers

- 5:00pm Print and duplicate papers on re-entry
7:30pm Review questionnaire on research institute master plan
- Sunday, 18 March 1990
- 8:00am Distribute papers on re-entry program
8:30am Dr. Bill Wright to discuss master plan questionnaire and re-entry papers
9:00am Begin drafting framework for categories of NARC in-service training
10:30am Mr. Tariq Hassan, Officer-in-Charge and Training Officer, NARC Training Institute and review staffing matters
12:00pm Tour of new NARC Training and Communications Centre
1:30pm NARC Training Institute Training/Scientific Officers--Mr. Tariq Hassan, Mr. Masud Anwar, Mr. Zafar Khan, and Mr. Javed Nasim to review role and priorities of NARC TI
3:30pm Review findings and preliminary recommendations for NARC TI with James White
4:30pm Begin outlining draft report on NARC TI

Monday, 19 March 1990

- 8:00am PARC to continue preparing training categories framework for NARC Training Institute
12:00pm Prepare Training Institute Management Plan form
3:00pm Begin outlining Training Institute Recommendations and Trip Report
8:30pm Meet with participants of Training Coordinators course to review roles of the training programs in the network

Tuesday, 20 March 1990

- 8:00am Begin drafting Recommendations for NARC Training Institute
2:00pm Edit NARC Training Institute report
4:00pm Begin drafting summary report

Wednesday, 21 March 1990

- 8:00am PARC to print draft report
8:30am Continue drafting report
12:30pm Lunch with Dr. Bill Wright, Dr. Harry Dickherber and Dr. Bill Wagner
3:00pm Meet with Dr. Curtis Nissly and Dr. Bill Wright to brief on recommendations in the report

Thursday, 22 March 1990

- 7:00am Breakfast with Dr. Larry Littlefield to discuss training course for trainers

- 8:30am Meeting with Mr. Peter Nottidge and Dr. Bill Wagner to discuss twinning arrangements linked to training of researchers
- 10:00am Meet with Mr. Slal and the IC&T staff
- 11:00am Print report and transfer the files to MART computer disks
- 2:00pm Continue editing report and wrap up the assignment
- 3:00pm Final meeting with Dr. Bill Wright
- 5:00pm Depart Islamabad PIA319 for Karachi/Dhaka/Bangkok

Friday, 23 March 1990

- 1:15am Arrive Karachi
- 3:30am Depart Karachi for Dhaka and Bangkok
- 12:50pm Arrive in Dhaka, BANGLADESH

ANNEX #6

21 March 1990

BIBLIOGRAPHY

1. Barnett, James B., In-Country Training Needs: Focus on Sind and Baluchistan, MART: Islamabad, September 1989, 19 pp.
2. Barton, Donald W. and Abdus Salam Akhtar, Shortcourse in Research Management Training, MART: Islamabad, September 1989, 25 pp.
3. Brown, Albert L. and others, Evaluation of Management of Agricultural Research and Technology (MART: 391-0489), Chemonics: Washington, D.C., February 1989, 99 pp.
4. Buila, Theodore, End of Tour Report: Agricultural Training Advisor, MART: Islamabad, August 1988, 128 pp.
5. Byrnes, Francis C., Training for Agricultural Research in Pakistan, MART: Islamabad, September 1988, 38 pp.
6. Greenwood, Beth, Pre-Academic Orientation Handbook, MART: Islamabad, 162 pp.
7. Gant, Susan, Evaluation of Participant Training Component Project (391-0296) Strengthening Agricultural Research in Pakistan, USAID: Pakistan, March 1986, 50 pp.
8. Littlefield, Larry J. and James D. White, In-Service Training Program for Agricultural Research Scientists in Pakistan: Initial Phase (Training of Training Coordinators), MART: Islamabad, November 1989, 39 pp.
9. NARC Training Institute, 1988 Annual Report, NARC: Islamabad, 1989, 120 pp.
10. NARC Training Institute, Training in Research Management, MART: Islamabad, 83 pp.
11. Nayman, Oguz B., "Distant Cousins," An Evaluation of Official and Non-Official Sources of Agricultural Information, USAID: Pakistan, January 1990, 175 pp.
12. Pakistan Agricultural Research Council, National Agricultural Research Centre Master Plan 1988-2000, Islamabad, 1989, 220 pp.

ANNEX #7

22 March 1990

BRIEF VITAE OF CONSULTANTDr. John L. Woods

Dr. Woods grew up on a farm and received the following degrees at the University of Illinois: BS in agriculture; MS in mass communications and marketing/advertising; and a Ph.D. in adult education management. Dr. Woods brought to this assignment a broad background spanning the globe in the fields of agriculture, education and management. His professional career has focused on management information systems, organizational communications, human resources development, and institutional change.

His career started working for the Illinois agricultural extension service as radio-TV coordinator during which time he received many national awards. In 1965-66 his international career began with an assignment in Jordan. This was followed in 1967 in Columbia, South America. From 1968 to early 1970 he was Chief of Party for a project in Malawi followed by assignments in India and Australia. In mid-1971 he rejoined the University of Illinois back stopping programs for the Midwest Universities Consortium for International Activities (MUCIA) and as a program development specialist in the Vice Chancellor's Office for Continuing Education and Public Service. Beginning in 1975 Dr. Woods spent 11 years as Director of the Bangkok-based UNDP Asia and Pacific Programme for Development Training and Communication Planning, commonly called DTCP. DTCP, which he founded, is a unique in-house management consulting unit for the entire U.N. development system focusing on improving rural development projects and programs. In mid-1985 Dr. Woods once again rejoined the University of Illinois as Director of the International Program for Agricultural Knowledge Systems (INTERPAKS). In August 1988 he shifted to the College of Veterinary Medicine as Director, Office of International Collaboration which oversees twinning arrangements with overseas institutions, international graduate students, collaborative research and other international activities.

Dr. Woods has written numerous articles and monographs on the subjects of rural development, training and management. He has served on consulting missions, sectoral reviews, training assignments, and project formulation exercises throughout the world. During the past year he has been involved in conducting a major case study of the Taiwan agricultural technology system; team leader for preparing technical paper for the Government of Egypt and USAID outlining a new approach to agriculture extension/technology transfer; team leader for a major study for the Government of Bangladesh and the World Bank on the organization and role of the Bangladesh Agricultural Development Corporation (BADC); and assisting the University of Illinois College of Veterinary Medicine, 35 Illinois community colleges, and other universities review their approach to international programs.

Since the beginning of 1975, he has visited Pakistan many times working with various agricultural, health, population, and other rural development programs. He has a broad understanding of the Pakistan agricultural sector, how organizations function and interact, and how international donor agencies function. Dr. Woods served as team leader in mid-1988 to formulate the proposal for creating a Regional Economic Development Centre at Vehari. In early 1989 he served as a member of the team to review the MART project--he was responsible for the training and information transfer components.

Dr. Woods brings to this assignment an understanding of the agricultural sector in Pakistan, considerable understanding of the training activities and needs for the research system, and extensive experience overseas working with training programs and participant training, and as an administrator in an American university responsible for international programs and students.