367 0102 (5)
PD-AAD-034-A1

PROJECT EVALUATION SUMMARY (PES) - PART I

1. Project Title:	2. Project Number:	3. Mission/AID/W Office:
Institute of Agriculture and Animal Science	367-0102	USAID/Nepal
	4. Evaluation Number: FY 1979-002 Second Regular Evaluation	

23p

5. Key Project Implementing Dates: A. Project Agreement Signed FY 74 / Final Obligation FY 1977 / Final Input Delivery FY 1984	6. Estimated Project Funding: A. Total: $4,701,000 B. U.S. $ 3,201,000	7. Period Covered by Evaluation: From: October, 1977 To: December, 1978 Date of Evaluation: Review: Dec. 11-14, 1978

8. Action Decisions Approved by Mission or AID/W Office Director

A. Action Decisions Reached at Evaluation Review including items needing further study	B. Offices or Unit Responsible for Action	C. Date Action to be completed
(SEE PAGE "B" & "C")		

9. Inventory of Documents to be Revised per Above Decisions:

- [ ] Project Paper
- [ ] Financial Plan
- [ ] Logical Framework
- [x] Project Agreement
- [ ] Implementation Plan
- [ ] PIO/T
- [ ] PIO/C
- [ ] PIO/P
- [x] Other (Specify) Contract
- [ ] Other (Specify)

10. Alternative Decisions on future of Project

A.
- [x] Continued Project Without Change
- [ ] Change Project Design and/or
- [ ] Change Implementation Plan
- [ ] Discontinue Project

11. Signatures: Project Officer

Signature: B C Newbry
Typed Name: Clifton C. Newbry
Title: Chief, HRD

Evaluation Officer:
Typed Name: Donald L. Long
Signature: D L Long
Date: 1-3-79

12. Mission/AID/W Office Director Approval

Signature: Julius E. Coles
Typed Name: Julius E. Coles, Acting Director
Date: 1/5/79

8. Action Decisions

A. Action Decisions Reached at Evaluation Review including items needing further study	B. Offices or Unit Responsible for Action	C. Date Action to be completed
1. Decision		
1.1. It was agreed that early enrolment of participants at the IAAS, and taught by MUCIA advisors, with fees to be paid under the contract, is unlikely to materialize. This relates to the inability of MUCIA institutions to give blanket admission; to the question of course appropriateness for large groups of students, etc. However, the present Contract provides the flexibility for this if it should arise.	None	None
2. Decision		
2.1. It was agreed that the IAAS and USAID/N should hold talks with Mr. Subhawal, USAID/New Delhi to attempt to smooth out participant placement and reporting as soon as possible.	HRD	12/78 (Completed)
3. Decision		
3.1. It was agreed that, in keeping with the 1977 JAR, Tribhuvan University had allowed, and would continue to allow the IAAS freedom to evolve appropriate academic programs for the various levels of professional agriculturists.	T.U. and IAAS	12/78 (Completed)
4. Decision		
4.1. It was agreed that the development of the livestock farm (recently turned over to the IAAS by the Department of Agriculture) as a teaching unit will receive top priority.	T.U. and IAAS	12/79
4.2. It was agreed that the recommendations of the two short term MUCIA advisors in animal science were acceptable, and that these recommendations should be acted upon.	T.U. and IAAS	12/78 (Completed)

A. Action Decisions Reached at Evaluation Review including items needing further study	B. Offices or Units Responsible for Action	C. Date Action to be completed
4.3. It was agreed that the recommendations for converting the animal science farm over to teaching units would be carried out in a phased fashion, with the first phase funding to be provided by Tribhuvan University.	T.U. and IAAS	3/79
4.4. It was agreed that funding for the later phases (1) could not be provided by USAID, (b) might be provided by other donors, and (3) can possibly be provided by Tribhuvan University in the coming fiscal year.	T.U./IAAS/ HRD	6/79
5. Decision		
5.1. It was agreed that a full team (4) long term advisory personnel should be provided by MUCIA ASAP, but not later than the coming academic year.	MUCIA	7/79
5.2. It was agreed that MUCIA can go outside its member institutions if that proves necessary to secure qualified staff on a timely basis.	MUCIA	7/79
6. Decision		
6.1. It was agreed that MUCIA/IAAS has the freedom to utilize the most appropriate training locations for participants, not excluding third countries.	MUCIA & IAAS	9/79
7. Decision		
7.1. It was agreed that 5 of the branch campuses which are jointly operated by the IAAS and the Department of Agriculture will be phased out, the reason being that part-time teaching by personnel employed by the Department, who are basically researchers, is not effective. Both the research and the teaching suffer. It was agreed, however, that this will not mean a reduction in the number of JTA's. The two fully satellite campuses at Lamjung and Bhairahawa will turn out close to 600 JTA's per year.	IAAS	9/79

Project Evaluation Summary (PES) -- Part II

13. Summary: The second joint annual review (JAR) of the Project was held December 11, 1978 through December 14, 1978 and was participated in by high level officials from Tribhuvan University, MUCIA, the U.S. Embassy, the Ministry of Agriculture, and USAID/N. The JAR was designed to provide an indepth review and evaluation of project progress since the last JAR, and to determine what courses of action need to be taken to improve the performance of the various concerned and involved agencies. Representing Tribhuvan University were the Rector, the Chief of the Tribhuvan University Planning Division, the Dean of the Institute of Agriculture and Animal Science (IAAS), and four administrative and teaching staff of the IAAS. Representing the U.S. Mission to Nepal were the Charge d'Affaires, the Acting Director of USAID, and the Chief of the Human Resources Division. Representing MUCIA were the Executive Director, the Campus Coordinator, two MUCIA Board Members, three team members, two long term, and one short term. Representing the Ministry of Agriculture was a Joint Secretary.

Accomplishments of the project continue to be substantial:

a. Enrolment at the Rampur campus has risen from 240 one year ago to 348 currently. Enrolment at the training centers is 386.

b. Staff development is on schedule, with total teaching staff appointed to the IAAS having risen in the past year from 44 to the current 57 on the Rampur campus, plus 8 at the branch campuses (21 of the total are currently on study leave.) This is in keeping with the staff development plan that was approved prior to the last JAR.

c. A benefit plan has been implemented by Tribhuvan University which provides service benefits to employees that are comparable to those given GON employees. (This is a highly significant development, one which has facilitated the employment of full-time professionals for service with the University, and which has been of great value to the IAAS.)

d. Further progress has been made in implementing the administrative organizational plan that was approved prior to the last JAR, with department heads now having been appointed to all departments: Plant Science, Animal Science, and Rural Development. Thus, all of the top academic personnel have been employed.

e. Impressive progress has been made in the development of student plots, which during the JAR were growing temperate zone vegetables. These were highly commended by the visiting agriculturists from MUCIA. (These plots are entirely in the

hands of the students, who have to pay for the inputs, but who then sell the outputs--all phases of the work carefully recorded--generally realizing sufficient profit to pay for a substantial portion of their tuition.) Pig and poultry projects have also been carried out with great success, and have been made a permanent part of project work.

f. The faculty research program also shows excellent progress, applied research being carried out on seasonal crops. The Research Committee is fully operational, screening and approving research proposals. Faculty members who have been selected for participant training are carrying out research under the guidance of MUCIA faculty which is designed to relate to their training programs, as well as to provide classroom material.

g. The faculty research program has been extended to all faculty, with a basic purpose being the accumulation of information about everything that relates to or affects farming in Nepal for use in the classroom.

h. The livestock farm has been formally turned over to the IAAS by the Hetauda Center, and this has been added to the teaching program. 50 students were admitted to the second year of Animal Science this year as a result of the farm acquisition.

i. Detailed plans have been prepared for the remodeling of the animal farm to make it better adapted to teaching requirements.

j. Agriculture education has been geared into the regular B.Sc. program, rather than being continued as a separate area.

k. 13 staff-student seminars were conducted over the past year by short-term consultants, regular staff, and visitors.

l. Two issues of the IAAS Journal have been published. (This is a professional journal for agriculturists, basically to report research activities.)

m. The Vice Chancellor and the Dean of the IAAS visited MUCIA institutions in September/October in order to promote good relations and further the cause of MUCIA staff recruitment.

n. Plans have been completed for opening a second branch campus which is directly related to the IAAS. (Of the 6 branch campuses now in operation, 5 are under the Department of Agriculture, and teaching is done by the research staff. This has been judged less effective than are strictly teaching campuses, such as Lumjung. Hence, the branch campuses under the Department will be phased out, and teaching campuses developed.)

The institutional development aspect of the project has been closely related to the project design as set forth in the Project Paper, project agreements, the Contract, and the work plan developed by the MUCIA team and the IAAS, and approved by USAID. Several principles continue to guide the institution: (a) that the Institute will be based on the "upside down" curriculum, ie., on a curriculum that begins with the practical and progresses to the academic mixed with the practical; (b) that it will be based on identified needs of Nepalese agriculture; (c) that it will develop a Nepalese capability to man the program at the most rapid pace possible; and (d) that recruitment of students will be nationwide, rather than from urban areas.

The programs that now exist begin with the concept that "practical" agriculture must be the base of the learning experience. Thus the first year of training is almost completely practical, and is conducted on the various branch campuses. This year is required of all students, whether that year is to be the only experience the student will have at the IAAS, or whether the student will go on to further training. Then the programs at the IAAS also require that every student carry on practical agricultural activities during his entire period at the IAAS, through student plots or projects involving animals or chickens. Hence, the "upside down" concept is institutionalized, and while it--like all institutional programs--may be modified in the light of experience, the "work-study" idea is firmly implanted.

Enrolment and faculty development continues to run ahead of schedule, with total enrolment already having reached 734, counting both the enrolment on the branch campuses and the Rampur campus. Staff recruitment also continues ahead of schedule to keep pace with the enrolment. As was noted in" above, 5 of the branch campuses are being phased out, but enrolment will not drop since the Lumjung campus--a teaching campus, directly under the IAAS--currently enrolls 114 students; the new campus at Paklihawa will enroll 225 students. (This decision to close the teaching programs on the 5 research stations was based on findings that quality teaching by research staff on a part-time basis was not effective.)

The adoption of a personnel system which provides fringe benefits comparable to those of Government employees has been of inestimable assistance in the staff recruitment program.

Progress to date continues to indicate that the institution building efforts will succeed, and that the project purpose will be achieved, assuming continued support for the Institute by His Majesty's Government.

Impressive progress over the past year does not suggest that major problems do not still exist: lack of amenities at Rampur; communications problems; lack of transport; construction delays, etc.

14. Evaluation Methodology: This evaluation is based on:

a. The second joint annual review (JAR), which is specified in the Project Agreement as an annual review. This review was held at Rampur December 11 through December 14, and was participated in by high level officials from Tribhuvan University, MUCIA, the U.S. Embassy, the Ministry of Agriculture, and USAID/N. The JAR was designed to provide an indepth review and evaluation of project progress since the last JAR, and to determine what courses of action need to be taken to improve the performance of the various concerned and involved agencies. Representing Tribhuvan University were the Rector, the Chief of the Tribhuvan University Planning Division, the Dean of the IAAS and four administrative and teaching staff of the IAAS. Representing the U.S. Mission to Nepal were the Charge d'Affaires (one day), the Acting Director of USAID (two days), and the Chief of the Human Resources Division. Representing MUCIA were the Executive Director, the Campus Coordinator, two MUCIA Board members, and three team members, two long term and one short term. Representing the Ministry of Agriculture was a Joint Secretary.

Representation was as follows for the second JAR:

Tribhuvan University

Dr. K.P. Malla, Rector
Dr. P.L. Pradhan, Chief of Planning Division

USAID/Nepal

Mr. Richard W. Boehm, U.S. Charge d'Affaires (December 11)
Mr. Julius E. Coles, Acting Director, USAID/N (December 11-12)
Dr. Burton C. Newbry, Chief, HRD, USAID/Nepal

Ministry of Agriculture

Mr. Rameshwor P. Singh, Joint Secretary

MUCIA

Dr. John T. Murdock, Executive Director
Dr. George Briengar, Board Member, Director of International Programs, University of Illinois
Dr. James Anderson, Board Member - Dean, College of Agriculture Michigan State University
Dr. Darrell Fienup, Campus Coordinator - Michigan State University

IAAS

Mr. N.B. Basnyat, Dean, IAAS
Mr. T.P. Neupane, Assistant Dean for Academic Affairs
Reader in Entomology
Mr. N.K. Mishra, Reader in Agronomy
Mr. G.M.S. Adhikari, Reader in Agriculture Economic and Statistics
Mr. Tej Bahadur K.C., Reader in Soil Science

IAAS/MUCIA Team

Dr. Rex E. Ray, Team Leader - Michigan State University
Dr. Harry C. Bittenbender, Team Member in Plant Science, Michigan State University
Dr. Kenneth Miller, Short Term Advisor in Animal Science, University of Minnesota

b. Examinations of documents developed by the Contract Team and the IAAS over the past year, which were reviewed in the light of the JAR. These included course outlines and plans which were developed in relation to the complete "Academic Programme" of the IAAS; the Tribhuvan University Overview; reports of short term specialists; reports on enrolment; reports on staff appointments; research studies, etc.

c. Regular discussions with the Team Leader; discussions with team members; discussions with the Vice Chancellor and the Rector.

d. Reviews of participant training programs.

As noted earlier, this in a regular evaluation which is based on the evaluation plan as contained in the Project Agreement, and as reflected in the Contract. The Joint Annual Review (JAR) is the basic evaluation mechanism, and the basic data are the institutional documents as examined and varified by the JAR, Tribhuvan University officials, and USAID.

15. External Factors: A wide variety of external factors continue to affect the development of this project, including: Tribhuvan University policies, MUCIA policies and practices; USAID policies and practices; the location of Rampur, and the various problems associated with the location; relationships between the IAAS and various ministries of GON, most notably the Ministry of Agriculture; and adjustment problems of contract personnel.

a. Tribhuvan University policies have undergone a marked and significant change in the area of personnel policies during the past year. The fact that the University had no defined personnel policy, ie., no retirement, no tenure, no sick leave, etc., placed the University at a distinct disadvantage in its efforts to recruit staff. However, the University adopted a personnel policy which places its employees on the same footing as GON employees, a move that has transformed the environment for recruitment. Thus, a major external problem has been resolved.

Further, Tribhuvan University has granted the IAAS freedom to develop its academic program with a minimum of restraints, and has approved major decisions taken by the IAAS, most notably the decisions to terminate the separate agriculture education curriculum and make it an integral part of the B.Sc. curriculum; and the decision to strengthen the teaching programs at the branch campuses by developing fully satellite campuses in place of the rather ad hoc arrangements with research stations. This promises to strengthen the first year program significantly. The first year examination results demonstrated the advantage of the fully satellite campus concept, with the Lumjung campus turning out far and away the strongest products.

b. MUCIA policies and practices: A basic assumption of the project, and of the decision to contract with MUCIA for this Project, was that the Consortium would be able to staff the Contract fully with highly competent personnel. This has not proved to be the case. While quality has been high, numbers have been only 50% of the anticipated level. MUCIA requested at the 1977 JAR that the Contract be loosened to allow the Contractor to fill the slots with short term personnel, and that the number of long term slots be reduced to four. The JAR agreed. However, USAID did not make that modification in the PIO/T, with the result that the Contract still provides for the four long term advisory personnel. This action was strongly supported by the new Chief of Party for MUCIA at the time of his appointment, and in the recently completed JAR. He asserted that he must have the four personnel as originally envisioned, an assertion supported by the Dean of the IAAS, and fully endorsed by the MUCIA representatives. Hence, it is the intention of all concerned that the field team will be at the level of four long term personnel.

MUCIA representatives expressed assurance that the two unfilled slots can be filled and that they have launched an agressive campaign to assure that this does happen.

c. USAID policies and practices: A significant difference between the JAR of 1978 and the JAR of 1977 was that the most recent JAR made no reference to USAID support except to express appreciation for the good support that the MUCIA team had enjoyed. The recently changed USAID policy of providing contractors with similar privileges as it provides direct hire has been the major difference, and morale has risen markedly.

d. The location of Rampur: Assurance given in the 1977 JAR that MUCIA could and would field adequate staff have proved to be poorly founded, a major reason appearing to the location of Rampur, with certain isolation and health problems. Whether this will continue to be a seriously inhibiting factor, only time will tell.

An area of concern remains the lack of health facilities at Rampur, and the lack of good educational facilities for the children of IAAS staff. Tribhuvan University has arranged for a doctor to be at Rampur two days per week, and is exploring ways of making a nurse available. This area will continue to receive attention. The development of adequate schooling for children of staff is a long-range process. However, a beginning has been made, with a primary school now in operation. Negotiations are in process both with the Ministry of Education and Tribhuvan University to upgrade the educational facilities and program.

e. Relationships between the IAAS and the Department of Agriculture: These have improved considerably during the past year, with the Department having turned over to the IAAS the livestock farm at the Maize Research Station, and with a continuing dialog being carried on between the Department and the IAAS. The Department sent an official to participate in the review, and it is anticipated that this will be continued in the future.

In summary, a number of highly significant developments over the past year have contributed greatly to the solution of severe problems. It appears that the groundwork has been laid for continued attacks on remaining problems, such as health and schooling. Given the general problems in these areas in Nepal, however, solutions cannot be expected quickly. They must evolve over an extended period.

Hence, except as noted in b. above, assumptions underlying "External Factors" are proving to be valid.

16. Inputs: The statement of project inputs is found on pages 19 through 22 of the Project Paper.

a. Advisory Assistance: As was noted earlier, the contractual obligation for a long term advisory team remains at four, with only two currently on board. A short term advisor, who was tentatively scheduled to return on a long term basis will not return because of health problems that pre-dated assignment to Rampur. MUCIA is expected to have a full complement on board by June, 1979.

Contractor performance on recruitment has not been good, though some of the problems were outside the control of the Contractor. Two of the first team of four departed post after serving but one year. Another was forced to return by health problems, most of which also pre-dated assignment to Rampur. A short termer, who is currently in Rampur, was expected to accept a full tour, but health problems which--as noted above--pre-dated assignment to Rampur, will not permit the assignment. Thus, three of the six long term personnel did not complete their terms.

The JAR devoted most of its attention to this area, and the conclusion was that MUCIA can and will provide high quality assistance that conforms to its contractual obligation before the next academic year.

b. Participant training: Participant training is on schedule. (See summary below in "c" under "Outputs.")

c. Commodities: $180,000 for life of the project.

Commodity procurement is proceeding on schedule, with a total of $88,428.22 having been expended as of April, 1978. This is the latest expenditure report for commodities that the Mission has. Delivery has been prompt, and utilization continues good.

d. Capital costs: This element is now a separate project, and is subject to a separate evaluation.

17. Outputs: The statement of Project outputs is found on page 18 of the Project Paper. These outputs are listed, with an evaluation of the status of each output.

a. "Trained Nepalese for services as KAAS faculty--per participant training schedule under "inputs".

Participant training is on schedule.

S.No.	Name	Subject	Degree	Duration	Country
	Participants for 1975				
1.	Mr. Bishnu B. Bhandary	Agri.Education	M.S.	2 years	America
2.	Mr. Anirudra Shrestha	" "	M.S.	"	"
3.	Mr. Khadga B. Shrestha	Agri. Engr.	M.Sc.	"	India
4.	Mr. Gyan K. Shrestha	Horticulture	M.Sc.	"	"
	Participants for 1976				
1.	Mr. Nand P. Joshi	Animal Science	M.S.	2 years	America
2.	Mr. Sri Bindu Bajracharya	Farm Mgt.	M.S.	"	"
3.	Mr. Satya N. Tiwari	Extension Edu.	M.S.	"	"
4.	Mrs. Lalita Manandhar	Library Science	Training	1 year	"
5.	Mr. Sreechandra Sah	Soil Fertility	M.Sc.	3 years	India
6.	Mr. Sahadev Sah	Animal Husbandry	M.Sc.	2 years	"
	Participants for 1977				
1.	Mr. Sant B. Gurung	Agri. Botany	M.Sc.	2 years	India
2.	Mr. Durga D. Dhakal	Horticulture	M.Sc.	"	"
3.	Mr. Ganesh Pd. Shivakoti	Agri.Economics	M.Sc.	"	"
4.	Mr. Sundar M. Shrestha	Plant Pathology	M.Sc.	"	"
5.	Mr. Arjun K. Kayastha	Dairy Husbandry	M.Sc.	"	"
6.	Mr. Badri B.S. Dangol	Extension Edu.	M.Sc.	"	"
7.	Mr. Krishna R. Tiwari	Animal Nutrition	M.Sc.	"	"
8.	Mr. Padma Pd. Sharma	Soil Science	M.Sc.	3 years	America
9.	Mr. Krishna Pd. Sharma	Plant Breeding	M.S.	2 years	"
10.	Mr. Chandra M. Shrestha	Animal Breeding	M.S.	"	"
11.	Mr. Pradeep M. Tulachan	Agri.Economics	M.S.	"	"
12.	Mr. Narayan Kunwar	Ag.Int.&Audiov.	M.S.	"	"
13.	Mr. Laxmi N. Chaudhary	Library Science	Training	1 year	India
	Participants for 1978				
1.	Mr. Kailash N. Pyakuryal	Rural Sociology	Ph.D.	3 years	America
2.	Mr. Bhola N. Pokhrel	Agri.Economics	M.S.	2 years	"
3.	Mr. Rishi R. Adhikari	Horticulture	M.S.	"	"
4.	Mr. Maheswar Sapkota	Animal Science	M.S.	"	"
5.	Mr. Krishna R. Shrestha	Edu. Admn.	Training	9 months	"
6.	Mr. Thakan Mallik	Ag. Statistics	Ph.D.	3 years	India
7.	Mr. Chandra K. Mandal	Entomology	M.Sc.	2 years	"
8.	Mr. Tara P. Nepal	Agronomy	M.S.	2 years	America
	Participants for 1979				
1.	Mr. Fanindra P. Neupane	Entomology	Ph.D.	2 years	America
2.	Mr. Tej Bahadur K.C.	Soil Science	Ph.D.	"	"

Others to be selected.

b. "Site plans and definition of capital requirements--in late FY 74 or early FY 75."

This element of the project is now a separate capital project and is subject to a separate evaluation.

c. "Physical facilities as to be specified in site plans referred to in No. b above." (See No. b.)

d. "Graduates of IAAS projected as follows:"

Course	FY 74	FY 75	FY 76	FY 77	FY 78	FY 79	FY 80
1 year Certif.	161	150	200	200	200	200	200
2 year Certif.	40	42	40	40	40	40	40
I.Sc. (Ag.)	18	-	-	-	-	-	-
Diploma (Ag.)(B.Sc.)	-	-	-	20	20	20	20
Diploma (Ag.Ed.)	-	120	100	100	100	100	100
Degree (Ag.Ed.)(M.Sc.)	-	-	14	14	14	14	14
In-Service	48	50	95	95	95	95	95
	267	362	449	469	469	469	469

This projection was speculative, and based on a program of studies that did not exist. While the number of graduates exceeds the projection, the mix is different. There are 386 in the one-year certificate course alone, for example, almost double the projection for FY 78, the reasons being that the demands of the Department of Agriculture are very great for these personnel, and the IAAS geared up to meet the demands. At the two-year certificate level, there are 159, almost four times the project number of graduates. At the diploma level there are 189. Thus, the project is on target in terms of enrollees and graduates.

e. "Curriculum developed." The curriculum has been completely developed and formally published. This does not mean that it is "finalized", for curricula at any institution are subject to constant revision as conditions change and as the requirements and demands on the institution change. In the case of the IAAS, for example, the Diploma in Agriculture Education is being phased out as a separate discipline, and agriculture education is made an integral part of the Diploma in Agriculture course. Also, since the animal farm has been turned over to the IAAS, this area of the curriculum is being revised and strengthened.

f. "Faculty Research--at least 5 reports will be published beginning in 1975 and 10 reports annually beginning in 1977."

This activity is on target, with 14 research projects having been carried out in 1977, and an effort being made to engage all faculty in applied research, either in conjunction with classes and gathering data for teaching purposes, or in conjunction with participant training. Two issues of the IAAS Journal have been published. This Journal is devoted to publication of research in agriculture. The June, 1978 issue contained the following articles by IAAS faculty:

(1) Yield Potentials of Maize Grown During Monsoon and Winter Seasons.

(2) The Flow of Information to Some Small Farms in Nepal.

(3) A Regional Comparison of Small Farms in Nepal.

(4) Response of Rice to Zinc Fertilization.

(5) Nitrogen Sources, Application Time, and Levels Effect on Potato (Solanum tuberosum L.) Production Under Irrigated Conditions.

(6) Non-Target Response of Rainfed Potato to Graded Levels of Diquat in Weed Free Environment.

(7) Effect of High Sodium Absorption Ratio (SAR) of Water on the Growth of Water Hyacinth (Eichhornia crassipes (mart.)) Solms.

No changes are needed in "project outputs"to achieve"project purpose."

18. Purpose: The Project purpose as given on page 16 of the Project Paper is "To expand and improve the Institute of Agriculture and Animal Science so that it will be capable of providing quality training and academic programs for (1) middle and high level officials of the Ministry of Agriculture, (2) vocational agriculture teachers and supervisors, and (3) farmers at the community level."

The Project purpose as stated above relates directly to "Conditions Expected at End of Project", which are enumerated on pages 16 and 17 of the Project Paper. Progress to date is given under each conditions.

Conditions expected at end of project:

a. Minimum of 700 full-time students enrolled in IAAS: There are currently 348 full-time students enrolled on the Rangpur campus, and 386 full-time students enrolled at the branch campuses, for

a total of 734 full-time students. Hence, progress toward the enrolment target is markedly ahead of schedule, for it was not envisioned that the enrolment would reach 700 until 1984. (The branch campus concept was developed in order to help the Ministry of Agriculture meet its requirements for trained manpower. As was noted earlier in this PES, the branch campuses are being revised, with the teaching programs at five of the research farms being phased out, and full-fledged teaching campuses being developed as satellites of the IAAS being phased in. It is not expected that this will reduce the enrolment figures, and it is expected that the quality of teaching will be markedly improved.)

b. Annual output of trained students as follows:

(1)	1 year certificate	200 (386 in 1978)
(2)	2 year certificate	40 (approximately 159 in 1978)
(3)	3 year diploma (after FY 77)	20 (144 enrolled in 1978)
(4)	2 year diploma in ag. ed.	100 (45 in 1978, then to be phased out)
(5)	2 year ag. ed. degree	14 (Phased out. Put in diploma course)
(6)	short courses and in-service training	95

Since the Project Paper was written, and the Project implemented, a completely revised curriculum has been published. That curriculum eliminates the fragmented program noted above, and introduces a sequential curriculum which a student follows throughout his program, with specializations introduced as higher levels are reached. It further provides that students may move out of the IAAS and into the agriculture community at any level, coming back in to continue the sequential programs after a period of service. Hence, with the enrolment in the one-year certificate program already 386, the output for each succeeding year for each specialized area will be well above the figures noted, except for agriculture education, which has been woven into the regular diploma course rather than standing as a separate and distinct discipline. (As a matter of interest, the Ministry of Education, for which this program was designed, and which agreed to provide enough candidates to enable the IAAS to graduate 100 per year, has been able to provide only about 45 candidates total, or enough for about 20 graduates per year. As a result, the Ministry of Education agreed to the phasing out of this separate curriculum.)

"Short course and in-service training, and extension activities" has evolved into an outreach program in which students and faculty work with farmers in informal activities, and on research programs, and exchanging information with farmers. This is designed basically as an information gathering mechanism which will provide faculty with real information and data on current farming practices in Nepal. The formal extension program will not evolve until participants return from training and the MUCIA contract slot in extension/non-formal education is filled.

c. "All physical facilities in place and functioning sufficiently to meet the needs of approximately 750 full-time students." (On the Rampur campus.)

The capital ingredient of the project has been moved to the CI section of USAID/N, and is subject to a separate evaluation.

d. "'Upside-down' curriculum installed in all areas, with practical work being basic and requisite to academic study."

One full year of practical study on one of the satellite campuses is required of all students who enter the IAAS. This pre-professional agriculture program is designed to meet two goals: (a) It prepares agricultural technicians for service to the rural people of Nepal in such posts as junior technical assistant (JTA), and (b) it is the first step after secondary school for persons desiring to become professional agriculturists and to receive further education in agriculture and animal science.

Course titles illustrate the practical nature of the work.

First Semester:

PS 001 Practice of Agronomy
PS 005 Practice of Vegetable and Flower Production
AS 001 Practice of Animal Production
RD 001 Practice of Non-Formal Education in Agriculture
PR 001 Project Work

Second Semester:

PS 002 Practice of Agronomy
PS 006 Practice of Fruit Production
AS 002 Practice of Animal Production
RD 002 Practice of Farm Management
PR 002 Project Work

Not only is each student required to take the year of practical work, but each one is also required to take practicals throughout his training at the IAAS.

e. "Satellite or extension programs for rural farmers and youths in operation." See "b" above.

f. "In-service training program in operation for agriculture officials, including JT's and JTA's."

This program has still not been initiated because the specialist in non-formal/extension education has not been provided to plan the activity, and participants trained in the field have not returned. It should be started during the coming year if MUCIA is able to field personnel.

g. "IAAS has effective linkages with the agriculture community in Nepal, with exchanges of services, as well as ideas, being established practice. This will include participation of user agencies in curriculum development and revision and in the projection of training requirements."

It is noteworthy that a representative of the Ministry of Agriculture participated in the JAR. Through this and other devices, such as the appointment of Ministry of Agriculture and other user agencies to the IAAS Faculty Board, have strengthened the linkages with other institutions. This establishment of linkages is an evolutionary process, and the maintenance of such linkages will continue to be a major concern of the IAAS.

h. "Program of studies conducted by qualified, all-Nepalese staff.": As noted earlier in this PES, excellent progress has been made in the recruitment of qualified staff for the IAAS, with 57 now serving at the Rampur campus, and 8 assigned to the branch campuses. IAAS staff is as follows:

PS - Permanent Staff
SL - Currently on Study Leave
B - At Present at a Branch Campus
C - Staff on Contract
T - Employed on Temporary Basis
V - Volunteer

IAAS Staff List

S.No.	Name	Position	Degree	Code
1.	Basnyat, Netra Bahadur	Dean	M.Ag.Sc.Assoc.IARI	
2.	Neupane, Fanindra Prasad	Reader/Asst-Dean	M.Sc.Ag.	PS
3.	K.C., Nav Raj	Act.Asst.Registrar	M.A.	PS
4.	Shrestha, Krishna Raj	Act.Asst.Registrar	M.A.	PS/SL

Plant Science Instruction Committee

S.No.	Name	Position	Degree	Code
1.	Karki, Amrit Bahadur	Reader-Chairman	Ph.D.	PS/LWP
	(A) Agronomy			
1.	Mishra, Nand Kumar	Reader	M.Sc.Ag.	PS
2.	Sharma, Ram Chandra	Asst.Lecturer	B.Sc.Ag.	PS
3.	Sharma, Krishna Prasad	" "	B.Sc.Ag.	PS/SL
4.	Nepal, Tara Prakash	" "	B.Sc.Ag.	PS/SL
5.	Subedi, Laxmi Prasad	" "	B.Sc.Ag.	PS
6.	Upreti, Gopi	" "	B.Sc.Ag.	CTS
7.	Prasad, Moti Lal	Instructor	J.T.	PS
8.	Dhar, Surinder Nath	Lecturer	M.Sc.Ag.	C
9.	Yadav, Dev Nath	Asst.Lecturer	B.Sc.Ag.	PS/B
	(B) Soil Science			
1.	K.C., Tej Bahadur	Reader	M.Sc.Ag.	PS
2.	Sharma, Padma Prasad	Asst. Lecturer	B.Sc.Ag.	PS/SL
3.	Sah, Shree Chandra	" "	B.Sc.Ag.	PS/SL
4.	Khakural, Bhairab Raj	" "	B.Sc.Ag.	CTS
5.	Baral, Dilli Ram	" "	B.Sc.Ag.	CTS
	(C) Horticulture			
1.	Shrestha, Gyan Kumar	Asst. Lecturer	M.Sc.Ag.	PS
2.	Dhakal, Durga Bahadur	" "	B.Sc.Ag.	PS/SL
3.	Adhikari, Rishi Raj	" "	B.Sc.Ag.	PS/SL
4.	Sakya, Shanta Man	" "	B.Sc.Ag.	PS
5.	Koirala, Ram Chandra	Instructor	J.T.	PS
6.	Gurung, Bhim Sen	Asst. Lecturer	B.Sc.Ag.	CTS
7.	Terada, Y	Japanese Volunteer	B.Sc.Ag.	V
	(D) Plant Pathology			
1.	Bharadwaj, Laxmi Nand	Lecturer	Ph.D.	C
2.	Shrestha, Sunder Man	Asst. Lecturer	B.Sc.Ag.	PS/SL
	(E) Entomology			
1.	Thapa, Resham Bdr.	Asst. Lecturer	B.Sc.Ag.	PS
2.	Mandal, Chandra K.	" "	B.Sc.Ag.	PS/SL
	(F) Botany			
1.	Karmacharya, S.B.	Lecturer	M.Sc.(Bot)	PS
2.	Gurung, Santa Bdr.	Asst. Lecturer	B.Sc.Ag.	PS/SL
	(G) Agri. Engineering			
1.	Shrestha, Khadga B.	Asst. Lecturer	B.Sc.Ag.Eng.	PS/SL
2.	Basnyat, Badri Bdr.	" "	B.Eng.Agri.	TS

S.No.	Name	Position	Degree	Code
	(H) Physics			
1.	Mallik, Thakkan	Lecturer	M.Sc.(Math)	PS/SL

Animal Science Instruction Committee

	(A) Animal Husbandry			
1.	Tiwari, Krishna Raj	Asst. Lecturer	B.V.Sc.	PS/SL
2.	Sapkota, Maheswor	" "	B.Sc.Ag.	PS/SL
3.	Yadav, Jagat Lal	" "	B.Sc.Ag.	PS
4.	Nepali, Dainik Bdr.	" "	B.Sc.Ag.	PS/B
	(B) Poultry			
1.	Joshi, Nand Prakash	Asst.Lecturer	B.Sc.Ag.	PS/SL
2.	Sah, Saha Deo	" "	B.Sc.Ag.	PS/SL
3.	Tiwari, Sudarshan	Instructor	J.T.	PS
	(C) Dairy			
1.	Prakash, Bhirahm	Lecturer	M.Sc.	C
2.	Kayasta, Arjun K.	Asst. Lecturer	B.Sc.Ag.	PS
	(D) Fisheries + Zoology			
1.	Augusty, K.T.	Lecturer	M.Sc.(zool.)	C
	(E) Veterinary			
1.	Sharma, Bal Krishna	Asst. Lecturer	B.V.Sc.	TS
2.	Sah, Nagendra P.	" "	B.V.Sc.	TS

Rural Development Instruction Committee

S.N.	Name	Position	Degree	Code
1.	Adhikari, Ganesh M. Singh	Reader/Chairman	M.Sc.	PS
	(A) Agri. Extension			
1.	Tiwari, Satya Narayan	Asst. Lecturer	B.Sc.Ag.	PS/SL
2.	Dangol, Badri B. Singh	" "	B.Sc.Ag.	PS/SL
	(B) Rural Sociology			
1.	Pyakurel, Kailash Nath	Reader	M.Sc.	PS/SL
2.	Joshi, Jaya Raj	Asst. Lecturer	B.Sc.Ag.	PS

S.No.	Name	Position	Degree	Code
	(C) Agri-Education			
1.	Bhandari, Bishnu Bdr.	Lecturer	M.Sc.	PS/B
2.	Shrestha, Anirudra P.	Lecturer	M.Sc.	PS
3.	Subedi, Murari Prasad	Asst. Lecturer	Dip.Ag.Ed.	PS
	(D) Agri-Economics			
1.	Tulachan, Pradip Man	Asst. Lecturer	B.Sc.Ag.	PS/SL
2.	Shivakoti, Ganesh P.	" "	B.Sc.Ag.	PS/SL
3.	Pokhrel, Bole Nath	" "	B.Sc.Ag.	PS/SL
	(E) Farm Management			
1.	Bajracharya, S. Bindu	Asst. Lecturer	B.Sc.Ag.	PS/SL
2.	Bauer, Earl W.	PCV		V
	(F) Agri-Information			
1.	Kuwar, Narayan	Asst. Lecturer	B.Sc.Ag.	PS/SL
	(G) Statistics			
1.	Gupta, Uma Shanker	Asst. Lecturer	B.Sc.Ag.	PS/B
	(H) Mathematics			
1.	Sakya, Prakash	Asst. Lecturer	M.Sc.(Math)	PS
	(I) English			
1.	Peter Rood	PCV		V
2.	Bauer, Ellie F.	PCV		V
	(J) Nepali			
1.	Risal, Upendar Prasad	Asst. Lecturer	M.A.	PS
Visiting Professors				
1.	Ray, Rex E.	MUCIA Team Leader	Ph.D.	Agri.Education
2.	Miller, K.P.	" " Member	Ph.D.	Animal Science
3.	Bittenbender, Harry C.	MUCIA Team Member	Ph.D.	Plant Science

19. Goal: The program goal, as stated in the Project Paper, page 15, is to establish a national system of agriculture training providing all 75 districts of Nepal with qualified, responsive, and locally knowledgable agricultural technicians and an expanding number of specially trained farmers by 1984.

The measures of goal achievement, and the evaluation findings related to each of the measures, are as follows:

a. "Functioning networks of national agricultural training institutions; in-service training programs, special training activities; and district level farmer oriented training."

A basic training network has been established through a system of branch campuses, which were earlier described. These campuses currently enroll 386 full-time students. Inservice training programs for the IAAS have been carried out for the past two years. The program of farmer visitation which was begun two years ago continues, with farmer involvement in IAAS activities through farmer visitation. District level farmer oriented training programs have not yet been initiated, and probably will not be until participant trainees return.

b. "Adequate staffing of each training institution and program with the skills essential to effective operation."

Progress on staffing has been exceptionally good. In 1976 there were only 21 staff connected with the IAAS, nearly all of them seconded from the Department of Agriculture. In 1977 this grew to 44, with all but one being permanent. In 1978 it grew to 57 at Rampur and 8 on the branch campuses. (Detailed staffing is given under 18 h, under "purpose.") There is every reason to assume that the staff will be fully assembled and trained by the end of the project.

c. "Development and application of curricula appropriate to the objectives and level of each agricultural training institution and program."

The program has been developed and published. The publication, which is entitled ACADEMIC PROGRAMMES OF THE INSTITUTE OF AGRICULTURE AND ANIMAL SCIENCE, contains a complete description of all programs and courses offered at the IAAS. (In U.S. terms this is the "catalog" for the Institute.)

d. "Systems established for locally recruiting district inhabitants for varying stages of training in agriculture; and assignment back to home districts."

A major justification for the branch campus system is the recruitment of students from the surrounding district, with the assumption that so recruited, they will be more likely to remain in their respective areas. An examination of the enrolment patterns indicates that virtually all students on the branch campuses are from the surrounding area. On the Lumjung campus, virtually 100% of the students continue to be from that geographic area. It is too early to judge whether or not such students will tend to remain in their areas. However, follow-up studies are contemplated which will yield such data. Further, the IAS campus recruits nation-wide, providing scholarships to about 30% of the students from remote areas. Assignment of the students is the role of the Ministry of Agriculture, but the subject is of concern to the Ministry. Again, follow-up studies will be carried out to determine what the assignment patterns are, and what retention rates prevail among students coming from remote areas.

Goal achievement is directly related to purpose achievement, for if the branch campus concept continues to recruit from local areas--which they will do--and as the numbers increase, the goal of local recruitment will be achieved. Further, the branch campuses are to be geared to the most appropriate agricultural developments of each particular region. For example, branch campuses will specialize in horticulture, animal husbandry, cereal crops, etc., with goal achievement resulting directly from the purpose.

"Evaluation and review systems operational which are designed to study effects of farmer training upon farmer efficiency, behavior, etc."

This system has not been set up, and will not be until the farmer training program is begun.

20. Beneficiaries: The direct beneficiaries are the roughly 750 students currently enrolled. However, each of those students after completing training either (a) works for the Department of Agriculture in extension, (b) teaches in vocational secondary schools, or (c) works in the agriculture sector or in the Ministry of Agriculture or Department of Agriculture in research or some other activity. Thus, the beneficiaries are the farmers of Nepal in the first instance, for most of the students go directly into extension activities. In the second instance, beneficiaries are the students of secondary schools. In the third, they are those agricultural people who are reached by institutions serving agriculture in Nepal.

21. Unplanned Effects: It is still too early in the life of the project to determine what these effects might be. However, this will be an important consideration in future evaluations after several years. It is likely that the effects will be in two major areas: (a) the social and economic impact of the Project on the lives and economy of the area which the IAAS directly influences, ie., the Chitwan area generally, and the Rampur area specifically. It is likely that the economic life of the community will be markedly changed by the infusion of capital and people, and by the expanded employment opportunities. It is also likely that the farming patterns of farmers in the area will undergo substantial change as a result of the direct contacts with the IAAS research and information exchange programs, and (b) the social and economic impact on a broader front, ie., in those areas served by graduates of the IAAS and influenced by its outreach or extension program. The influence of the IAAS graduates on the whole extension program of the Department of Agriculture should undergo profound changes also as large numbers of the IAAS students are absorbed into the system.

22. Lessons Learned: The well-known truth continues to come through in this project, namely that only if the host government is committed to the project will it develop as anticipated. The level of HMG commitment of this Project is clear from (a) the staffing levels that have been attained (b) the administration levels attained, (c) the willingness of the top figures in Tribhuvan University to devote personal attention to the Project over extended periods, (d) the level of funding for operational costs, (e) the willingness of HMG to make a very hard decision to give the entire livestock farm to the IAAS for its teaching purposes, and (f) the willingness of the University to undertake serious negotiations with other arms of HMG to effect changes in relationships and programs that affect the IAAS. Without such a commitment, no project is likely to succeed; and with it, no project is likely to fail, even if the donor inputs fall short.

A second lesson is that even the best plans for contractor selection, resulting in what appears to be the best possible contractor for the project, can guarantee the personnel requirements will be completely met. There must be built into the evaluation mechanism the flexibility to evaluate on the basis of actual results rather than purely on the basis on how many slots have been filled. In this case, even though the Contractor failed to fill half of the advisory slots, the JAR revealed continued excellent progress toward the achievement of Project goals.

A third lesson is that if USAID gives the impression of lack of interest in the project through lack of what is considered to be equitable treatment of the contractor and direct hire personnel, tensions can have an advers effect on the staff morale, and ultimately on the project.

23. Special Comments or Remarks: None.

HRD:DNewbry/drs 12/28/79