

EVALUATION OF AGRICULTURAL
DEVELOPMENT COUNCIL OPG-TRAINING NEPALESE
IN AGRICULTURAL RESEARCH AND DEVELOPMENT PLANNING

Report of a Program Evaluation
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The views and interpretations expressed in this report are those of the authors and should not be attributed to the Agency for International Development.

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I. EXECUTIVE SUMMARY

Problem and Overview. Approximately 95 percent of Nepal's population is directly or indirectly involved in agriculture. Nepal is a food sufficient country, but its population is growing at an annual rate of 2.6 percent. Nepal's development and its agricultural development in particular has suffered from a lack of accurate information upon which to base policy and planning decisions (noted in the 1981 World Bank Report Nepal: Policies and Prospects for Accelerated Growth). This Project was focused on helping the Ministry of Agriculture (MOA) develop a capacity for social science research and analysis.

The Project. The "Agricultural Development Council (ADC) OPG Training Nepalese in Agricultural Research and Development Planning" (OPG 498-0251) was approved in September 1976. Project funding was \$1,004,953 from USAID, \$450,000 from ADC and \$128,300 from the Government of Nepal (HMG). This was a five-year Project ending in September 1981 that has been extended without funding for one year.

The purpose of the Project was to provide partial support for a program to train Nepalese in agriculture research and development planning and assist HMG to develop the institutional capacity to make more productive use of:

1. Its human and physical resource endowments, and
2. The new technical knowledge that is becoming available through USAID's Integrated Cereals Project (ICP) to expand agricultural production and improve the well being of the people living in rural areas.

The specific objectives of the Project were:

1. To initiate research on selected problems of agricultural and rural development, and
2. To expand the capacity of Nepalese institutions to conduct research on which to base public decisions.

The Project activities consisted of Ph.D. training in the U.S., Masters training in Asia and Australia, short-term training in and outside of Nepal, organization of seminars, implementation of a program of social science research, provision of research advice, supply of two mini-computers and other limited commodities. The Project was with the Ministry of Agriculture (MOA). Most of the Project effect was focused on the Agricultural Projects Service Center (APROSC).

Purpose of Evaluation. To assess the impact and effectiveness of this Project and to provide information that would assist in identifying appropriate activities for a follow-on Project.

Project Output. 33 people received Masters degrees, 2 people received Ph.D. degrees, 101.5 person-months of non-degree training were provided, 7 major seminars were organized in Nepal, several 2-hour seminars were given by visiting and local scholars, 11 Nepalis were provided a chance to attend seminars and conferences outside Nepal, 9 research studies were conducted in Nepal with direct Project help, 35 research papers and seminar reports were published, 10 person-years of long-term consultant time were provided as well as vehicles and other commodities.

Conclusions.

1. The Project was successful in meeting its objectives and was very cost effective. ADC's established organization in Asia and America was a major factor leading to this cost effectiveness and success.
2. The degree training produced twice as many Masters graduates and one less Ph.D. than originally planned. The selection process used by ADC provided well qualified candidates. The thesis process where students were required to formulate a problem, design a study, collect and analyze data, and present results in a written form was a major contributing factor to improved job skills and confidence.
3. All degree graduates returned to Nepal, and most are still in positions that require research skills. A low pay scale and slow advancement may lead to job dissatisfaction. Almost four percent of the degree trainees were women against little more than three percent in government service.
4. Non-degree training was most successful when focused on an immediately useful skill. About 25 percent of the trainees were women. The target of 60 person-months of non-degree training was far exceeded.
5. Some of the seminars linked senior policy or planning officials with young social scientists to produce papers for the seminars. This innovative procedure had very beneficial effects.
6. Research has had an impact on policy and planning. The MOA still needs to improve its quality control for research; the research advisory services provided by ADC are still needed.
7. The publications were scholarly but might have had more impact with an executive summary and a section on policy implications.
8. The MOA should have developed an ongoing program of social science research funded directly by HMG.

Recommendations.

1. HMG and ADC should continue this Project with AID or other funding.
2. The MOA should continue degree training in social science research and should support a strong, valid selection system.

Applicants who are almost qualified should be given remedial training. This might increase the number of women trained and the number of trainees from MOA agencies other than APROSC and ADBN (Agriculture Development Bank, Nepal).

3. Increases in salary and job classification should be provided to returned graduates. A special fund should be set up for Ph.D. graduates so they can pursue their own research and attend international conferences.
4. Non-degree training that focuses on skills that are immediately useful or that expand HMG's existing program should continue.
5. The MOA should continue seminars using the procedure of linking senior policy and planning officials with young social scientists to produce seminar papers.
6. The MOA should strengthen its quality control standards for research and locate a qualified Nepali to act as research advisor.
7. The MOA should add an executive summary and a section on policy and planning implications to its research publications.
8. The MOA should make a strong commitment to social science research by funding a planned program of research that answers MOA's fundamental policy and planning questions.

II. BASIC PROGRAM IDENTIFICATION DATA

1. Country: Nepal
2. Project Title: Training Nepalese in Agriculture Research and Development Planning
3. Project Number: OPG 498-0251
4. Project Implementation:
 - a. First Project Agreement: September 1976
 - b. Final Obligation: May 1981
 - c. Final Input Delivery: Ongoing
5. Program Funding:
 - a. AID Funding: \$1,004,952
(Grant AID/ASIA G-1199)
 - b. Other Major Donors:
- ADC \$450,000
 - c. Host Country Counterpart Funds: \$128,300
6. Mode of Implementation:
 1. OPG Agreement between USAID/Washington and ADC; and
 2. Letter of Agreement between ADC and the Ministry of Food, Agriculture and Irrigation.
7. Responsible Mission Officials:
 - a. Mission Directors: Samuel H. Butterfield 1976-1980, and Dennis Brennan 1981 - present;
 - b. Responsible Project Officers: John Wilson 1976-1978, Douglas Pickett 1979, William Nance November 1979-September 1981, and Douglas Pickett September 1981 - present.
8. Previous Evaluations and Reviews:
 1. First Annual Report, December 1977;
 2. Second Annual Report, December 1978;
 3. Third Annual Report, October 1979;
 4. Fourth Annual Report, November 1980; and
 5. Final Report, October 1981
9. Host Country Exchange Rate:
 - a. Name of Currency: Rupee
 - b. Exchange Rate at Time of Project: 12.00 Rupees = \$1 U.S.

III. CONCLUSIONS AND RECOMMENDATIONS

The major findings and conclusions of this evaluation are summarized in this section. Where appropriate, each of these is followed by one or more recommendations pertaining to the conclusion. Part IV, which follows, presents the details upon which these conclusions and recommendations are based.

1. The Project. This Project was quantitatively and qualitatively successful in meeting its grant objectives. The Project was also cost effective. AID invested approximately \$1 million and was able to provide HMG with 10 person-years of technical assistance, 1,000 person-months of training, two mini-computers, seven seminars and other equipment and activities. AID was able to do this by depending upon ADC and its resources for Project implementation. ADC contributed its own funds and secured funds from other sources for the Project. HMG also contributed services and facilities. All this led to a very cost effective Project for AID. ADC has an established organization and program in Asia and the U.S., and the Project was able to utilize these resources. This contributed greatly to the Project's success.

Recommendation. If possible, HMG and ADC should continue this project, with USAID funds or funds from other sources, until the MOA has the capability to conduct social science research and do project development and analysis work of a consistently high quality and without the assistance of foreign specialists or consultants.

2. Degree Training. The degree training was a notable success - more than double the number of Masters degree trainees budgeted were trained and only one fewer for the Ph.D. degree. The ratio of 16 Masters degrees to each Ph.D. degree appears to have been appropriate since so few people with a Masters degree were available during the early years of the Project. The selection process used by ADC (here and in all of its programs) contributed to a high level of quality in the people sent for training and was a major factor contributing to the small number of women trained. Preparation of a thesis was a very important part of the training. Masters candidates, except for those registered for business school degree, were required to formulate a problem, design a study, collect and analyze the data, and prepare a report of the study and findings. This process gave them the skills and confidence to implement and manage research projects when they returned to their parent agency in Nepal. In two cases non-Nepal data were used for these; for the other Nepal data were used. The Nepal studies, though, required added expenses for travel back to and from Nepal.

Recommendation. Degree training should continue to be an important part of the MOA's efforts to enhance its capacity for social science research. The MOA should continue to support a strong, valid selection process, but special help should be provided to good but unqualified candidates so that they might meet all qualifications. This might permit a larger number of women to qualify for training and more people from throughout the MOA to qualify. Except for those majoring in business administration, rigorous thesis studies should be facilitated, the focus should be on Nepal's problems and consideration should be given to planning the studies and collecting the data before leaving for training, especially for those candidates who are qualified by research experience to do so.

3. Returned Graduates. Most of the graduates are still in positions that require the use of research skills. Nineteen of the 20 people with Masters degrees returned to the same agency and same job as before leaving for graduate study; 11 returned at the same level, eight at a higher grade. This represents little recognition of the value of degree training, and it may well lead to job dissatisfaction. It may also lead to departure from government service.

Recommendation. Large increases in salary are not possible, but some modest pay and job classification increase should be given. In addition, Masters graduates should be considered for Ph.D. training. The Ph.D. graduates should have a source from which to obtain modest amounts of funds to continue research, separate from their job, and to attend international conferences. This should allow them to continue in government service without ending their own professional growth.

4. Non-degree Training. The 106 people given 101.5 person-months of non-degree training represent a sizeable achievement. Even without the special training program for women, 10 percent of the trainees were women versus a reported three percent in HMG. This type of training represents a quick, economical (especially when conducted in Nepal) means of imparting specific information to selected individuals. In this Project, non-degree training was most successful when it focused on a skill that was of immediate use or helped to expand an existing HMG program.

Recommendation. Short-term in-service training should be emphasized even more than in the past. The training topics should be carefully selected to be sure that they are of immediate use to the trainees. The use of returned ADC fellows and other local degree holders should be maximized to make the training less expensive and to build the MOA's capacity to train its own people without outside help.

5. Seminars. The major seminars, sponsored in cooperation with other agencies, resulted in the preparation and presentation of papers related to the socio-economic aspects of several different topics. The innovative procedure of linking senior policy and planning officials with young well-trained social scientists to produce papers was used in some of the seminars. This procedure benefited both parties and added greatly to the impact of the seminars on the policy and planning process. The seminars have:

1. Broadened the knowledge base of the participants,
2. Provided a reference source in the published proceedings of the seminars, and
3. Stimulated participants in their work.

Recommendation. The MOA should continue seminars using the procedure of linking senior policy and planning officials with young social scientists to produce conference papers.

6. Research. The MOA still needs to continue to improve its quality control over social science research. This problem can be partially solved by enforcing high standards for the research studies and reports conducted and prepared by APROSC, ADBN and other institutions. It was temporarily solved through the role played by the ADC Associate and Research Specialist. They were always available to help in the design of studies, analysis of data and preparation of reports. Research was having an effect on policy and planning.

Recommendation. The MOA should strengthen its quality control standards. It should also try to locate a qualified Nepali Ph.D. to fill the role played by the ADC team and help train that person to perform the services that ADC provided.

7. Publications. The research studies and summaries of Masters theses that were published were of a high quality. Preparing summaries of these was a particularly good idea. Ph.D. and Masters theses on Nepal, done by Nepalis or foreigners, are usually not locally published in an available form. The publications would have been more widely read by policy and planning officials if they had non-technical one or two-page executive summaries that included a section on policy implications.

8. Institutional Development. The MOA has no ongoing program of social science research. Research is done in response to needs that, quite often, are generated by an international organization. The MOA has concentrated most of its resources for social science research in APROSC, but APROSC has no operating budget from the MOA. APROSC, therefore, must depend heavily upon outside requests for research.

Recommendation. The MOA should make a strong commitment to APROSC as its social science research unit. APROSC should be provided with a budget in addition to the funds it receives from responding to requests for research. That special budget should be used to pursue a planned program of social science research based upon the priority needs of the MOA. These needs should be developed by the MOA to answer its fundamental policy and planning questions and serve as a guide to social science research workers.

IV. REPORT OF EVALUATION

Purpose and Background

The Agricultural Development Council has been active in Nepal since 1970. Up to 1975, their activities consisted of periodic visits of their Associate who was resident in Thailand and the granting of three Masters fellowships, one Ph.D. fellowship and the participation of several Nepalese in regional workshops and seminars. In January of 1975, the Council placed a part-time, short-term visiting professor at Tribhuvan University. From January 1975 to the beginning of this Project, the Council engaged in research activities with the Center for Economic Development and Administration at Tribhuvan, made library and equipment grants to research institutions (less than \$2,000) and expanded the fellowship program. Up to the start of this Project, nine Nepalis were sent for their Masters and four for their Ph.D. degrees.

In 1976, the Council submitted a proposal for an expanded Project to USAID. In September 1976, AID/Washington accepted the proposal for a five-year involvement for up to \$1,500,000 (\$1 million from AID, \$400,000 from ADC and \$100,000 from HMG). An agreement between the Council and the Ministry of Food, Agriculture and Irrigation was signed on October 21, 1976.

The purpose of the Project was set out in the Grant Agreement as:

"To provide partial support for a program to train Nepalese in agriculture research and development planning and assist HMG to develop the institutional capacity to make more productive use of:

- a. Its human and physical resource endowments, and
- b. The new technical knowledge that is becoming available through the ICP to expand agricultural production and improve the well-being of the people living in rural areas."

The specific objectives of the grant were stated as:

- a. To initiate research on selected problems of agricultural and rural development, and
- b. To expand the capacity of Nepalese institutions to conduct research on which to base public decisions.

In addition to a focus on the ICP, it is:

1. General AID/Nepal policy to give attention specifically to hill areas,
2. General AID policy to give attention to developing the role of women, and
3. AID/PVO policy that an OPG should directly affect the rural poor.

In the letter of agreement between the Council and HMG, the purpose of the Project was stated as:

"to offer assistance to His Majesty's Government of Nepal in the areas of research and training in the social sciences and human problems of agriculture and rural development in Nepal."

The Project has focused on the need of the process of agricultural and rural development for a flow of reliable statistics and information and for a capacity to do social science research and economic analysis. The project was attempting to produce this capacity and make it useful and available to the policy and planning institutions of HMG.

To accomplish these goals, the Project conducted the following activities:

1. Thirty-three people were sent to Asian and Australian institutions for Masters level training,
2. Two people were sent to U.S. institutions for Ph.D. level training,
3. Eight Nepalis were sent to training programs outside Nepal,
4. Two short-term training programs were organized for Nepalis in Thailand,
5. Three short-term training programs were organized in Nepal,
6. Seven seminars were organized in Nepal,
7. Eleven Nepalis were provided with a chance to attend seminars or go on study tours outside Nepal,
8. Four presentations by visiting scholars were arranged in Nepal,
9. Nine research studies were conducted with direct ADC staff involvement or technical support and financing,
10. Thirty-five seminar reports and research papers have or will shortly be published,
11. An ADC Associate was resident in Nepal for 54 months,
12. An ADC Specialist was resident in Nepal for 60 months, and
13. A mini-computer was installed, and a data base for research use was developed. A second mini-computer has just been received.

This evaluation will explore the following broad questions:

1. Has this Project helped to develop the institutional capability of HMG to do social science research, financial analysis and statistical studies?
2. Is this increased capability being made available and useful to HMG's policy making and planning process?
3. Has the Project paid attention to the ICP, the problems of the hill areas, the role of women and the life of the rural poor?
4. How have the 13 elements of the Project contributed to the overall success of the Project?

This evaluation will look first at each of the component parts of the Project. The output of the Project will be measured against the original projections. The quality of the implementation of each component will be judged, and the impact of each component will be described. Then, an overall view of this institution building process will be given, and, finally, program implications for Nepal, USAID and a continuation of this effort will be presented.

Project Context

Agriculture is a critical element in Nepal's development. Of course, the country depends upon agriculture for its food, and the population is growing at 2.6 percent annually. Nepal also depends upon agriculture as a source of export earnings (jute and grains) and import substitution (tea, tobacco and sugar). At least 95 percent of Nepal's work force is engaged in agriculture, the processing of agricultural products, marketing of agricultural products and supplying services to the agriculture sector. Fifty-seven percent of Nepal's GNP comes from agriculture and 80 percent of Nepal's export earnings is from agriculture. Thirty percent of Nepal's Sixth Plan development spending is allocated to agriculture.

Nepal can be divided into three distinct environments. The low southern plains (the tarai) are rich and productive. The middle altitude hills are productive, but the landholdings are small (0.4 hectare in the hills and 1.7 hectares in the tarai on the average). The high altitude mountains are only suitable for subsistence farming and animal grazing. Transportation is good in the tarai and poor in the hill and mountain areas. Only about 40% of Nepal's 15 million people live in the tarai, but migration from the hill and mountain regions has been increasing. This migration to the tarai and subsequent clearing of land is causing a loss of valuable forest. Nepal needs to develop its agricultural potential, but it must have a balanced development of the hill, mountain and tarai areas.

Reliable information and statistics are needed as resources with which to formulate government agricultural policy and to plan for further development in this sector. In the World Bank's 1981 study of Nepal (Nepal: Policies and Prospects for Accelerated Growth), note was made of the lack of capacity in HMG for economic analysis and the lack of statistics and information on which to base analyses. The study states, ". . . the primary causes of poor growth performance are not easily diagnosed, largely because of the severe lack of statistical information" (p.4). The report suggests that there

" . . . should be improvements in statistical information systems to provide a better basis for public decision making. The paucity of good economic and social data inhibits informed monitoring and analysis of government budgetary and economic operations as well as of overall economic trends, thus contributing to delays and imperfections in the design of economic policies" (p.20).

The Ministry of Agriculture needs three sources of information:

1. Statistics on the progress of present and completed programs and projects,
2. Agriculture research and field trials on new varieties/strains of crops and animals, and types of agricultural practices, and
3. Social science research focused on the agriculture sector.

Foreign aid and domestic resources have been used to develop the first two sources of information, but the third source has received very little attention or assistance. This Project focused on developing HMG's capacity to conduct social science research which can help to answer questions like:

1. What is the impact on the income of small farmers of HMG policies?
2. What is the proper price for government purchase of tobacco?
3. What is the economic benefit of fertilizer subsidies?
4. In what cases are women the proper target for the extension system?

The answers to these kinds of questions help to give HMG a true picture of the impact of their programs. This information can also lead to better design of agriculture development projects.

The Project put most of its efforts into developing the research capability of the Agricultural Projects Service Center (APROSC). This is a semi-autonomous public corporation that engages in research, planning, studies and training. APROSC has no direct MOA funding but depends on contracts, most of which come through the MOA from international organizations.

Substantial resources were also put into the Agricultural Development Bank of Nepal (ADBN). The ADBN is a public corporation that extends credit in kind and in cash to the private agricultural sector and implements the small farmer development project. The Department of Agriculture (DA) manages extension and agriculture research, and it, too, was assisted. Help was given to the Department of Food and Agricultural Marketing Services (DFAMS) which is responsible for agriculture statistics and food, nutrition and marketing studies. Two other public corporations were assisted, the Agricultural Inputs Corporation (AIC) and the Nepal Food Corporation (NFC). The AIC imports and markets fertilizer, insecticide and other agricultural inputs. The NFC is involved in the purchase of food in surplus production areas and the

distribution of such in food deficit areas. Two non-MOA institutions were also given assistance, the National Planning Commission (NPC) and the Center for Economic and Development Administration (CEDA). The NPC cooperates with the Finance Ministry to set overall development goals and priorities. The NPC then works with the line agencies to prepare the five-year plan and yearly programs to meet those goals. CEDA is a think tank at Tribhuvan University that engages in research and publishes its findings.

The major effort, then, was directed at giving the MOA a solid social science research capacity in APROSC. In addition, the other departments and public corporations that need social science research capacity were assisted and two agencies outside the MOA who have an impact upon agriculture were given help. Policy makers, planners and staff from many other private and public agencies and international organizations were also affected by this project through participation in seminars and short-term in-service training courses.

Training

The project involved two types of training, degree and non-degree. The latter consisted of short-term in-service training either inside or outside of Nepal with special emphasis on development planning for mid-career professionals. The target of 60.0 person-months of non-degree, short-term training was substantially exceeded by a calculated total of 101.5 person-months of training (See Table below). Of the 106 persons trained, 80 were men and 26 were women.

Person-Months of Training Planned and Accomplished

Type of training	<u>Planned</u>		<u>Accomplished</u>	
	Number of persons	Person-month of training	Number of persons	Person-months of training
Non-degree, short-term	+	60.0	106	101.5
Degree: Masters	16	384.0	33*	792.0
Ph.D.	3	144.0	2	96.0
<u>Total</u>	-	<u>588.0</u>	-	<u>989.5</u>

+ Not specified.

*Twenty-six of these Masters candidates were directly funded with USAID grant funds. The other seven were funded with ADC funds and funds from the International Development and Research Center of Canada and the

Australian Development Assistance Bureau. In addition, ADC will fund three more Masters fellows in 1982 from other sources; ADC had funded nine Masters and four Ph.D. fellows before the Project. So ADC fellows from 1972-1982 totaled 45 Masters and 6 Ph.Ds.

It should be noted here that USAID contributed approximately \$1,000,000 and this produced approximately 1,000 person-months of degree and non-degree training. At \$1,000 per person-month, this Project was very cost effective, but other services were also provided with Project money.

The degree training consisted of two levels: Masters degree training at Asian and Australian universities, and Ph.D. degree training at U. S. universities. The target of 16 persons for Masters degree training was far exceeded as a total of 33 study awards were made. Almost all of the awardees were men, only one woman was chosen for Masters degree training. The Masters degree program was most favorably received by the MOA, and AID agreed that this part of the Project should be expanded. The funds budgeted for one Ph.D. degree were also diverted into four Masters degree fellowships.

Degree Training

Masters degree participants attended eight different universities. The ones most often attended were the University of the Philippines at Los Banos, the University of the Philippines at Diliman and Thammasat University. The complete list is as follows:

	<u>Persons</u>
Australia:	
University of New England	4
Australian National University	1
Philippines:	
University of the Philippines at Los Banos	11
University of the Philippines at Diliman	6
Thailand:	
Thammasat University	6
India:	
Tamil Nadu University	2
Andhra University	1
Malaysia:	
Malaysia Agricultural University	2

Agricultural Economics and Economics were the major fields of study in which the participants engaged. The fields of study were:

Agricultural Economics	13
Economics	10
Business Administration	3
Statistics, Economic Statistics	2
Resource Economics	2
Agricultural Business Management	1
Rural Development Management	1
Agricultural Development Economics	1

The Agricultural Projects Service Center (APROSC) and the Agricultural Development Bank Nepal (ADB) were the major institutions that benefited from the Masters degree program. This was reportedly the result of these agencies being able to remunerate their employees at a higher level (than other agencies) and thus they attracted better personnel who were better able to compete for the fellowships. These people are in APROSC for other reasons too. There are more opportunities for research, and career advancement is better in APROSC.

The institutions from which the participants came were:

Agricultural Projects Service Center	14
Agricultural Development Bank Nepal	9
Department of Agriculture	4
Department of Food and Agricultural Marketing Services	2
Center for Economic Development and Administration of Tribhuvan University	1
National Planning Commission	1
Agricultural Inputs Corporation	1
Nepal Food Corporation	1

The Ph.D. Degree program was budgeted for three study awards, but only two were utilized. A third awardee was chosen for Ph.D. degree work but declined the opportunity when it became apparent that he was not an appropriate candidate. There was no other qualified person available in time to meet university deadlines. The funds saved were thus used to support four Masters degree trainees. One Ph.D. awardee is from the MOA and is studying Agriculture Economics at the University of Wisconsin. The other is from APROSC and is studying Resource Economics at the University of Florida. The two Ph.D. candidates are progressing well and will return in 1983 and 1984, respectively. The cost of one Ph.D. program was approximately \$68,000 and the cost of one Masters program was approximately \$17,000.

The selection process followed by ADC merits consideration in evaluating the degree training phase of the project - a phase with 100 percent success in completion of degree training to date. This process spanned nearly a year from the time the availability of fellowships was announced

until the successful applicants entered graduate school. First, it involved conferences with MOA officials to obtain a list of potential candidates and the collection of biodata and scholastic data from each. Then followed a local review of the data and the elimination of those without first-class records and more than 30 years of age. A Bachelors degree from a recognized institution in India or a Masters degree from a local institution was required as well as an adequate knowledge of English and Mathematics. Personal interviews followed to determine if the applicants had an appropriate background, past research experience and an interest in future work in the social science area. Thus, the list of candidates was reduced to about the number of fellowships to be awarded.

All data concerning the final candidates were forwarded to Bangkok where a selection committee consisting of the ADC regional director, the ADC fellowship director and four representatives of Asian universities made the final decisions (including the institutions to which they should go, thereby matching student interest with program availability). These decisions were made in conjunction with decisions regarding applicants from other Asian countries. This phase of the selection process eliminated any efforts to influence the selection process. With a highly selective process, the possibility of student failure was minimized.

As was noted earlier, APROSC and ADBN were able to compete much better for these fellowships. APROSC and ADBN can offer greater remuneration and better career possibilities to bright young people because they are public corporations with strong cash flows and more flexible regulations than regular HMG departments. Well qualified people, therefore, gravitate to these two organizations. Also, there are more social scientists in these two organizations. This concentration in APROSC and ADBN of ADC fellowships was noted by HMG officials and staff from international organizations as both positive and negative. The MOA needs one strong research institution, and APROSC is now filling that need. Even the high number of fellowships awarded to APROSC will not be sufficient to meet its needs. ADBN needs a strong group of economists since it is engaged in providing credit to the entire agricultural sector. A focus on these two institutions was noted as positive for the above reasons.

But the choice to put resources into these two institutions was not based on need but rather on ability to supply well-qualified people. There may have been more people in the other institutions who could have been qualified with some remedial help, but ADC was not provided with the resources to supply that help. ADC's selection process was excellent, and the returnees are filling posts in a way that closely meets HMG's needs.

Those selected for Masters degree training had lower-middle-level positions, were 27-28 years of age and consisted of 32 men and one woman. The Ph.D. candidates had middle-level positions, were 30 years of age and both were men.

At the time of this evaluation, 20 of the Masters degree candidates had completed their degrees and returned to Nepal. The other 13 plus the Ph.D. candidates had not completed their study programs. Of the 20 returnees, 19 returned to the same agency as before the study period; one transferred from the DA to the MOA and to a higher level job. Of the 19 that returned to the same agency, 11 were at the same level while eight were at a higher grade level.

The impact of the degree training has two aspects - the impact of the training on the individuals who were trained and the impact of those individuals on the Government of Nepal. Twelve of the Masters students who have returned were interviewed. In addition, two ADC fellows who were funded with ADC money before the beginning of this Project were also interviewed.

The Masters degree people were all of a high caliber, and they all had either a Bachelors degree from an Indian University or a Masters degree from Tribhuvan University. Government officials in the MOA have stated that training at the Bachelors level in India and at the Masters level in Nepal is not sufficient to do the research and analysis that is needed. All but one of the Masters graduates stated that before their training they were not able to do the research and analysis activities that they are now called upon to do. Several of the government officers and two of the Masters graduates mentioned an increased confidence to take greater research responsibilities as an outcome of the training. Seven of the graduates stated that before their Masters they were members of research teams but afterwards they were team leaders. Some of these teams are large and have both Nepali and foreign members. The competence and confidence they now have, therefore, can be attributed to the Masters training that was built on a strong base.

The theses of the graduates show a high standard of scholarship. The evaluation team asked the graduates to explain their thesis studies and other research they had done since returning. All of the graduates were able to give a good description of the studies and findings, and most gave very good explanations. All but two of the graduates interviewed are still in positions that use the skills they acquired. One Masters graduate is now working on his Ph.D. in the U.S.

Most of these people are in positions that require them to design research and evaluation studies, analyze research results and draw conclusions from data sources. In their Masters training, courses in statistics and research methodology were, therefore, very important. The most valuable experience was the Masters thesis where students had to identify a research subject, design a study, collect data, analyze that data and draw conclusions. Since many of the studies in which they are now engaged are direct requests from international organizations (e.g. World Bank, ADB, USAID and UNDP), English is the preferred medium. Studying for a Masters in English medium has been helpful, but preparing a thesis in English has been even more important in improving their ability to communicate in English.

Some of the graduates interviewed said that they did not have a specific course in research methodology, and two were not required to do a thesis as they were enrolled for a Master of Business Administration degree. Several graduates mentioned that courses in management would have been helpful. Seven of the graduates mentioned that they are involved in project appraisal, design and evaluation, and they feel they need training in these areas. The graduates feel that most of these topics could be adequately covered in short-term training in or outside Nepal. Most of the participants also felt that Ph.D. training would be necessary for them to do a really good job in their research. All of these people have had an increase in the scope of their work, but only nine have had their salary or government position raised. Six of the seven increases in position in APROSC in 1981 were ADC fellows. Since most have recently returned, advancement in the bureaucracy should come later. All did accumulate promotion points, and when positions become available, these people should be able to compete. Six of the 20 project supported Masters graduates have been accepted in or are actively seeking a Ph.D. program.

Except for Andhra University, the graduates had a good opinion of the schools in which they studied. Andhra University was considered weak and the student body was in turmoil. The graduates from Los Banos and Thammasat suggested that these schools should be reviewed, since some of their best faculty were scheduled to leave soon.

Only one of the 35 Masters and Ph.D. students sent for training was a woman. This is equal to 3.8 percent of the total number. According to July 1978 statistics from HMG, Department of Administrative Management, 3.23 percent of the total number of Gazetted Officers (all Masters and Ph.D. trainees would be from the Gazetted classes) were women. When all the ADC fellows are considered, those who were sent before the project and those during the project, women represented two of the 48. This is equal to 4.16 percent, and one of the women was sent for her Ph.D. In addition, ADC has provided funds for a Nepali woman to do field research in Nepal on her Ph.D. from a university in Bombay. The 4.16 percent is a very small proportion, but even the 3.8 percent is greater than the occurrence of women in the pool of potential candidates. In AID's Assessing the Impact of Development Projects on Women, the question is asked, "under what conditions are women least likely to be disadvantaged by development projects, both in absolute terms and relative to men?" Women in the pool of possible applicants were not further disadvantaged by this Project. The Women of Nepal, though, were further disadvantaged since the educational gulf between men and women was widened. Men will be better able to compete for positions of authority. The ADC Specialist stated that a strong effort was made to find qualified women.

In summary, the Masters graduates were of a high calibre to begin with, generally received good training and did well in their studies. Most are still in positions that require research, analysis and evaluation. The graduates have, for the most part, not yet benefited by increases in pay or work status, but that should come with time. Women were part of the

training in the same proportion that they exist in the pool of candidates, but that is still a very small group.

Twenty Masters graduates have returned to Nepal, and these people are now beginning to have an affect on HMG. The evaluation team questioned Dr. Sainju of the National Planning Commission about whether this training fit into overall HMG manpower priorities. He said the proper question was did it fit into MOA priorities. MOA officials strongly supported the training as filling a critical need. According to ADC figures, this project has increased the number of Ph.D. and foreign trained Masters graduates in social sciences within the MOA by around 150 percent, and MOA officials said that the previous lack of social science capability had hindered research efforts.

The degree training was to "improve the GON capacity in agriculture research and development planning." It did increase the capacity for research. An improvement in the ability of APROSC in particular to do research was noted by the World Bank, AID and HMG officials. A review of APROSC research studies coordinated by an ADC fellow and a non-ADC fellow, respectively, showed a definite improvement in quality. These statements are qualified that further improvement is needed at APROSC, and that usually some foreign consultant help is still needed in research projects. Further improvement is built into the project since 14 Masters graduates have not yet returned (four from APROSC) and two Ph.D. candidates have not yet returned (one from APROSC). In addition, these and the returned graduates should improve with on-the-job experience, and some of the returnees are receiving short-term and Ph.D. training from other sources. The officials in charge of the other MOA sections (ADB, DFAMS, DA, etc.) have all stated that the trained people have increased the research capability of their institutions.

These returnees are also passing on some of their new skills. Most stated that their research assistants needed broad, basic training. Eight of the graduates interviewed said that they are involved in some kind of formal or informal training of junior staff. In APROSC the group of returned ADC fellows have formed a support network that continues to expand their own training.

Development planning was not a specific field of study for any of the Masters graduates, and the project proposal states that the degree training should focus on research and non-degree training on planning. Development planning has been helped by improvement in research which supplies information and data to the planning process. Most of the graduates are working directly in the planning process as consultants to planning bodies or in project identification, appraisal, feasibility and design. Their training has given them a general background that is helping them do this kind of planning work, but the graduates interviewed said that they had no courses in planning. When asked a general question about training needs, most graduates mentioned project appraisal, feasibility studies and project design as areas in which they needed further training.

The goals of the Project focus on a more productive use of Nepal's human and material resources. The evaluation team cannot measure a direct effect. The research section of this report shows that the Masters theses, the Project research and other research conducted by Masters graduates point the way toward a more efficient use of these resources. The research section of this report also notes some direct effects on policy from the research.

The goals of the Project also focused on making more productive use of the ICP technology. As stated in the second annual report of the project, this objective was postponed until the last two years of the project, but in the fourth annual report, it was stated that this phase was not implemented because:

1. The ICP had established its own socio-economic unit that did work regarding the adoption of production technology which HMG thought should not be duplicated, and
2. The Project should use its limited resources to implement the other objectives.

There is no indication that the Masters training was focused on the ICP, but some of the thesis work (Ramesh Shrestha, Tek Bahadur Shrestha and Ganesh Thapa, for example) should provide useful information that will lead to a more productive use of ICP technology. One of the seminars did focus on ICP technology, and many of the graduates participated in that.

The theses also show a level of attention to the rural poor (Bekha Maharjan, Prakash Aryal and Krishna Maharjan, for example). The hill area was also a focus of some of the these (Bishnu Silwal, Devendra Chapagain and Ramesh Sharma, for example).

The question of impact on HMG of this training requires a restatement of the goal of the project. If the goal is seen as producing an institutional capacity to do social science research that is functioning and improving, the Masters and Ph.D. training has made an impact that will continue to grow over the next few years.

Non-degree Training

The non-degree training was meant to have a special emphasis on development planning for mid-career professionals. Many HMG officials who were not eligible for degree training due to age or academic performance were able to benefit from training relevant to their work. Fifty percent of the training person-months took place in Nepal and 50 percent took place outside Nepal.

The number of persons involved, the training topic and the training agency or agencies are as follows:

<u>Number of</u>		<u>Topic</u>	<u>Agency</u>
<u>Men</u>	<u>Women</u>		
2	0	Agricultural Capital Project Analysis	U.S.D.A., Washington
1	0	Information Systems and Data Management	Asian Institute of Technology, Bangkok
1	0	Managing Computer Center and Information Systems Management	Asian Institute of Technology, Bangkok
2	0	Project Appraisal Techniques	Agricultural Banking College, Poona
1	0	Management Education Program	Indian Institute of Management, Ahmedabad
1	0	Designing Projects for Agricultural Development	"
21	3	Agricultural Development and Administration	Kasetsart University, Bangkok, and Project
0	16	Agribusiness for Nepalese Women	"
16	4	Statistical Framework for Monitoring Rural Area Development Projects	APROSC and Project
22	3	Food and Agricultural Marketing Statistics	UNSIAP and Project
13	0	Computer Programming and Application	Project and APPLE Users Assn.

The non-degree training falls into three categories:

1. Eight people were sent for training in six different specific training courses outside of Nepal,
2. Forty people were sent for training in two training programs organized by ADC in Thailand, and
3. Fifty-eight people were trained in three course arranged by ADC in Nepal.

The first category was ad hoc responses by ADC to requests by the MOA to send Nepalis to established short-term courses. The person sent to the Management Education Program in Ahmedabad was the only participant interviewed. The course he attended was very good and was designed along the lines of Harvard's three-month management training course. The course used the case study method with 25 percent of the cases from the Harvard course, 25 percent from a similar course in the Philippines and 50 percent designed around Indian situations. The participant was a financial manager at APROSC, and he said that the course broadened his understanding of all the different elements of management. He also said that this training has helped him to bring better coordination to the financial side of APROSC.

The USDA, the Asian Institute of Technology and the Indian Institute of Management all have good reputations. The quality of the courses, therefore, can be assumed to be high.

All but one of these trainees were from APROSC, five were economists, one was an accountant and one was a statistician. The people sent to the courses, their positions in the MOA and the objectives of the courses all appear to match well. For example, Mr. Bista was sent for training to a course in managing computer centers and to a course in information systems management. In fact, he manages the APROSC computer center and data bank.

This category of training affected the fewest people. It appears to have been well managed and to have added needed skills to the MOA. This category of training is flexible and can quickly respond to specific needs, but it also requires a high management input by Project personnel. Almost the same amount of input is required for a one person training program as for a program with 10. There were two programs in the second category, Agricultural Development and Administration (ADA) and Agribusiness for Nepalese Women (ANW). The ADA course consisted of five weeks of lectures, discussions and field visits designed to:

1. Help participants identify skills and insights in managing agricultural and rural development programs and projects,
2. Acquaint participants with the use of practical techniques in investment analysis as applied to the problems of agribusiness, agricultural production and other aspects of rural development,
3. Develop administrative abilities and competence in the use of management tools for planning, monitoring and evaluating project implementation, and
4. Provide exposure to several on-going and completed agricultural development projects in the Central Plain of Thailand through field trip studies.

More than half of the participants were from outside Kathmandu. Five different MOA departments and public corporations were represented. The one participant interviewed commented that the training was effective in giving a broad background, but that it had not helped him in any specific aspect of his job. His job, though, was not directly concerned with administration. The training staff appears to have been very strong.

The ANW training was a two-week course of lectures, discussions and field visits. The 16 participants came from a wide range of MOA agencies, public corporations, banks, the University, the National Planning Commission and the Women Services Coordinating Committee.

Here again the training staff appears to have been very strong. The one participant interviewed from this course enjoyed it, but she, too, was not involved in work that directly pertained to the subject matter.

This category of training was an attempt to provide Nepalis with the rich training resources that exist in Thailand. The sample of participants was too small to draw conclusions, but this category of training appeared to be less valuable than the other two. The training was well organized, and was probably more valuable than this small sample indicates.

The third category of training consisted of three courses in Nepal, and all three were focused on statistical data.

Statistical Framework for Monitoring Rural Area Development Projects was a three-week workshop focused on monitoring rural development projects. Participants came from the National Planning Commission, Central Bureau of Statistics, Department of Food and Agriculture Marketing Services, Agriculture Development Bank, Ministry of Agriculture, APROSC, Nepal Resettlement Company and the Ministry of Home and Panchayat. No participants from this program were interviewed.

The Computer Programming and Application courses were for 11 participants, predominantly from APROSC. They were taught during a three-week course how to use the APROSC Hewlett-Packard computer. The trainees interviewed found the course to be efficient and complete. The computer is now being used by these people without assistance.

The Food and Agricultural Marketing Statistics course was a one-month course that focused on:

1. Supply/utilization accounts of food and agricultural commodities,
2. Food balance sheets,
3. Food consumption statistics and survey techniques, and
4. Economic accounts for agriculture.

The course drew half of its trainees from the Department of Food and Agricultural Marketing Services and half from other agencies involved in agriculture.

The Director General of the DFAMS and several of the participants said that the course was very useful, and the course has already had an effect. The food balance sheet produced by the DFAMS has been expanded and improved as a result of this workshop. The DFAMS is also beginning a food consumption survey based on techniques learned in the training.

This category of training appears to have been successful because it focused on useful skills that could be put to immediate use.

Women represented 24.5 percent of the total number of trainees involved in this training. When the Agribusiness for Nepalese Women program is dropped, the percentage of women falls to 11 percent. This is much better than the degree training rate and both the 11 percent and 24.5 percent rates are much higher than the general participation of women in government service.

The issues of the ICP technology, the hills and the rural poor are not directly dealt with by these training programs. The HMG capacity in research and development planning were positively affected.

In summary, this training was useful to the project goals, was well managed and was effective. The training appears to have been most valuable when it focused on skills that could be immediately used. Otherwise basic exposure can also be useful.

Seminars

Another area of activity in the Project was the organization of a number of seminars, workshops and study tours to get HMG officials involved with and exposed to the development process of agricultural modernization. To this end, the project sponsored three types of seminars in Nepal, supported selected social scientists to attend seminars outside the country, and sponsored study tours. Seven major seminars were sponsored in cooperation with government agencies. Three of these were three-day seminars, two were five-day seminars, one a two-day seminar and one a one-day seminar. The number of men and women that attended each of the major seminars, the seminar topics and the agencies that organized and implemented the seminars are given in tabular form below. In each of the seminars, knowledgeable people from Nepal (plus for two seminars, experts from other countries) presented papers (ranging from one to 22 papers per seminar) that reported essentially the "state of the art" for the topics involved and presented recommendations for improvements.

<u>Number of</u>		<u>Topic</u>	<u>Duration</u> (Days)	<u>Agencies</u>
<u>Men</u>	<u>Women</u>			
29	0	Water Management and Control at the Farm Level in Nepal	3	APROSC and Project
34	1	Farm Resource Allocation for Efficient Crop and Livestock System in Nepal	3	APROSC and Project
41	2	Interagency Cooperation and Coordination in Program Planning, Implementation and Evaluation at the Ministry Level	2	EPAD and Project
32	1	Job Satisfaction Problems in Agricultural Development in Nepal	1	EPAD and Project
84	1	Nepal's Experience in Hill Agricultural Development	5	MFA and Project
22	50	Integration of Women in the Main Stream of National Development	3	WSCC and Project
89	5	Appropriate Technology for Hill Farming Systems	5	DA, ICP and Project

In addition to the major seminars, four smaller two-hour seminars were given by visiting scientists and four were given by ADC fellows who had used Nepalese data for their theses.

The project sponsored four young economists to attend the 40th Conference of the Indian Society of Agricultural Economists in Poona, a woman from the WSCC to attend a seminar in Japan regarding the Importance of By-passed Areas in Asian Economic Development, and a resource economist from CEDA to attend a workshop regarding Investment Decisions to Further Develop and Make Use of Southeast Asia's Irrigation Resources held in Bangkok. During the Project period, five study tours were provided, generally to top officials of the MOA.

Seminars provide a forum for the exchange of views on the problems of agricultural development and a means of identifying problem areas for research and development planning. Organizing seminars, sending persons to participate in seminars organized by others, and organizing study tours were important supporting services to strengthen communication between the project staff and HMG officials.

The one-hour seminars presented by foreign scientists provided an opportunity for local scientists to become acquainted with reknown scientists and to learn briefly of their work. Those presented by returned ADC fellows provided an opportunity for the fellows to present their thesis studies to their colleagues. Study tours presented unusual opportunities for selected officials to learn of relevant operations elsewhere. These officials, in some cases, prepared reports regarding their findings and distributed them to appropriate people. The attendance at foreign seminars and workshops contributed to the professional growth of the participants. All of these activities were useful and their cost was minimal. The participants interviewed from these activities gave the same comments as listed above.

The first few major seminars given in Nepal followed a traditional format of a few people giving papers to a gathering of government officials. The last three - Hill Experience, Integration of Women and Hill Technolgoy - have all drawn high praise. An attempt was made in the two Hill seminars to link young social scientists with HMG policy makers as co-authors of seminar papers. This gave the policy makers a more direct and personal interest in the seminar while it provided the younger scientists with the opportunity to actively participate and express their own views. All seminar participants remember these two Hill seminars and felt that they were useful. The Women seminar led to a series of recommendations with follow-up activities by HMG policy makers.

The interagency cooperation seminar was the first of its kind to draw together top-level personnel of ministries and line agencies engaged in rural development programs.

The participation of women in the seven major seminars averaged 15 percent. When the seminar focusing on women is dropped, the involvement of women falls to 3 percent. The hills and the rural poor were a major focus of the seminars, and three seminars covered topics useful to the ICP.

In general, seminar activities made research findings available to policy and planning people. The last three seminars, expecially, were well designed and brought policy people into contact with research findings.

Research

Output

It should be noted that the research activity of the Project largely followed the training periods of the degree candidates. Thus, for the Masters degree, at least two years would elapse before research work, other than thesis, could begin; for the Ph.D. degree, four years would be a minimum. Then research could be planned, undertaken, completed and results prepared for publication and published. In essence, this means

that the research activity and report preparation were generally concentrated in the latter half or so of the Project. And given the returned and soon-to-return degree holders, research studies and report preparation will continue to be important activities.

The research activities sponsored under the Project include those in which the ADC staff participated directly, as:

1. Productivity and Production Constraints,
2. Job Environment and Job Consciousness of Agricultural Graduates under the MFAI,
3. Socio-Economic Aspects of Livestock Production in Western Hill and Mountain Areas of Nepal, and
4. Development Potential in Nepal's Hill Agriculture.

In addition, there were research activities technically and financially supported by the Project, as:

1. Agricultural Price Policies for Foodgrains in Nepal,
2. Problems and Prospects of Jute Cultivation, Trading and Manufacturing in Nepal,
3. Efficiency on Tobacco Farms and Constraints in Production and Marketing,
4. Repayment Performance of Small Farmer's Groups, and
5. Optimum Pumpset Size for Different Farm Sizes in the Terai.

Lastly, the ADC staff provided assistance in methodology for two studies conducted by members of APROSC's staff and, of course, assisted in the thesis studies of the degree candidates which represented research activities not covered by the research studies listed above.

The research publications include 13 that have been published, three that are in press, five that are being edited, seven that are in various early-stages of preparation, and four that will be preliminary, condensed reports of ongoing research studies.

The 13 studies published in the Research Paper Series include:

1. Bekha L. Maharjan, "Intermediate Technology: Alternative Production Systems for Small Farms in Nepal," Feb. 1980,
2. Devendra P. Chapagain, "Agricultural Productivity Pattern in Nepal and Its Regional Variations," Feb. 1980,

3. Som P. Pudasaini, "Farm Mechanization, Employment, and Income in Nepal: Traditional and Mechanized Farming in Bara District," Feb. 1980,
4. Ganesh P. Rauniyar, "An Economic Analysis of Flue-Cured Tobacco in Nepal," Mar. 1980,
5. Ramesh P. Sharma, "Uncertainty and Subjective Beliefs in the Adoption of Modern Farming Techniques: A Case Study of Nepalese Farmers," Apr. 1980,
6. Arjun J. Shah, "The Determinants of Demand for Agricultural Labor in Laguna (Philippines) Rice Farms," May 1980,
7. Tek B. Shrestha, "Job Environment and Job Consciousness of Agricultural Graduates under the Ministry of Food, Agriculture and Irrigation," Sept. 1980,
8. Ganesh B. Thapa and James A. Rounmasset, "The Economics of Tractor Ownership and Use in Nepal Terai," Dec. 1980,
9. Govind Koirala, "The Impact of Agricultural Credit on Farms in the Rupandehi District of Nepal," Mar. 1981,
10. Vijaya Shrestha, "Community Leadership in Rural Nepal," June 1981,
11. Tilak Rawal, "An Analysis of Factors Affecting the Adoption of Modern Varieties in Eastern Nepal," Sept. 1981,
12. Bharat B. Karki, "The Impact of Modern Varieties of Rice on Farmer's Income and Income Distribution in Eastern Nepal," Sept. 1981, and
13. Tilak Rawal, Bharat B. Karki and J. C. Flinn, "Rice Production in the Terai of Kosi Zone, Nepal," Sept. 1981.

Research papers in press include:

1. C.M. Rokaya, "The Impact of the Small-Farm Credit Program in Nepal on Output, Net Income and Adoption of New Methods,"
2. Madhav R. Khoju, "Economics of Pump Irrigation in Eastern Nepal," and
3. Dibakar Poudyal, "Crop-Livestock Based Farming Systems".

Research papers in the process of being edited include (tentative titles):

1. Sushil Pandey, "Inclusion of Risk in Project Evaluation,"
2. Bishnu B. Silwal, "An Economic Analysis of the Tea Industry in Nepal,"
3. Champak Pokharel, "Comparative Study of Chemical Fertilizer and Farmyard Manure in Nepal,"
4. Sushil Pandey, "Supply Response of Australian Agriculture" and
5. Ramesh Sharma, "Resource Allocation in Agricultural Research".

Research papers in various early-stages of preparation include (tentative titles):

1. Krishna H. Maharjan, "Factors Affecting Repayment Performance of Small Farmers in Nepal,"
2. Shyam K. Poudyal, "Resource Use Efficiency in Nepalese Agriculture - A Comparative Study of Agriculturally Developed and Underdeveloped Regions,"
3. Prakash C. Aryal, "Employment and Unemployment of Agricultural Labor in Nepal - A Case Study of Two Villages,"
4. Raghu N. Shrestha, "Technological Change in Agriculture in Bicol Region, Philippines,"
5. Bharat K. Mainali, "Income, Productivity and Labor Utilization on Rice Farms in Chitwan District, Nepal,"
6. Purushottam Mudbhary and Malcolm Iles, "Grain Storage in Nepal," and
7. Shiva P. Sharma, "Contractual Arrangements in Paddy Farms of Nepal."

Preliminary, condensed reports, based on ongoing research studies, are planned as follows:

1. Govinda Koirala and Ganesh Rauniyar, "Assessing Efficiency of Tobacco Farms and Identifying Constraints in Production and Marketing,"
2. Thakur N. Pant, Ganesh Thapa and Pramod Lohani, "A Study on Problems and Prospects of Jute Cultivation, Trading and Manufacturing in Nepal,"

3. Krishna H. Maharjan, "Repayment Performances of Small Farmers Groups," and
4. Madhav Khoju, K. M. Singh and C. M. Rokaya, "Optimum Pumpset Size for Different Farm Sizes in the Terai."

The original Project proposal contained no precise statement regarding what and how many research studies would be undertaken. Rather the Project concerned itself with qualitative criteria that concerned both conceptual and analytical aspects as:

1. Conceptual: The formulation of studies to provide policy makers, ICP scientists and administrators with social-science insights needed to address particular problem areas, and
2. Analytical: The use of appropriate methodologies, the incorporation of such capacities into the institutions conducting the research, replication of studies without foreign assistance, and use of techniques as "building blocks" upon which more sophisticated techniques may be developed if necessary.

To facilitate research activities, the commodity budget was used to acquire a Hewlett-Packard 9825A mini-computer, APPLE II mini-computer, 15 desk calculators and three jeeps. (The latter were used for training activities also.) The acquisition of the second mini-computer reflected the increased demand for computer services and the larger data bases that have been developed.

Two considerations emerge from this analysis and related interviews with knowledgeable individuals. They are:

1. Three of the reports (published or to be published) concerned non-Nepal studies, two about the Philippines and one about Australia. These resulted from one person being asked to do a special job as a thesis for his foreign professor, another person lacked funds to return to Nepal and collect research data for a thesis, and it was the personal choice of another.

The general practice for those who had to present a thesis was to have them return to Nepal, after a year or so of graduate work, select a topic and collect appropriate data for the study. However, the selection of thesis topics resulted from a mixture of ideas - largely of the agencies from which the trainees came but also of the professors with whom the trainees worked, and of the trainees. However, the topics were generally agreed upon with ADC's knowledge and the knowledge of the trainees' parent organization.

ADC considers the selection of a thesis topic and collecting the essential data to be too far advanced for the Masters degree trainees to accomplish prior to a year or so of graduate study. However, some of the Masters degree trainees have had previous research experience. For these people, it would appear to be appropriate for them, under the guidance of the ADC Research Specialist, to select a thesis topic and collect the appropriate thesis data prior to departing for graduate study. For the others, ADC would become involved when, and if, the students return for thesis purposes.

To facilitate research in the social sciences, it is important that the trainees, except for those in business administration, have the valuable experience of conducting a research study, analyzing the data and preparing a thesis.

There are advantages to be gained in having the students return to Nepal, after a year or so of graduate study, to conduct a thesis study; there are also advantages to be gained in having the study conducted prior to leaving for graduate work, especially if the person has had some research experience. Given the importance of a thesis, it is also important, insofar as possible, that the thesis concern a topic of significance to Nepal in general and the students' parent agency in particular.

2. Given five facts, as follows:
 - a. The relatively few people trained,
 - b. The other duties these people have,
 - c. All training did not start immediately upon approval of the Project,
 - d. The time required to complete training programs, and
 - e. The time needed to undertake and complete a research study.

It is evident that the amount of research work undertaken, the number of different people involved, and the resulting publications and papers in process represent a significant accomplishment.

Impact

The research studies undertaken through this Project, with three exceptions (the Philippine and the Australian studies done as MA theses) provided relevant social-science information to MOA officials involved in policy making operations. Of the 13 reports published, three had specific sections dealing with the policy implications of the results, six had a limited amount of information re policy implications while four had none, thereby leaving any policy implications to the reader. Since the reports had no Table of Contents, it was difficult to find the sections on policy implications even in the reports that had them.

Topics for thesis studies, for example, represented a mixture of ideas. The greatest input in the selection of topics was provided by the agencies from which the trainees were selected. Thus, the topics were relevant to the information needs of the agencies. However, the trainees' professors influenced the choice of topics as did the desires and interests of the trainees. For the latter two sources of inputs, although minor, the topics may or may not have been relevant. Certainly the Philippine and Australian studies would not be relevant but, no doubt, had value in providing experience with the methodology needed for different types of studies.

The other research studies undertaken were all relevant to the information needs of the government as the studies were requested by the agencies represented by the workers. The various government agencies have an awareness of the problems that need to be studied and these were often discussed and sanctioned in the periodic meetings of USAID, ADC and MOA officials. Though no prioritized list of problems for study was available, the method used was a logical substitute. Some examples: The tobacco study was requested by the ADBN and the Tobacco Development Board, the pumpset study by the ADBN to facilitate its loan operations for irrigation, the jute study by the MOA in its concern to further develop the industry, and the repayment performance study by the ADBN as part of its loan operations. However, problems faced by government agencies change from time to time, often frequently, and a problem of importance at one time may not be a major problem later or one of the more persistent problems. And a given situation may become a new problem area. All this requires substantial flexibility in research operations to insure continued relevance.

The quality of the research, the appropriateness of the methodologies used, and the quality of the research publications may be evaluated in one or more of three ways - by the graduate institutions involved for thesis studies, by the directors or scientists involved in supervising the preparation of the theses, and by examining the publications.

Eleven of the 13 published reports represented condensed versions of theses presented in partial fulfillment of the requirements for the Masters (nine theses) or Ph.D. (two theses) degrees. That the theses were accepted in fulfillment of degree requirements is of significance itself. The Evaluation Team is quite familiar with the high quality standards existing at three of the graduate institutions that awarded eight degrees and believes that the other three institutions that awarded three degrees have high standards also. This suggests that the research, the methodologies used and the research reports are quality products.

Not all of the research reports carried footnotes that indicated the professors or scientists under whose direction the thesis studies were conducted. However, there were nine instances where the professors or scientists involved as directors or advisors to the thesis studies were known by the Evaluation Team. Thus, the Team is sure that only quality products and procedures were involved.

Careful examination of the research reports revealed that a detailed level of analysis was involved, that sophisticated statistical tools were used, and that a scholarly level of writing was employed. However, the latter may have resulted in the reports being of most use to colleagues having similar or higher levels of training. Terms like "loglinear Cobb-Douglas production function," "regression coefficient," "marginal factor cost," "dummy variable," "factor productivity" and "probability density function," to mention a few, are likely to be understood by only a small proportion of the potential users of the results. In fact, several MOA officials admitted they had not read all of the reports, a few had only read part of them, and one important official had just read the conclusion sections. It is likely that no one had read all of each report.

Research methodologies, procedures and techniques represent an integral part of the training of the recipients of the study grants, although the type differed for those who majored in business administration and agricultural business management. Of the 20 participants who have returned from graduate study, 19 returned to their original agency and job. Only one moved to a different agency and higher level job. Thus, it should be evident that the agencies involved, through the capabilities of the returned persons, have the capacity to conduct research comparable to that represented by the thesis studies with little or no technical assistance from foreign sources. The personnel are reported to be good in the descriptive, methodological and analytical phases of research with which they are familiar. However, due to the lack of experience with a wide variety of studies, a study that differs much from the thesis studies generally requires assistance from foreign sources, typically the ADC staff.

The financial resources required to fully develop the research capacities of APROSC, the major agency involved, are reportedly lacking. It has no budgetary item from the government, thus a need for financial assistance from other agencies or foreign sources. Assistance from foreign sources apparently will be needed in the area of drawing meaningful policy-implication conclusions. This likely results from inexperience on the part of the research workers and should be self-correcting given time and additional studies. How has the research contributed to the achievement of the Project purposes - to expand agricultural production and improve the well-being of rural areas? Here two facts should be noted. First, the above purpose was not implemented because ICP established its own socio-economic unit that did the work planned under this Project, and there was no need for duplication. Second, social science research seldom, if ever, has a direct effect upon such things as production and well-being. It is unlike other types of research, as varietal research which may develop an improved variety that promptly increases production and brings direct benefits to rural areas. Social science research largely operates indirectly through contributing to a better understanding of the diverse farming systems that prevail and development problems or by concerning itself with the problems of program implementation or the issues faced by implementing agencies.

By increasing the knowledge of policy makers of the rural sector, of farmers, of the conditions surrounding their operations, of their responses, and of the constraints to their efforts, increased capacity is developed within government agencies to develop appropriate policies, procedures and economic environments for the benefit of farmers. These, in turn, lead to increased output and greater benefits for the rural sector.

Of the 13 research reports published, 11 provided socio-economic information of relevance to policy makers (one concerned the Philippines and one the job environment and consciousness of college graduates in the MFAI). Of the 19 papers reportedly in process (in press, being edited, being prepared or preliminary from ongoing research), 17 will provide relevant information for government policy makers (one concerns the Philippines and one Australia).

Due to the nature of social science research, the impact of such on government policy is difficult to measure and evaluate. It is not easy to measure changes in the thinking patterns of policy makers. But these facts have been observed or otherwise noted.

An examination of research coordinated by a Project degree participant and by a nonparticipant for USAID shows that the former study was clearly quantitatively superior - this was largely a reflection of the degree training involved. The World Bank reports that the research conducted by APROSC shows the impact of increased research capacity and is superior to that of earlier years. As should be expected, there is still room for improvement, but this may, in part, reflect inadequate management of and experience with research.

Several of the degree holders have become involved in studies requested and sponsored by the World Bank, Food and Agriculture Organization, ESCAP, USAID, MOA and others. These studies, upon completion, should provide important policy-related information.

Some specific illustrations include:

1. A study of tobacco production led to a 10 percent increase in the support price for the crop.
2. A study of optimum pumpset size for farms of different sizes led to ADB acquiring, and providing as commodity loans, pumps of larger sizes than 5HP which had been the only size used.
3. Results of a study involving projections of possible outcomes and problems with different population and food production growth rates will be used by the National Population Commission to devise appropriate programs.
4. Data from a socio-economic study for an irrigation project were used by the Asian Development Bank in the design of the project.

5. A study for the MOA of cash crops identified the ones that represented the best investment opportunities and the problems involved with each.
6. ADBN research is generally problem specific - what is wrong, why and what strategy can be developed to correct the problems; the feasibility of various projects; and project design and evaluation work. For the former, the research is largely for in-house policy and operating procedures. On the other hand, the feasibility studies often lead to the development of financing programs. This was true for both coffee and tea production.
7. Results of a study of agricultural marketing and prices will be used by the Price Commission to establish policies.
8. One study involves the question of whether food procurement should be done by a private corporation or by the government - certainly a major policy question.
9. Implementation of \$100 million of infrastructure projects have been based (or will be), in part, upon APROSC research.
10. A study of the government-operated tool factory, a troubled agency, will lead to changes in its operations.
11. In addition to research, APROSC personnel are being increasingly called upon for advisory services: some were members of the Price Commission Task Force; two of 11 economists that participated in a Prime Minister's meeting on the state of the economy were from APROSC.

In summary, the number of research studies conducted and underway represents a notable achievement in so short a time following the return of the Masters degree holders. The quality of the research completed is scholarly and has shown a marked improvement over that for earlier years. Experience with a wider range of research methodologies is being gained through interaction with other returned degree holders and through the assistance of the ADC Research Specialist. And, perhaps most important, are the facts that (1) the research workers are being requested to conduct more policy-oriented research, and (2) the MOA and other officials of HMG are making use of the research results and of the research workers as advisors.

ADC Associate and Research Specialist

From the beginning of the Project to December 1977, Dr. William Bateson was the ADC Associate resident in Nepal. In September 1977, Dr. Veit Burger assumed the position of ADC Research Specialist and is still resident in Nepal. Dr. Shao-er Ong made periodic visits to Nepal while resident in Thailand between February and July of 1978. In August of

1978, Dr. Ong became the full-time resident ADC Associate in Nepal and finished his service in October of 1981. There were a total of 54 person/months of Associate and 60 person/months of Research Specialist provided.

No specific job description is given for the Associate or the Research Specialist in the Grant Agreement, but the Letter of Agreement between ADC and HMG states that the Specialist will be placed in the Evaluation and Project Analysis Division of the MOA and will devote his efforts to developing "a plan of research and training which will implement the objectives of the Project." The Associate was to be placed in APROSC and was to develop a program of activities including:

1. Participation in activities related to the Project,
2. Small research activities related to economic and human problems of agriculture and rural development in Nepal,
3. Consultations on matters of research design, analytical procedures and preparation of research results, and
4. Training of junior staff members in research methodology.

In addition, the Associate and Specialist were free to engage in ADC activities not directly related to the project as long as this did not adversely affect the Project or APROSC.

The duties of the Associate and Specialist were defined by Project needs. Both the Associate and Specialist were resident in APROSC because APROSC had more flexibility in providing support (rooms, services, etc). Also, it was felt that the implementation of Project activities would be more efficient if Project staff members were working in the same office. This departure from the Letter of Agreement between HMG and ADC was approved by the Ministry.

The project activities needed a team effort. In practice, however, the duties of the Associate and the Specialist, as given in the Letter of Agreement, were generally reversed. The Associate was the senior of the two positions. He designed the seminars and other activities and worked with senior HMG officials on policy matters and Project strategies while the Specialist assisted in implementing the Project activities. The Specialist worked closely with the middle-level staff to train and assist them.

This division of labor appears to have worked well. The senior officials of the MOA all gave a favorable report on the second Associate, Dr. Ong, and the seminars he designed (as an example) show a high degree of professional ability. All of the APROSC and ADBN people interviewed stated that they had used the services of the Specialist on a regular basis, and they all gave a favorable report on him.

Some MOA officials stated that they still feel the Specialist should have been placed in the EPAD, and most officials expressed negative feelings about the first ADC Associate. The final team, though, appears to have been very successful. The Associate was able to develop a good rapport with senior HMG officials, was well acquainted with institutions, officials and research workers in the rest of Asia, and was successful in designing some very innovative and useful activities for the Project. The Specialist was able to develop a good rapport with the junior members of the MOA's staff who are doing the real research work and was able to transfer needed skills to them.

Computers and Data Bank

The major pieces of research equipment supplied by the Project with grant funds were a Hewlett-Packard 9825A mini-computer, installed in late 1978, and an APPLE II mini-computer just being installed. The first computer is still operating and is being used at a good rate. Two consultants were supplied by the Project to help with training and programming. The staff of the Computer Unit received on-the-job training from the ADC Specialist throughout the Project period. One staff member has been sent for his Masters degree in statistics at the University of New England with Project funds and one will be sent in 1982 with ADC funds.

A package of programs for statistical and financial analysis was produced and the programs are now widely used by APROSC staff but also by ADBN, MOA and other agencies. This package is available in a self-learning text for use by people without programming knowledge. In addition, a large data base, some on tape and some in printed form, has been developed at APROSC and is being used as a source of secondary data by many projects. This appears to be a successful part of the project and the appearance of the first mini-computer shows every indication of full use.

Institution Building

This Project had two major effects upon the MOA. APROSC developed and became recognized as the major MOA research institution. In addition, ADBN and five other MOA departments or agencies, and public corporations now have (or will shortly when Masters and Ph.D. graduates return) a greater capacity for research and analysis in the social sciences. Individuals in the MOA have also been affected by the project through non-degree training and seminars. The degree training, though, provided the greatest effect.

The major institutional change that resulted from this Project was the development in APROSC of a substantially improved capacity and capability to conduct research. Fourteen of those sent for Masters degree training were from APROSC as was one of those sent for a Ph.D. degree. As of this time, 10 of the Masters degree people have completed their study programs and returned to APROSC. This raised the number of social scientists with advanced degrees from recognized universities from two to 12 and four

more Masters and one Ph.D. will be added when their degree programs have been completed. This represents a substantial increase in research capacity and capability, and it is being recognized as evidenced by the use being made of APROSC by various international agencies as well as the MOA.

Another institutional change is the enhanced capacity and capability for research within ADBN. From a base of five social scientists (with degrees from recognized universities), ADBN, with five returned degree holders, now has a staff of 10, and four more will be added upon completion of their degree programs. Although the type of research conducted by ADBN generally differs from that of APROSC, it should be evident ADBN has greater research strength that will be further enhanced as the remaining fellowship holders return from abroad.

The MOA is now considering making APROSC the official social science research wing of its policy and planning process. In many ways this has already happened. The research section of this report notes a number of policy and planning effects that can be attributed to APROSC. APROSC, the returned Masters graduates in the ADBN and the other ADC fellows in the MOA are supplying options to policy and planning officials. Before this Project, these options were often developed without research or based on foreign research. This capacity within the MOA should have a lasting effect.

Note was also made of direct effects from the seminars and non-degree training. In particular, the improved food balance sheet of the DFAMS. But indirect effects can also be assumed. Some people had specific skills developed; some were exposed to new ideas, and officials in policy and planning positions were brought together to exchange opinions and hear new ideas. These effects, too, will continue to improve the development process.

There is still no ongoing program of MOA funded social science research. All research in APROSC and the rest of the MOA is a response to program and project needs. This ensures that the research will have an effect. Since the agencies are asking for specific information, they usually use it. But the MOA should begin to develop a long range set of priorities for research and define a program to give it a clearer overall picture of the effects of MOA policies and the needs for policy changes.

APROSC has been improved by help from the ADC Associate and Specialist. Some of the Associate and Specialist expertise has been transferred to APROSC personnel, but it is not clear that APROSC could successfully carry on the research, publications, seminars and short-term training of the Project without help. Maybe this is too much to expect in such a short period of time. The most important function of the two ADC staff members, from an institutional point of view, was the research advisory services in methodology and analytical procedures. APROSC and ADBN staff have been using the ADC staff for help in methodology and analytical procedures, and this help has contributed to the improved level of research.

This assistance has been institutionalized in that some of the staff now have a greater command of these skills, but there is no APROSC office that will be supplying this advisory service when ADC leaves. There is a Ph.D. holder in APROSC, and one more will return soon. One of these people could take over this ADC function, but no firm plans yet exist for this.

Within the MOA, links between the ADC fellows in APROSC and in the other agencies are strengthened by the APROSC policy of pulling in research workers from other institutions for temporary work. The ADC staff has been providing copies of important research articles to all of their fellows and to other people in Nepal. The seminars and non-degree training brought together people from a wide range of Nepali and international institutions. Parts of this network should continue on an informal basis after the Project staff leaves.

Program Implications

There are several elements in the design of this Project that should be noted for consideration in any future program. Some of these elements contributed to the success of the Project but some hindered that success.

The selection process outlined in the training section contributed to the success of the degree training program. This selection process should be considered a model for other projects. This process, though, was not linked to an HMG list of priorities. Had there been a list of how many people for each agency and particularly a target for the involvement of women, the Project could have spent resources on up-grading the qualifications of good but unqualified candidates through short-term training. This might have made a difference in the composition of the group of ADC fellows while still adhering to the high standards of their selection process.

The thesis process of the people sent for degrees was a strong element contributing to the success of the Project. Attention should be paid to increasing the effectiveness of this process where possible.

There was a lack of clear focus on one institution in the project design. The emphasis on APROSC developed during the program and has proved to be successful. Any future project should take note of the distribution of ADC fellows and work out a plan with HMG to expand on this strong base. A strong focus on APROSC should be included in this plan.

There was no national research plan formulated by the MOA. This would have given a focus and support to the ADC sponsored research and to the thesis research. HMG should be ready in any future project to make a commitment to an on-going program of social science research.

The seminar design used in the latter large seminars, focused on the hills, was very creative. Senior policy and planning officials have skills and knowledge but no time for research and writing. Linking them with young, well-trained social scientists provides these senior officials with a chance to use their experience and make it available to the rest of HMG. The exchange that took place at these seminars was more productive because these officials had a personal stake in the proceedings.

The use of a team of a senior consultant (ADC Associate) and a junior consultant (ADC Specialist) who had responsibilities divided in the way they are in HMG was an interesting aspect of the Project. The senior consultant worked well with senior HMG officials and the junior consultant worked well with the project trainees. There was, of course, overlap between the two areas of responsibility, but the Nepalis responded well to having an older senior person to deal with senior officials. The middle level staff felt more comfortable having a younger person to call on for help.

Note should be made of ADC as an organization. ADC has a resident regional staff in Asia. That staff was very helpful in making arrangements for this project's activities and supporting the Project in many other ways. The ADC Project was flexible and was able to respond to small requests because their support and administrative staff in the U.S. understood this need. The on-going ADC activities in other countries produced a rich flow of information through the Associate and Specialist's office. They made this information (books, articles, reports and other sources) available to their ADC fellows and to others.

USAID and its ongoing projects should support the further development of these well-trained people by making use of them. The research and analysis capacity of APROSC and the ADBN, particularly, should be called upon. The ICP could begin to use these resources to augment their own, and the problem of moving ICP technology into the hill areas could be studied by people trained under this project. USAID should also consider the returned ADC Masters fellows for Ph.D. programs if they become available.

The MOA has needs for further training in many different areas. This project was focused only on the social sciences. All of the MOA's different agencies need more well-trained people in economics, agriculture and statistics both at degree levels and in short-term training. The planning process needs more people trained in project identification, design, monitoring and evaluation, but some of this can be done using existing established short-term courses. The project sent people for degrees that focused on the quantitative aspects of life. The MOA needs to look at the more subjective qualitative aspects and to begin some in-depth case studies of farmers, farm families, rural communities and agricultural and marketing procedures. For example, agricultural production is increasing in Nepal, but it is below the levels of six years ago. Are there factors affecting the reporting of production

figures, or are the statistics accurate? This is an important question that might be answered by an in-depth study of several rural communities. Training in rural sociology and anthropology should be included in future MOA manpower plans.

The MOA also needs more research that focuses on:

1. The impact of MOA programs and policies on the lives of the rural poor,
2. The role of women in agriculture and in the development process,
3. An analysis of the migration of people from the hills to the tarai,
4. Ways to increase the quality of life in the hills, and
5. Ways to improve the quality of agricultural statistics.

Some of this research may be funded through cooperation with international agencies or as responses to project needs, but the MOA should look ahead and make a plan for social science research. That research could then be matched to the ability of different agencies to implement the research. The research should have its own source of funds, and the results of this research should be shared through seminars and publications. APROSC should be supported to take on the leadership role in this endeavor, but they should involve officials and research staff from a wide range of institutions.

The MOA has now had a good experience with the above process in this ADC Project. The MOA should analyze this experience and design a research plan. A strong commitment to APROSC, including direct on-going funding, should be a first step. Second, a research fund should be established with contributions from all MOA agencies. Thus, these agencies should prioritize research needs and ask APROSC to implement a plan of research. This would institutionalize the ADC Project activities and insure that the MOA's social science capability remains intact.

APPENDIX I
METHODOLOGY

METHODOLOGY

Dr. Darrah arrived in Nepal on January 24, 1982. He began his work by meeting with USAID and Project staff. He collected the readily available data and planned the meetings with Project participants and HMG officials. Dr. Comings arrived in Nepal on January 30, 1982. The team then began intensive interviews with participants and HMG officials, while reading through the project documents and files.

In the third week of the evaluation, the team continued its interview schedule but also began writing the first draft of the report. At the beginning of the fourth week the interviews were stopped, and the team concentrated on producing the final draft of the report. At the end of the fourth week, the team made an oral presentation of their findings. Dr. Darrah left on February 20th. Dr. Comings finished the final complete report and left Nepal on February 27, 1982.

The only real constraint on the collection of data was the problem of trying to interview so many people. There were hundreds of different participants who had degree or non-degree training, attended seminars or used other Project services. In addition, there were HMG, USAID and World Bank people to interview. The team feels that they were able to form an accurate evaluation of the Project from the 38 people interviewed.

The team quickly moved to the positive side of objectivity in this evaluation. Based on the team's experience with development in Asia this is a strong, solid project.

APPENDIX II
ACKNOWLEDGEMENTS AND
LIST OF PEOPLE
INTERVIEWED

ACKNOWLEDGEMENT

In the course of this evaluation, a number of people were interviewed. Some were involved in the operation of the Project; others were direct beneficiaries as participants in degree training, seminars, in-service training or study tours. Some were interviewed briefly; others extensively and more than once. The Evaluation Team acknowledges their contributions with special thanks. The persons interviewed were:

1. Bed. B. Khadka, Secretary
2. Thakur Pant, Joint Secretary, MOA.
3. Kamala Rajbhandari, Joint Secretary, MOA.
4. Pushpa Mathema, Director General, Dept. of Food and Agricultural Marketing Services.
5. Purushottam Gorkhali, Director, APROSC.
6. Ram P. Yadav, Executive Director General, Dept. of Agriculture.
7. Akur Rana, General Manager and Chairman, ADBN.
8. Pramod Regmi, Deputy General Manager, ADBN.
9. Chandra Pradhan, Deputy General Manager, ADBN.
10. Mohan M. Sainju, Member, National Planning Commission.
11. Amresh M. Pradhanang, Deputy Director-General Crop Science, Dept. of Agriculture.
12. R. B. Singh, Program Coordinator Foreign Aided Projects, MOA.
13. Ganesh Thapa, Assistant Economist, MOA.
14. Ramesh Sharma, Economist, APROSC.
15. Jyoti Lohani, Engineer, APROSC.
16. Shiva Sharma, Economist, APROSC.
17. Sushil Pandey, Economist, APROSC.
18. Shyam Poudel, Agricultural Specialist, APROSC.
19. Purushottam Mudbhary, Economist, APROSC.
20. Prakash Aryal, Economist, APROSC.
21. Ramesh Bista, Statistician/Programmer, APROSC.
22. Krishna P. Devkota, Senior Accountant, APROSC.
23. Mrs. Sudha Pant, Administrative Assistant, APROSC.
24. Madhav Gautam, Nutrition Specialist, APROSC.
25. Madhab Khoju, Loan Officer, Research, Monitoring and Evaluation Division, ADBN.
26. Som Pudasaini, Economist, ADBN.
27. Bishnu Silwal, Loan Officer, Loan Division, ADBN.
28. Govind Koirala, Loan Officer, Planning and Projects Division, ADBN.
29. Dibakar Paudyal, Assistant Agricultural Marketing Economist, Dept. of Food and Agricultural Marketing Services.

30. Raghu Shrestha, Assistant Statistician, Dept. of Food and Agricultural Marketing Services.
31. Surya B. Karki, Assistant Agricultural Statistician, Dept. of Food and Agricultural Marketing Services.
32. Jagdish Gautam, Assistant Agricultural Statistician, Dept. of Food and Agricultural Marketing Services.
33. Shailendra Gubhaju, Technical Assistant, Dept. of Food and Agricultural Marketing Services.
34. Ganesh Rauniyar, Chief, Planning and Research Division, Tobacco Development Corp.
35. Grant Slade, Country Representative, World Bank.
36. Veit Burger, Research Specialist, ADC.
37. William Nance, Program Officer, USAID.
38. Douglas Pickett, Chief of Agriculture, USAID

APPENDIX III

GLOSSARY

Glossary

HMG	His Majesty's Government of Nepal
MOA	Ministry of Agriculture The MOA was, when this project started, the MFAI or Ministry of Food, Agriculture and Irrigation. It was then changed to the MFA, the Ministry of Food and Agriculture.
PCD	Planning and Coordination Division (MOA)
EPAD	Evaluation and Project Analysis Division (MOA)
APROSC	Agricultural Projects Services Center (MOA)
ADBN	Agricultural Development Bank Nepal (MOA)
ADC	Agricultural Development Council
USAID	United States Agency for International Development
ICP	Integrated Cereals Project (DA/MOA)
UNSIAP	United Nations Statistical Institute for Asia and the Pacific
WSCC	Women Services Coordination Committee
DFAMS	Department of Food and Agricultural Marketing Services (MOA)
ESCAP	Economic and Social Commission for Asia and the Pacific

APPENDIX IV

H M G
CONTRIBUTION TO THE
PROJECT



MEMORANDUM

4 February 1982

TO: John Comins, USAID Impact Evaluation Team

FROM: Veit Burger, A/D/C *Veit Burger*

SUBJECT: HMG Contribution to HMG/USAID/ADC Project
 "Training Nepalese in Agricultural Research
 and Development Planning"

Below is an estimate of HMG's contribution to this project and the details which form the basis of this estimate, as you requested. I follow the format of the budget as used in USAID's amendment letters to the project.

	<u>Rs.</u>	<u>US\$</u>
1. Associate	-	-
2. Specialist	-	-
3. Work Budget	103,500	8,600
4. Grants and Projects	148,000	12,300
5. Commodities	10,000	900
6. Conferences, Workshops	29,000	2,400
7. Short-term, Non-Degree Training	139,500	11,600
8+9. Fellowship Program	<u>1,110,000</u>	<u>92,500</u>
	Rs1,540,000	\$128,300
	=====	=====

This sum represents 7.4% of the total budget for 5 years, or about US\$30,000 more than initially budgeted as HMG contribution.

Notes:

Workbudget: 103,500

APROSC provides officespace to the ADC staff, as well as secretarial and duplicating services, and telephone.

Memo: to John Comins, USAID Impact Evaluation Team
Subject: HMG Contribution to HMG/USAID/ADC Project
4 February 1982 - Page - 2.

- Rent: 69 months (October 1976 - June 1982)
Rs.1000/month Rs69,000
- Secretarial services, Rs.200/ month 13,800
- Duplicating facilities, Rs.200/month 13,800
- Telephone, Rs.100/month 6,900

Grants and Projects: Rs148,000

- Petrol of project jeeps, when used
for project activities, Rs.200/month
for 50 months = Rs10,000
- Research activities: excluding research
activities by ADC fellows (already
covered under Degree Training)

9 studies @ average 4 months @ average 3
researchers @ Rs.1,000/month = Rs108,000

Note: Costs of fieldwork and Research
Assistants covered by ADC grant

- Research and Seminar Publications:

Research Paper Series: 13 published
plus about 10 to be published.
Seminar Reports: 7 seminar reports.

Typing and management assistance per
publication about Rs.1,000 x 30 publi-
cations =

Rs30,000

Commodities: Rs10,000

- Some office furniture, a battery backup
for the mini-computer and consumable
supplies Rs10,000

Conferences, Workshops, Consultations: Rs29,000

- Per diem of participants in seminars,
assuming 20% of the participants to have
come from outside Kathmandu, i.e. 300
mandays @ Rs.50/day (including travel) = Rs15,000

Memo: to John Comins, USAID Impact Evaluation Team
subject: HMG Contribution to HMG/USAID/ADC Project

4 February 1982 - Page 3.

- Staff for seminar secretariate: Seven seminars, average 8 persons supporting staff (typing, mimeographing, general support), about Rs2,000 per seminar =	Rs14,000
Short-term, Non-Degree Training:	Rs139,500
a) outside Nepal: 52 person-months @ Rs1,000/month =	Rs52,000
b) in Nepal: 87.5 person months @ Rs1,000/month =	Rs87,500
Fellowship program:	Rs1,110,000
Fellows on study leave continue to receive their basic salary, Provident Fund, etc., assumed to be around Rs1,000/person/month for Master's candidates and Rs1,200 for Ph.D. candidates.	
- 33 Masters fellows @ 30 months average @ Rs1,000 =	Rs990,000
- 2 Ph.D. fellows @ 50 months @ Rs1,200 =	Rs120,000

APPENDIX V

GRANT AGREEMENT

A. Purpose

The purpose of this grant is to provide partial support for a program to train Nepalese in Agricultural Research and Development Planning and assist His Majesty's Government of Nepal (HMG) to develop the institutional capacity to make more productive use of (a) human and physical resource endowments and (b) the new technical knowledge that is becoming available through the Integrated Cereals Project to expand agricultural production and improve the well being of the people living in rural areas.

B. Specific Objectives

The specific objectives of this grant are to initiate research on selected problems of agricultural and rural development; and (b) to expand the capacity of Nepalese institutions to conduct research on which to base public decisions.

C. Implementation

Specific subject matter and objectives of research activities to be undertaken with the resources provided by this grant are the subject of consultation between ADC and the research units with which it plans to collaborate, the Agricultural Project Service Center (APROSC) and the Evaluation and Project Analyses Division (EPAD) of the Ministry of Food, Agriculture and Irrigation (MFAI). The following is a list of research areas that are beyond ICP or are linked directly with the ICP.

1. Production Constraints and Diffusion of Technology
2. Constraints on the Adoption of Existing Production Technology
3. Potential Constraints to the Adoption of New ICP Generated Technology

The research topics outlined above relate to improving the income levels of the tarai and hill farmers. The activities outlined have a strong focus on the hills for three reasons: a) almost all strata of the hill population are poor by any standard; b) present technologies and policies have not been effective as necessary in achieving desired changes in income levels or in stemming environmental deterioration due to population growth; and, c) the hills and the economic activities of the poor who live there represent the greatest void in the knowledge about the rural economy of Nepal.

The capabilities of HMG research units to conceptualize and analyze the rural sector must be enhanced if appropriate technologies and policies are to be developed to improve the incomes of the small farmer and if an uncontrolled migration of hill farmers to the tarai is to be discouraged. A/D/C shall assist HMG in this endeavor through an integrated program which pursues certain mutually agreed upon high priority research topics with the assistance of A/D/C staff members. The grantee shall provide research results and manpower which will assist the ICP in responding to the needs of rural poor and which will enable HMG to forge policy measures which will place both hill and tarai areas on a rational, self-sustaining growth path. In addition, the enhanced research capabilities of HMG will contribute to the formulation of policies for the settlement of appropriate tarai areas and for the increase of both the productive and export capacities of the tarai.

The foregoing shall be accomplished through and appropriate combination of in-service, non-degree and advanced degree training designed to enhance national research and policy planning capacities so that Nepal will become independent of the need for foreign personnel as soon as possible.

The grantee will provide for U.S. Ph.D. training; Asia Region M.S. training and short term non-degree training.

D. Reports

ADC will provide the following reports in duplicate to USAID/Nepal; ASIA/PD/PVD; AID/W; and SER/CM/ROD/ASIA/NE, AID/W in sufficient detail so that AID can judge the effectiveness with which the project is being, (and in the case of the final report) was implemented.

- (1) Semi-annual project progress reports which will detail the progress to date and grant funds spent.
- (2) Prior to the end of the second year, ADC will initiate an overall evaluation of the achievements as they relate to the directions and objectives of the project proposal.
- (3) A final report upon completion of the project.

E. Budget

The funds provided herein shall be used to finance the items in the budget. The amounts shown are for budgetary purposes only and may be deviated from but may not be exceeded in the total.

Total Budget for Five-Year Program

	USAID OPG Funds	ADC Contribution in addition to OPG	Other ADC Program	HMG Contribution
	<u> </u>	<u> </u>	<u> </u>	<u> </u>
I. Salaries, Benefits and Perquisites				
1) Associate	---	187,500	187,500	6,000
2) Specialist	<u>285,000</u>	<u>---</u>	<u>---</u>	<u>6,000</u>
Total	285,000	187,500	187,500	12,000
II. Program Support				
3) Work Budget	117,000	---	14,000	10,000
4) Grants & Projects	185,000	---	10,000	---
5) Commodities	<u>34,000</u>	<u>---</u>	<u>---</u>	<u>---</u>
Total	336,000	---	24,000	10,000
III. Training				
6) Conferences, work-shops, consultations	41,000	57,000	9,000	4,000
7) Short-term, Non-degree training	31,000	9,300	---	4,030
8) Asian Fellowship Program (M.S.)	155,938	46,780	94,953	24,960
9) U.S. Fellowship Program (Ph.D.)	<u>185,959</u>	<u>32,284</u>	<u>145,577</u>	<u>10,080</u>
Total	413,897	145,364	249,530	43,070
Total of lines 1-9	1,034,897	332,864	461,030	65,070
12) Ten percent contingency	103,489	33,286	46,103	6,507
Grand total	1,138,386	366,150	507,133	71,577

APPENDIX VI

ADC/HMG LETTER OF
AGREEMENT

Purpose

1. The Agricultural Development Council proposes to offer assistance to His Majesty's Government of Nepal in the areas of research and training in the social sciences related to the economic and human problems of agricultural and rural development in Nepal.

2. In the furtherance of this objective the Council will provide a Council Associate and a Council Specialist and will assist His Majesty's Government of Nepal in implementing a series of research and training activities entitled "Training Nepalese in Agricultural Research and Development Planning".

Responsibilities of the Agricultural Development Council

3. The council hereby agrees to provide the services of Council Associate in response to the above request without direct cost to His Majesty's Government. The Council further agrees to provide a Council Specialist and to provide the services described in the Project, under the conditions described therein.

4. The Council Specialist will be placed in the Evaluation and Project Analysis Division of the Ministry of Food, Agriculture and Irrigation and will develop a plan of research and training which will implement the objectives of the Project as they are described in the Project proposal and its implementation documents. The Project will be funded jointly by the Council and by a grant from USAID to the Council, together with resources contributed by His Majesty's government.

5. The Council Associate will be placed, in the first instance, at the Agricultural Projects Services Centre and will develop in cooperation with the Executive Director of the Centre a program of activities which may included, among other professional activities, the following:

- (a) Participation in activities related to the Project.
- (b) Small but carefully designed research activities related to the economic and human problems of agricultural and rural development in Nepal.
- (c) Consultations on matters of research design, analytical procedures and the preparation of research results.
- (d) Training of junior staff members in research methodology.

6. The relationship of Council staff to the Ministry of Food, Agriculture and Irrigation and the Agricultural Projects Services Centre shall not preclude their engaging in other professional activities on behalf of the Council. As an integral part of his assignment, the Council Associate will engage in the Council's regional program of seminars, workshops, scholarship activities and in activities devoted to the professional development of the rural social sciences in Nepal. In pursuing these activities, arrangements will be made to keep disruption of research and training activities of the Agricultural Projects Services Centre to a minimum. All travel expenses except those made at the specific request of the Agricultural Projects Services Centre will be borne by the Council or from Project funds, when appropriate. The Council Specialist will devote most of his efforts to the Evaluation and Project Analysis Division of the Ministry of Food, Agriculture and Irrigation and to the activities described in the Project proposal.

7. In addition to the activities of the Project, the Council will consider requests for grants-in-aid for research projects for research and training materials in the rural social sciences, and for fellowships for studies abroad. Participation by the Council Associate in preparing such requests shall not be considered to constitute approval of the grant or fellowship by the Council since they may only be made by the Council's Board of Trustees.

8. The Council staff members will be entitled to one month of annual leave after approximately eleven months of service and again after twenty three months of service.

Responsibilities of His Majesty's Government

9. The institutions to which the Council staff members are assigned will designate the Council staff members as Participating Research and Training Officers.

10. The Ministry of Food, Agriculture and Irrigation and the Agricultural Projects Services Centre shall provide without cost to the Council or the Project the following services:

- (a) Office space, together with appropriate secretarial services, furnishings and equipment.
- (b) Ordinary consumable office supplies, duplication and printing services as may be appropriate.
- (c) Access to library facilities including a core collection of journals and reference books.

- (d) The services of research assistants, field enumerators and investigators as may be appropriate.
- (e) Providing general assistance to the Council staff and their families in getting established in Nepal.

Other Provisions

11. Any issues or problems which arise concerning this agreement shall be subject to discussion and negotiation between the designated representative of His Majesty's Government and the President of the Council or his designated representative on behalf of the Council.

12. Foreign personnel and their families serving in Nepal pursuant to this agreement shall be granted visas and appropriate exit and re-entry permits which are standard for the personnel of United Nations agencies.

13. At least to the same extent and for the same items as it does for the experts of the United Nations agencies, His Majesty's Government will exempt from taxes all payments to such foreign personnel by the Council.

14. At least to the same extent and for the same items as it does for the experts of the United Nations, His Majesty's Government will exempt from all other taxes including customs duties, excise taxes or transfer taxes on any imports by foreign personnel provided by the Council for personal use and for use in connection with projects under this Agreement at any time during the life of this Agreement.

15. The provisions of this letter shall be in effect immediately and shall be valid for an initial period of three years, to be extended for two more years on the basis of the availability of funds to the Council.