THE INITIAL REPORT

OF THE

EXTERNAL EVALUATION PANEL

SMALL RUMINANT CRSP

February 1980

INTRODUCTION

1. The External Evaluation Panel (EEP) of the Small Ruminant Collaborative Research Support Program (SR-CRSP) held its initial meeting December 5-12, 1979. The Panel first convened at the headquarters of the Management Entity (ME), University of California, Davis, on December 6-7 and reconvened in Washington, DC on December 10-11 for discussions with representatives of the USAID and the Joint Research Committee (JRC).

2. It should be noted above that the members considered it advisable to change the the name of the group from the External Evaluation Committee, the acronym for which--EEC--causes confusion with the same acronym used for the European Economic Community. The latter is more widely known in developing countries.

3. As this was the first formal meeting of the EEP, an important purpose was to provide more indepth information to its members on the concepts, aims and objectives of the SR-CRSP. In particular, a review was made of the respective roles and expected interactions of the Participating Institutions, the Technical Committee and its Principal Investigator (PI) members, the Board of Institutional Representatives (BIR), ME, and their relationship with the USAID, BIFAD, JRC and the host countries.

4. Another major reason for the meeting was to familiarize the EEP members with the specific tasks of the Panel, its role in the total activities of the SR-CRSP and its responsibilities in carrying out these functions. A general description of the composition, responsibilities and organization of work of the EEP is attached (Annex I). A more specific guideline for evaluating the progress and performance of projects is being prepared by the ME for review with the Panel.

5. Specifically, the EEP examined individual PI proposals which had been the basis on which the ME had made the first subcontracts to the PI's and Participating Institu-

tions. Many of these draft proposals were incomplete and the overseas regional proposals, with one exception, were not yet compiled. Consequently, this first EEP report does not fully cover all of the proposed SR-CRSP activities as some were not prepared for an indepth review and assessment of all program components. Once the PI's have completed host country site visits, more definitive proposals and reviews could be undertaken.

6. It should be noted that the plan of work as now perceived for the EEP would require longer and more frequent meetings than originally envisioned. The next meeting of the EEP will be July 7-15, 1980. Included on the agenda will be site visits to four or five Participating Institutions. A list of the EEP members and an annual plan of work is attached (Annex II).

7. Finally, despite the various problems inherent in initiating this soundly conceived but difficult to implement program, the ME has made good progress. The Program Director was particularly helpful to the EEP in providing documents prior to the meeting and in thoroughly explaining the evolution of SR-CRSP to date. His constructive thoughts, frankness and honesty were much respected and his assistance greatly appreciated.

SMALL RUMINANT CRSP IN PERSPECTIVE

1. Small ruminants are an important source of high quality food particularly in the developing countries. They also provide a large share of the raw material for the textile and leather industries. In the Andes, the alpacas and llamas are important as beasts of burden. Of the approximately one billion sheep and 400 million goats in the world, 40 percent of the sheep and 77 percent of the goats are in the developing countries of Africa, Asia, the Near East and Latin America. In all the developing countries, be it in the new or the old world, the small ruminants are of particular importance to the poorer sectors of the population.
2. Many of the constraints to increased agricultural production in the developing countries have not yet been subject to systematic research. Work carried out thus far has largely concentrated on cash crops for export and to some extent on cattle. Small ruminants - owned by the poorer segments of the population - have been largely ignored. In particular, dairy goats have been given minimal attention and the components of sheep and goat production systems in the tropics have been inadequately or marginally studied. There is no doubt that the productivity of small ruminants can be improved through research into the biology of the more important constraints of the production systems existing in the developing countries. On the other hand, the removal of some constraints will require political and legislative actions. Research into the socio-economics of the production systems can help in better defining these latter constraints.
3. In spite of the neglect of these species in tropical and semi-tropical regions, there is a vast resource of technology that has been developed in the temperate zones, especially with sheep. There are, however, vast gaps in delivering this technology to the developing countries where sheep and goats are important both as sources of food and overall contributors to the economy. The SR-CRSP could become the

bridge for the transfer and adaptation of both existing and newly generated technology to fill the gaps in production systems in tropical and semi-tropical areas of developing countries.

4. The EEP compliments USAID, BIFAD and JRC for reassessing priorities and, in essence, initiating research both in the United States and abroad with these species. The PI's likewise are commended for contributing worthwhile projects to help increase this technology in developing countries.

5. The EEP understands that the assembly of the production system components, their field testing and delivery to producers, with emphasis on smallholders and transhumance producers, would largely be the responsibility of host countries. For this delivery system approach to function adequately and efficiently, however, will require the close collaboration on a personal basis in the host country between the staff of the US institutions and their local counterparts.

GENERAL COMMENTS ON SR-CRSP AREAS OF STUDY

As the EEP reviewed the documents from the individual PI's, certain points were repetitious and will be mentioned in this section. After the briefing by USAID personnel and the meeting of the Panel with JRC, additional points needing attention by PI's became apparent. These and comments resulting from the EEP deliberations directed to more than one project or to SR-CRSP as a whole follow. The listing is not intended to coincide with order of priority. Following these general comments is a section calling attention to more specific points of the individual projects.

1. PI Reports: Reporting procedures in SR-CRSP need standardization and should be submitted in a scheduled fashion. Report identification should be improved. The reports available to the EEP needed editing and some were obviously repetitious and preliminary in nature. The ME should issue more precise guidelines on reporting, not only in format but also in presentation of long range objectives (5 years) and budgeting. The latter must clearly delineate the allocation of funding to US and overseas sites and should also show financial obligations for training.
2. Regional Network: The EEP supports the concept of regional overseas networks. Site coordinators should be designated as soon as possible in order to minimize overlap in activities. On the other hand, present project plans do not indicate a complete program for any of the host country sites. The PI's should keep in mind a need for development of the programs in such a fashion that the host country installations will have regional significance as a complete program. As attention is focused toward the compatibility of instituitional projects, the PI's should consider possible reduction rather than expansion of sites, e.g. why four international sites; why not two with better coverage?

3. Social Science Participation: The EEP commends the emphasis given to socio-economic aspects and is convinced that social acceptance by target groups of small farmers will be critical in achieving successful adoption of the new information produced by SR-CRSP. Seemingly, the needs of information gathered by the social scientists will be more production oriented than the usual thrust in the social science area; therefore, the PI's should collaborate closely with the University of Missouri personnel on development and evaluation of questionnaires. The University of Missouri investigators are encouraged to center their work in areas around several of the overseas sites. If this is beyond their interest or capability, the other PI's should seek assistance from social science specialists, especially rural development personnel, at their institutions. Special attention is called to the need for close collaboration between the PI's responsible for the studies on economics, sociology and systems all of which function at each overseas site. All projects need to include in their documents further elaboration on how they expect to relate to small farmers.

4. Importation of Animals and Animal Products: As a result of the desire expressed in some of the projects reviewed to import animals, semen, blood and other animal related products into the United States, the Panel met with Dr. E. C. Sharman, Senior Staff Veterinarian, Import/Export, Veterinary Services, USDA. The following information is a summary of the discussion held with Dr. Sharman.

In the Tariff Act of 1930, Congress prohibits the importation of ruminants and swine and fresh, chilled or frozen products derived from those species that originate in or pass through countries infected with foot-and-mouth disease (FMD) and/or rinderpest. FMD exists in each of the countries identified in the SR-CRSP program activities as a host country and would consequently be subject to the application of this Act.

In 1970, Congress authorized the construction of a quarantine facility that would receive animals from a country in which FMD or other serious exotic diseases exist. Such a facility has been established, known as the Harry S. Truman Import Station on Fleming Key, Key West, Florida. The first shipment of animals to this facility is expected to take place in January 1980. The shipment will be limited to cattle originating in Brazil. In addition to purchase price of the animals, feed costs while in Brazil, cost associated with assembly and quarantine of animals in Brazil, the price required by the US Department of Agriculture to cover expenses related to quarantine in the United States is assessed at $3,354 per individual animal for the first shipment. The quarantine period will be for 5 months after their arrival at the Import Station. Because of the protracted incubation period for the disease scrapie, the quarantine period for small ruminants would be 60 months.

The Panel believes that it is not feasible for a project to consider the importation of animals from project host countries for study in the United States.

Provisions have been made in the past for importing semen from countries in which FMD exists where the host country is able to provide adequate isolation. The US Department of Agriculture provides a US employed veterinarian to supervise the animal testing, housing and collection practices in the host country. An aliquot of 10% of each collection is forwarded to the Plum Island Animal Disease Center, Greenport, Long Island, New York to ascertain its freedom from FMD. The most recent importation of semen resulted in a per shipment cost of $68,000 (120,000 doses).

Provisions are made for the importation of blood samples, particularly blood serum from countries in which FMD is known to exist, when the samples are treated in the country of origin either by heating or the addition of approved chemicals. Heating is usually to 56°C for 30 minutes which is acceptable for most

antibody studies, and chemicals such as betapropiolactone are examples of approved treatment. It is likewise necessary for a representative of the Import/-Export Staff to evaluate the biological security of the receiving institution in the United States.

Importing organisms or potential vectors of disease require special permits and these are dealt with on an individual request basis. In the event that the request involves procedures other than those routinely handled by the staff, a Parent Committee is convened to review the application. The Committee is composed of leading scientists, which may include the requestor, to evaluate the values and hazards associated with the proposed importation. The decision of the Committee determines the action to be taken.

The following recommendations are made for any PI anticipating the use of products of animal origin from a foreign country at a US institution: Write to Dr. E. C. Sharman, Senior Staff Veterinarian, Import/Export, Veterinary Services, USDA, Hyattsville, MD 20782, indicating the material considered for importation and the manner in which it will be manipulated in the institution in the United States. The response from that staff would indicate the requirements for continuing with the proposed importation. The same procedure would be followed for a proposed importation of blood, tissues, embryos, insects, vectors, organisms or biological specimens involving animals and animal products.

5. Danger of Disease Transmission Between Countries: An important part of SR-CRSP is the interchange of scientists between countries. Some of these scientists will have visited or worked on farms or research institutions where certain diseases may have been present. It is important that adequate precautions be taken to assure against the possibility of accidentally introducing an animal disease from one country to the other. The EEP asked Dr. R. C. Fish, Program Leader, Bi-National Programs, International Research Division, OICD, USDA, to prepare the

following precautionary measures for participants in this and other countries involved with SR-CRSP.

(a)

1. When visiting the other country, scientists should bring only clothing, particularly shoes, that have not been used in laboratories, animal holding areas or on farms where livestock are kept.
2. Scientists visiting laboratories, animal holding areas or farms where livestock are kept in the host country should wear protective clothing, particularly footwear, that can be discarded or adequately cleaned and disinfected prior to returning to their native country.

(b)

1. Scientists should avoid working in a laboratory where animal diseases are studied or contacting livestock in their native country for at least one week prior to arrival in the host country.
2. Scientists returning home should refrain from working in or visiting laboratories, animal holding areas or farms where livestock are kept for at least one week from the time of their last visit to such places in the host country.

(c) PI's should not take or export any fresh, chilled or frozen animal products or biological specimens to the host country unless they have received an official permit authorizing the importation.

It is also suggested that appropriate persons at the institutes, colleges or farms to be visited, be appraised that the visiting participant may possibly have had contact with a foreign animal disease. This would permit additional precautions to be instituted as deemed necessary by local authorities. Foreign counterparts should be encouraged to inform PI's of any detailed requirements they may wish

observed.

6. Spirit of CRSP: The EEP interprets from the Guidelines for the CRSP under Title XII that US Participating Institutions are expected to develop close collaboration with institutions in the LDC. Also, they are to insure development of programs which may become a strong part of the LDC efforts toward better efficiency in small ruminant production systems. Several of the projects are presently too heavily US oriented and will therefore need adjustments. Further comments on EEP's concept of cooperation with host countries are in the comments on individual institutional projects and elucidated in other parts of this section.

7. Policy Guidelines: The ME must commence to work more closely with the PI's to :

   (a) Develop policy guidelines on the use of herds or flock at both US and overseas sites to maximize the utilization of animals, e.g. breeding and health studies at Davis; breeding, nutrition and management in Brazil. Personnel, funding and facilities are limited; therefore, an urgent need for policy on collaborative efforts exits.

   (b) Have PI's carefully review the expected commitments from host countries in animals, personnel, time and facilities. Several of the projects appear to have unrealistic expectations, particularly where financing is not affirmed to support these expectations, e.g. laboratories for forage analysis to include operating costs. Host countries must be appraised of the implications of the long range nature of several of the projects, e.g. genetic improvement.

   (c) Develop guidelines on standardization of record keeping. Data collection projections indicate breeding information, reproduction data and data for economic analysis, modeling and management are expected to come from the same herds or flocks. Data formats must be streamlined to avoid overbur-

Guidelines developed by JRC, recommended by the BIFAD and approved by the USAID, October 10, 1979.

dening and overcommitting PI's. The EEP questions whether or not the PI's fully appreciate their tentative committments or have given due consideration to the resulting impact on host country personnel to execute the SR-CRSP.

8. Nutrition: Perhaps no other factor influences performance of small ruminants as much as nutrition. This discipline is lacking in specific identification and may not be receiving sufficient emphasis. The term "nutritional requirements" is used in several projects. This is too general; therefore, the goals on nutrition must be more clearly defined. Most of the proposals appear conventional, thereby offering little opportunity for development of new information on animal nutrition.

9. Animal Health: The animal health component of the projects does not identify the major disease deterrents in the host countries. The PI's have given insufficient attention to identification of the real health problems in the host countries. The PI's should, therefore, review the existing health problems in the host countries and only then prioritize on research objectives.

All host country sites should have a health program for experimental animals. This program must be established to insure no serious interaction between animal health and the experimental plans. Such may require the expansion of the scope of institutional relationships in the host countries beyond those presently identified.

10. Breeding: The evaluation of breeds is important but the index or estimate of merit will depend upon projected target socio-production systems.

Selection of sheep or goats for parasite resistance is a worthy objective. PI's are cautioned, however, to take steps to insure that differences in mature size and level of feeding per unit of metabolic size does not create serious interactions which may confound the true nature of resistance.

11. Reproduction: Only two of the SR-CRSP projects included a reproduction component. These are oriented heavily to US conditions and do not convey the collab-

orative emphasis of SR-CRSP objectives (Section 1.02, Bylaws Title XII CRSP on Small Ruminants, adopted by the BIR 10 May, 1979) nor the cooperativeness required for an effective transfer, adaptation and utilization of results to the LDC. Reproduction research must be evaluated under target systems. Moreover, all host country programs should include some studies on improving reproductive efficiency whether they be nutritional, pathological or physiological in nature.

12. Management: At present all projects which identify the study of management appear to be directed to goats, with none for sheep. The major thrust on management seems intended to come largely from routine herd records which will be collated for production system research. The Panel holds that systems analysis can identify some problems from those practices employed to acheive the research goals. However, data derived only from these sources may not be the best for identification of priorities for research nor for development of management recommendations in target areas. To illustrate the point, one could consider that the high priority given to rinderpest control resulting in high concentration of animals in the Sahel region was too narrow in focus and thereby contributed to the drought of the mid 70's.

Research on management practices to enhance animal productive efficiency should be as systematically programmed as any other phase. The demonstration type program proposed by Tuskegee Institute for Brazil does not meet this criteria.

13. Memorandum of Understanding (MOU):

(a) Policies on publications derived from host country resources must be developed and included in the MOU.

(b) The EEP commends the PI's and the BIR on plans for inclusion of foreign collaborators in meetings. This should be extended to include project-related visits, e.g. the proposal for PI's to visit India. Policies on these points ought to be clearly defined in the MOU.

(c) Provisions for assessment of training of LDC personnel should be defined in the MOU.

(d) The MOU should also include some guidelines on travel for all participants and policies on "allied travel" within regions which may be important to project activities, e.g. use of ILCA assemblage of data and manuscripts in Addis Ababa or to visit the goat program at the National Dairy Research Institute in India.

(e) It should be recognized that research results will only be beneficial when the research is fashioned towards the development needs of the host LDC. It must likewise be of high priority in the view of the host government and be transferable in a timely and comprehensive manner to producers who find it socially acceptable and economically viable to readily take up the recommended new practice. It is recommended that the ME include language to this effect in each of the MOU's.

14. EEP Responsibilities: The responsibilities of the EEP are stated in Annex I of this report.

The EEP has taken its responsibilities seriously and will continue to do so. Considering the SR-CRSP objectives (Section 1.02 of the BIR Bylaws of May 10, 1979), the Guidelines for CRSP under Title XII and developed by JRC, October 10, 1979 and verbal instructions from the USAID personnel on 10 December 1979, the EEP foresees potential serious conflicts between the proposed projects and these guidelines over allocation of resources for domestic versus host country site use. The EEP views its basic role as an evaluator and not a mediator. Throughout this report the need for closer attention to the "collaborative spirit of CRSP" with host countries has been stressed. It is suggested that as all PI's pursue finalizing their programs, that they carefully review these terms of reference for CRSP.

COMMENTS ON INDIVIDUAL PROJECT PROPOSALS

The comments on the individual projects resulted from review of the documents available to EEP at the time of the initial meeting. Since the reports for the most part lacked a clear designation, the documents are referred to by the title given and date received by the ME.

University of California-Davis

Small Ruminant Flock/Herd Health Program in Smallholder Systems.

Submitted July 1, 1979.

The document needs to specifically identify the geographical area referred to as "northeast" Brazil. It is proposed that northeast Brazil in the project document coincide with that described in the IBRD Agricultural Research I Appraisal Report.

It is considered premature to identify caseous lymphadenitis as a high priority research item in Brazil before health constraints are identified.

The budget commitment for training host country students needs to be identified; also, the ratio of the budget commitment in the host country and US institution needs to be clarified.

The components of the project dealing with activities in Indonesia will presumably be more specifically identified after a visit of the PI to that country.

University of California-Davis

Genetic Improvement of Sheep and Goats for Smallholder Production Systems.

Submitted August 7, 1979.

The project needs to identify the specific geographical areas in Kenya and Indonesia.

It is reassuring to note that this study plans to relate the length of daylight intervals and other environmental factors with the reproductive behavior of sheep in Kenya.

It may be useful to pursue studies on trypanotolerance in the sheep and goats in Kenya. Studies along these lines should be coordinated with the ILCA research network on this subject.

The development of a dairy goat herd in Davis should be primarily directed to training both foreign and US participants.

It would be desirable to share resources such as flocks of animals, laboratory services, et cetera, that are available or that might be developed in Kenya with concurrent projects supported by other resources, e.g.: FAO, IBRD, Winrock and others.

The information developed from this genetic study must be applicable to the social systems of the host country and region as indicated in the project proposal.

Any visit made by the PI to India should incorporate project collaborators from Kenya and Indonesia.

California State Polytechnic University, Pomona

Improving Reproductive Capability of Small Ruminants in LDC's with Emphasis on Male Reproductive Physiology.

Submitted July 3, 1979.

Most of the detailed comments which are made on the Utah reproduction phase are also applicable to this project. A SR-CRSP should be directed insofar as possible to programs applicable to the overseas sites. The appropriateness of the SR-CRSP bearing the burden of developing semen conservation technology is questioned since this type of work seems to have adequate attention in France, Australia, United Kingdom and India. The training component is weak. Participation of overseas collaborators needs strengthening as the project is overly US emphasized. This project should be rewritten with special emphasis on overseas involvement.

Colorado State University

Animal Health Project (Revised).

Submitted November 14, 1979.

This project on animal health is the subject of a special report provided to ME for transmission to the PI's at Colorado State University.

University of Missouri

Sociological Analysis of Small Ruminant Production Systems.

For Peru - Submitted December 7, 1979

It is considered that assignment of an economic anthropologist to Peru for only a 4-6 month period is inadequate since there are seasonal factors that need to be identified during an entire 12 month period.

The project site in any of the LDC's selected should insofar as possible coincide with other SR-CRSP related projects.

The usual enumerator survey forms do not include such factors as feeding practices for animals, their use in the household, the utilization of products and family labor allocations. It is recommended that forms used in surveys be closely coordinated with the overall SR-CRSP objective.

The PI should be aware that data collected on sheep and alpaca production systems in a given region would not necessarily be applicable to other regions and countries. If the study is to include goat production systems, the PI must be aware that most of the goat production in Peru takes place in regions different from those of sheep and alpacas.

Montana State University

Evaluation and Genetic Improvement of Sheep and Goats in Extensive Management Systems.

Submitted July 3, 1979.

There needs to be more precise identification of objectives after the on site visit. The PI should be aware that there are few identifiable indigenous breeds of sheep and goats since massive uncontrolled matings with introduced breeds have occurred.

The proposal reviewed is scanty on details of activities to be undertaken in Peru. Generalizations between livestock systems in Peru and Morocco are not realistic.

The project needs to identify specific counterpart institutions and work sites as well as long-term objectives.

The Panel endorses the concept of resource sharing with other SR-CRSP projects and recognizes the need for prompt resolution of a host country in the Middle East.

North Carolina State University

By-product and Crop Residue Utilization in Intensive Sheep and Goat Production Systems for Limited-Resource Farmers.

Submitted July 18, 1979.

The term 'nutritional requirements' is too general and needs further definition. It would be helpful to identify by-products that are available. Studies carried out in North Carolina should utilize, insofar as possible, by-products that are available in the US and found in the host countries, e.g., groundnut meal, maize stover and rice bran.

While the project site is identified in Indonesia as Java, Sumatra should be considered from the standpoint of developing information on presently underutilized by-products that have regional application. Adequate and sophisticated nutritional studies are currently being carried out in Indonesia at the Animal Research and Development Center supported by Australia which the PI should take into account in developing this project. The SR-CRSP should relate to field activities rather than laboratory work in order to avoid duplication.

Activities relative to animal health should be collaborative with other efforts in this area that may be under consideration by the Australian Government and IBRD.

The project requires revision after on site visits by the PI to both Brazil and Indonesia.

Ohio State University

Intensive Forage Production Systems for Smallholder Sheep and Goat Producers.
Submitted July 6, 1979.

The regions and institutions of Peru in which this project will be carried out must be defined, particularly as they relate to the commitment for work in the tropics and the relationship to smallholders. Adherence to the objectives reviewed would mean this project will need to seek other institutions and affiliations than those proposed by other PI's.

While there is a provision for considerable laboratory work to be carried out, there is no budget provision for this activity in the host country. It is necessary to assess existing facilities in the proposed host countries (Peru and Kenya) and determine their availability to project activities.

In Kenya, work is being carried out with FAO support involving studies on internal parasites and should be considered in the development of this project.

Project activities should be coordinated with the Texas Tech range management project. Reference is made to importing animal related products. Legal requirements need to be reviewed.

While this study emphasizes forage production systems, it should at the same time develop health programs with other projects, e.g., Colorado in Peru.

The project requires revision after an on site visit by the PI to Peru.

Texas A&M University

Systems Analysis and Synthesis of Small Ruminant Production.
Submitted July 23, 1979.

The project needs rewriting in consultation with other PI's to determine mutual requirements for utilizing SR-CRSP data. As currently written, the project is too general and not specific to the objectives of the SR-CRSP.

Each project should have specific key indicators for estimating progress. These need to be fully agreed upon as well as the methods for data collection systems by the PI's involved. Particular attention should be given to the compatability of the objectives of the Winrock project with those of this project.

Although not explicitly stated, it is assumed that the project objectives would be applicable to the improved production of small ruminants.

Texas A&M University

Evaluation of Meat Goats and Hair Sheep.

Submitted July 23, 1979.

This proposal is much too heavily biased toward establishing flocks in the United States. It is extremely sketchy with respect to host country research and training of Brazilian scientists. Moreover, it does not include any budget estimates. This proposal should be revised to reflect the collaborative nature of the CRSP mandate.

Texas Tech University

Improving Small Ruminant Nutrition, Management and Production.

Sumbitted July 3, 1979.

While project objectives are identified, they are of short-term nature and long-term objectives should be established. Provisions for training are not presented. Also, the proposal is not clear on how and where laboratory support would be provided in either the host country or Texas Tech University.

There should be emphasis on the use and strengthening of existing national facilities rather than the 'development of an Experimental Research Center'.

The current project describes activities in areas limited to sheep and alpaca. Goats are not found in these regions.

The project needs to identify specific sites and cooperating institutions in Peru. Two areas in the altiplano that could be considered for the studies are: (A) South: alpaca and sheep; (B) Central: sheep only.

Tuskegee Institute

Expansion and Intensification of Goat Production in Northeast Brazil.

Submitted November 20, 1979.

The concept of applied on-farm feeding demonstrations before releasing technology to large numbers of producers is a worthwhile undertaking. It is strongly recommended, however, that the proposal be reworked to sharpen focus, provide greater clarity and in particular, to strengthen the objectives on the applied research which is to be undertaken. It is also recommended that the proposal be examined critically with respect to the staffing requirements and training component in both the US and Brazil, with special concern for the socio-economic acceptability of some of the animal management practices proposed. The budget does not identify allocation of funds to participants and total requests. The budget also should be examined with regard to adequacy.

Utah State University

Rangeland Research for Increasing Small Ruminant Production in Morocco.

Submitted July 27, 1979.

In view of the uncertainty of the SR-CRSP linkage in Morocco, the project was not reviewed in detail.

In the event that this project would eventually be implemented in the Middle East, the EEP recommends an expansion of the objectives to include the interface of higher potential cultivated cropland, the residues of which are important in finishing of sheep and goats prior to slaughter.

As previously stated, the identification of a host country in the Middle East has high priority.

Utah State University

Improving Female Reproductive Performance of Small Ruminants in LDC's.

Submitted July 28, 1979.

A study of reproductive parameters by breeds is worthwhile but this project gives undue emphasis on research activities in Utah without endorsing the principle of 'collaborative research overseas'. The extraction of data and inputs from overseas collaborators on less than a partnership basis is not encouraged. The importation of breeds from proposed host countries to the US is not feasible (see General Comments paragraph #4). Even so, such a study represents only one environment and one not necessarily applicable to tropical or subtropical regions.

The establishment of a computerized data bank on reproduction is a worthy objective. The training component of the project needs expansion.

In brief, this proposal is too domestically oriented to represent a good SR-CRSP contribution. More emphasis must be given to developing the capabilities of overseas institutions and formulating viable programs.

Washington State University

Subgrant on Herd/Flock Health Program

Plan of work - year one.

The proposal needs rewriting to be applicable to Kenya if it is to be the host country. Evaluations made in Morocco in 1978 on the disease problems and language requirements are not appropriate.

The objective to assist Kenya in training paraprofessionals requires clarification taking into consideration the existing facilities in that country.

The amount of time committed by PI personnel to the project is insignificant and it it not clear whether such assignments would be at Washington State University or the host country.

Winrock International

Economic Analysis of Small Ruminant Production and Marketing Systems.

Submitted August 17, 1979.

The project is well written and presented. The PI should work closely with other PI's to insure a unified data collection procedure which will avoid repetition. In particular, the PI should phase with the PI responsible for the systems analysis project (Texas A&M) and with the PI responsible for the sociological analysis project (Missouri).

Project objectives should be scaled down to more nearly coincide with the number of personnel and funding during the five year SR-CRSP period.

A monitoring and evaluation component with clearly defined procedures would be required in each host country. It would specifically assist in the carrying out of the farm management data collection, including the measuring of productivity and identifying the changes required for any long-term economic analysis. The monitoring and evaluation unit would also provide research managers with information useful to them in making day-to-day as well as long-term decisions.

With respect to the overall economic evaluation, priority should be given to the development of data for an ex post analysis of project activities. If additional funding is not made available for this function, it should be accomplished even at the expense of the other assessments such as those presented in paragraph 4 of the Project Objectives, 'Overall Economic Evaluation Studies to Assess Project Impact on Selected Groups'.

Winrock International

Dairy Goat Production Systems for Smallholder Agriculturalists.

The objectives are sound, taking into account both biological and socio-economic factors important to production. Dairy goat production is an important and growing source of income for smallholder producers and requires research for improving production systems.

Dairy goat production is of minor importance in Kenya and information on constraints to production and their removal is scanty. Research at the newly established station, Mutuga in Kenya, and the dairy goat herd at Winrock in the US is likely to provide useful information of future dairy goat production.

SUMMARY

Many of the reports and documents reviewed were preliminary in nature and host country identification were yet to be finalized. Some of the PI's still needed to make overseas site visits in order to present more definitive proposals. This was also the initial meeting of the EEP and much time was spent in acquainting Panel members with SR-CRSP activities and projects. All of this makes it premature for the EEP to present a meaningful list of recommendations. There are, however, a number of suggestions and conclusions presented in the Specific and General Comments Sections of this report which reflect the EEP's perception of the matters that need attention.

ANNEX I

External Evaluation Panel

Membership

1. The External Evaluation Panel (EEP) will have up to six members. It will be composed of a multi-disciplinary group of eminent scientists. Members will be appointed by the Management Entity in consultation with the Technical Committee and with the advice and consent of the Board of Institutional Representatives and the Joint Research Committee. Members will not be from institutions participating in the Small Ruminants CRSP.

Responsibilities

2. The general responsibility of the EEP shall be to perform periodic evaluation of the component projects in order to assess whether the particular project goals and overall program objectives are being accomplished. Guidelines for evaluating the progress and performance of projects, and the procedures by which such evaluations are to take place, shall be proposed by the Management Entity.
3. Specific responsibilities of the EEP shall include:
   (a) Review at least annually the projects and overall program of the Small Ruminants CRSP and provide written evaluation reports to the Management Entity.
   (b) Recommend on changes in program objectives.

(c) Recommend on addition, deletion or modification of component projects or program elements.

(d) Recommend on selection of foreign work sites.

(e) To advise and recommend to the Board of Institutional Representatives on matters having a general policy impact, as the EEP may deem necessary and appropriate.

Organization of Work

4. An annual plan of work for the EEP will be developed by the Management Entity and the Chairman of the Panel to include:

(a) Review and evaluation of work plans and progress reports prepared by the Principal Investigators and the Program Director.

(b) Visits by members of the Panel to participating institutions and foreign work sites.

(c) Meeting of the EEP.

(d) Schedule for the preparation of reports.

ANNEX II

Members of the External Evaluation Panel

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Rendel, Jan
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EEP Annual Plan of Work - 1979/80

1. Meet at UC Davis to review subgrants to participating institutions ..... December 5-8/79

2. Meet in Washington DC with the USAID and JRC personnel and complete preliminary report ..... December 9-11/79

3. Submit preliminary report in draft form to Management Entity (ME) ..... January, 1980

4. Submit preliminary report in final form to ME ..... February, 1980

5. Review guidelines proposed by ME for the evaluation of subrants..... March, 1980

6. Review format for submission of EEP reports to ME.. ..... April, 1980

7. Review the revised subgrant application by participating institutions..... May/June, 1980

8. Visit some of the US institutions involved in the CRSP..... July, 1980

9. Meeting at UC Davis to prepare the First Annual Report of the EEP 1979/80 program..... July, 1980

10. Prepare recommendations for 1980/81 program ..... July, 1980

11. Prepare a schedule for future visits to US and overseas institutions..... July, 1980