

INTSORMIL TRIP REPORT

TRAVELER: Dr. Earl R. Leng, Program Director

DATES OF TRAVEL: September 16 - October 12, 1979

CONDENSED ITINERARY:

- September 16 - 18 - U.S. West Coast, with visit to headquarters of Small Ruminants CRSP, University of California/Davis
- September 19 - 20 - San Francisco - Hong Kong
- September 22 - Hong Kong - Delhi
- September 23 - Delhi - Hyderabad, India
- September 23 - 26 - Visit to ICRISAT and ICAR Branch Station, Hyderabad
- September 26 - - Delhi, India. Discussions with USAID/Delhi, Indian Council of Agricultural Research, Indian Agricultural Research Institute, representatives of Ford Foundation, World Bank, and Canadian International Development Research Center.
October 4
- October 4 - 5 - Delhi - Bahrain - Sana'a. Denied entry to Yemen because of visa problem.
- October 5 - 6 - Sana'a - Cairo. Conference with USAID/Cairo.
- October 6 - 10 - Rome. Discussions with FAO/Rome.
- October 10 - 12 - Washington, D.C. (AID/W)
- October 12 - Return to Lincoln, NE.

AGENCIES AND INDIVIDUALS CONTACTED:University of California/Davis, Davis, CA.

Ms. Marilyn Rush, Grants and Contracts Officer, Office of Sponsored Research, Graduate College (this office administers the CRSP Small Ruminants program).

International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)- Patancheru, Dist. Madak, Hyderabad, A.P. India

Dr. Leslie Swindale, Director
 Dr. J. S. Kanwar, Associate Director, Research
 Dr. J. C. Davies, Associate Director, Outreach
 Dr. Leland House, Sorghum Research
 Dr. Matt Van Oppen and Dr. Hans Binswanger, Economics and Sociology Research
 Dr. Peter Dart, Plant Physiology
 Dr. H. B. Russell, Farming Systems
 Mr. Surendra Mohan, Administrative Officer, Delhi

USAID/Delhi, American Embassy, New Delhi, India

Dr. Fletcher Riggs, Ford and Agricultural Offices
 Mr. John Gunning, Program Officer and acting Executive Officer
 Mr. Stan Novak, Comptroller

Indian Council of Agricultural Research (ICAR), Ministry of Agriculture, Delhi (and Rajendranagar, Hyderabad)

Dr. L. M. Jeswani, Assistant Director, Crops Research
 Dr. N. Ganga Prasad Rao (ICAR Branch Station, Hyderabad), Professor of Excellence and member, "Title XII committee"
 Dr. P. V. Vidyabhushanam, Coordinator, All-India Sorghum Program (Hyderabad)

Indian Agricultural Research Institute (IARI), Pusa Road, Delhi

Dr. Chopra, Head, Genetics Division
 Dr. Pekheryal, Pearl Millet breeder, formerly coordinator, All-India Pearl Millet Research Program

Others in India

Dr. Hugh Duggett, Canadian International Development Research Center, Kandy, Sri Lanka
 Dr. Norman R. Collins, Program Advisor, Ford Foundation
 Mr. Bumbry, World Bank
 Dr. K. L. Bajaj, Biochemist, Punjab Agricultural University, Ludhiana

USAID/Egypt, American Embassy, Cairo, Egypt

Dr. P. J. Edwards, Food and Agricultural Officer

FAO/Rome, Via delle Terme di Caracalla, Rome, Italy

Dr. C. H. Bonte-Friedheim, Deputy Chief, Agricultural Operations Division

Dr. R. DeVred, Acting Chief, Agricultural Research Development Center
 Dr. A. Sozzini, Chief, Crop and Grasslands Production Service.

AID/Washington

Mr. Curtis Farrar, Components Coordination, IDCA
 Dr. D. Woods Thomas and Dr. Elmer Kiehl, BIFAD Staff
 Mr. John Wilson, Deputy Director, DS/AG
 Dr. Floyd Williams, Associate Director, Research, DS/AG
 Mr. John Yohe, DS/AG/FCP
 Mr. Blair Allen, Latin American Bureau
 Mr. Ed Thomas, CM/COD

NARRATIVE:

1. Small Ruminants CRSP, University of California, Davis

The principal purposes of this visit were to establish personal contact with administrators of the Small Ruminants CRSP, and to learn as much as possible about experiences of this first CRSP group, which might be useful in planning GS/PM CRSP activities.

The two programs obviously are quite different in many respects. Some of these result from dissimilarities in background of the participants or in the planning process. By contrast with the Small Ruminants group, several of the GS/PM participating institutions had many years' experience in working together and with AID, in contract research very similar to the planned CRSP activities. Also, planning for the GS/PM CRSP extended over a longer time period and was more detailed; thus, the GS/PM CRSP grant document and the planned program of work were spelled out in excellent detail. This enabled the GS/PM sub-grant process to be executed very expeditiously, while the Small Ruminants group had to go through a planning cycle after the grant was received. As a result, the Small Ruminants group is just beginning the first-year allocation of actual research funds, while the GS/PM program is in nearly full operation.

Another significant operational difference has resulted from differences in planning philosophy. The Small Ruminants group has already devoted extensive planning effort and travel to the selection and organization of overseas research sites. The GS/PM group is just beginning the overseas organizational effort, and at present it appears unlikely that it will organize many, if any, overseas sites under its own control. Rather, the GS/PM group philosophy has been directed toward close working ties with existing country, regional and international research agencies, at physical sites controlled by such organizations.

An organizational difference which is apparent, though not necessarily important, is the administrative placement of the CRSP headquarters within the Management Entity institution. The Small Ruminants CRSP is administered by the Graduate College of UC/Davis, specifically under the office of Sponsored Research. As GS/PM CRSP personnel are aware, the office of its Program Director is administratively responsible, within the University of Nebraska-Lincoln, to the Dean and Director of International Programs, in the Institute of Agriculture

and Natural Resources. For technical and operational matters, the Director is responsible to the INTSORMIL Board, chaired by Dr. Dudley Smith of Texas A&M University.

2. ICRISAT, Hyderabad, India

ICRISAT has responsibility, within the Consultative Group system, for research leadership in sorghum, millet, peanuts and several grain legumes. Close coordination between the INTSORMIL program and ICRISAT obviously is important to both. The purpose of the visit to ICRISAT was to determine the likely general scope of such coordination and to begin discussions on specific areas of mutual interest.

We were very well received in Hyderabad and given a good look at the field research plots, particularly those of sorghum and the farming systems program. The ICRISAT field facilities are impressive, particularly considering the scarcity of land in India. Both major soil series of the Deccan plateau - "red" and "black" - are represented in close proximity to each other.

Crops had been under severe moisture stress until just at the beginning of our visit, and this was reflected in the condition of the summer (Kharif) crops. Fall-sown fields of sorghum were just emerging, and the very heavy rains that fell during our visit may have necessitated some replanting.

It appeared that the ICRISAT on-station fields are well suited to grain sorghum research, but less well-adapted to pearl millet culture. This observation is substantiated by the fact that ICRISAT is developing a major sub-station at Hissar in Haryana State, northwestern India, primarily for research on pearl millet, chickpeas and dry-land farming systems.

Dr. Leslie Swindale, Director of ICRISAT, welcomed us cordially and assured us that ICRISAT desires to cooperate extensively with the GS/PM CRSP work. He agreed that at present, there is no need for special projects to be organized to carry out such collaboration. Rather, it was felt that existing close working ties between INTSORMIL participants and their ICRISAT colleagues should be strengthened and expanded. Many INTSORMIL research workers already have collaborative work underway with ICRISAT staff.

A special feature of collaboration, mentioned first by Dr. Swindale and enthusiastically agreed by Dr. Leng and Dr. Jackson, is the proposal that a series of working-group meetings should be convened at ICRISAT. Some of the INTSORMIL utilization-grain quality workers previously had suggested organizing such a workshop. Tentative agreement was reached to have a meeting of INTSORMIL, ICRISAT and other researchers, directly involved in grain quality/utilization research, to be held at Hyderabad in mid or late 1980.

Dr. Lee House, Chief of ICRISAT's sorghum research program, indicated that ICRISAT hopes to host a large symposium on the theme "Sorghum for the 1980's," sometime in 1981. It was suggested, and agreed, that INTSORMIL technical staff should take part in planning and arrangements for this meeting.

Dr. J. S. Kanwar, ICRISAT Associate Director, Research, expressed an interest in being kept closely informed of the content, personnel, etc. of all INTSORMIL research projects. It was agreed that a summary of the desired

information would be sent to Dr. Kanwar.

Procedures for international variety/hybrid trials also were discussed. ICRISAT expressed the hope that INTSORMIL would collaborate in the existing series of international trials, rather than establishing an independent set of tests. This matter will be referred to the INTSORMIL Technical Committee.

As an administrative note, ICRISAT staff were most helpful in arranging accommodations, transportation, ticket confirmation and other travel details. This also included direct assist in Delhi, by Mr. Mohan, ICRISAT administrative officer, New Delhi.

3. USAID/New Delhi

The CRSP program and mutual interests were discussed with USAID officials, who also made appointments and arrangements for conferences with Government of India officials and others. While the Mission expressed a positive reaction toward INTSORMIL collaboration within India, it was clear that the low staffing level of the Mission and extensive plans for direct USAID support of Indian agricultural research will not permit much close involvement of USAID personnel in details of CRSP work. This could lead to complications, since GOI (See below) specifically expressed a desire to use USAID/Delhi as the "nodal point" for CRSP contacts.

Another point, discussed with Dr. Riggs, Mr. Gunning and Mr. Lovak, is that CRSP direct expenditures within India should be (by terms of the Basic Grant document) in U.S.-owned rupees. This is a special problem because the present AID program in India is not "Surplus"-rupee funded. Implications of this requirement were explored in detail but not resolved.

4. Government of India (GOI)-Indian Council of Agricultural Research (ICAR).

The ICAR, under the Ministry of Agriculture, is the GOI entity charged with organization, funding and supervision of agricultural research at the national level. ICAR is headed by a Director-General (Dr. G. P. Gautam) who also is a Secretary to the Government, and has four divisions headed by Assistant Directors-General. We discussed the GS/PM CRSP with Dr. L. M. Jeswani, who is Assistant Director-General (Crops), and chairman of a special committee organized by ICAR to coordinate contacts with CRSP programs. Dr. Jeswani was eager to develop cooperative relations between ICAR research programs and the GS/PM CRSP, but indicated uncertainty as to the exact shape such cooperation should take. He did indicate that ICAR (himself, specific) would be the "nodal point" for Indian contacts with the GS/PM CRSP, and expressed the view that USAID/Delhi should provide the "nodal point" from the U.S. side. We noted this view and relayed it to USAID/Delhi officials (see above).

It was generally agreed that

- a. Subject to clearance from the INTSORMIL Board (since obtained), Dr. Leng would prepare summaries of each INTSORMIL project and forward these to Dr. Jeswani through AID/W and USAID/Delhi.
- b. Dr. Jeswani will convene his committee (consisting of himself, Dr. M. G. P. Rao, and Dr. Haryananarayan), scrutinize the summaries, and make specific suggestions for collaboration by Indian research workers in the two crops.

c. These suggestions would be examined by the INTSORMIL Technical Committee, which would recommend specific areas of collaboration to the Board of Directors.

d. Early in 1980, a meeting would be held in Delhi, between ICAR and INTSORMIL representatives, to finalize details of a working agreement.

I was impressed by the friendly, perceptive response of Dr. Jeswani to our discussions, and particularly by his obvious interest in developing close collaboration with the CRSP program. Since U.S.-Indian working relationships in agricultural research have been rather strained since 1972, I was greatly encouraged by this show of interest.

While at Hyderabad, we had extensive technical discussions with Dr. N. Ganga Prasada Rao, who is recognized as India's most eminent sorghum research specialist. He is an ICAR official, long the coordinator of the All-India Sorghum Improvement Program, who recently was appointed "Professor of Emirance" in a new, centrally-funded sorghum research activity. Clearly, the nature and scope of this activity is not fully developed, but Dr. Rao (and later, Dr. Jeswani) were evidently interested in the possibility of close ties between his work and particular topics under study in the INTSORMIL program. It appears to me that fruitful collaboration might well be developed, particularly since Dr. Rao is internationally known and respected as a research worker and leader.

5. Indian Agricultural Research Institute (IARI), Delhi.

This is a central facility of the Government of India for research in crop production, soil and water science, and closely related fields. Its headquarters and main station located at the northwest corner of Greater Delhi, branch experimental stations are scattered across the country.

We visited the Institute, at the request of ICAR and USAID/Delhi, chiefly to meet persons involved with sorghum and millet research. We met Dr. Chopra, head of the Genetics Division, briefly, and had a more lengthy discussion with Dr. Potheryal, formerly All-India coordinator for pearl millet (bajra) research. He explained that the coordination office was moved to Maharashtra State a few years ago, and is now located at the Mahatma Phule Agricultural University.

Both All-India programs (sorghum and pearl millet) with which INTSORMIL is likely to cooperate are led from sites other than IARI and not by IARI personnel. This fact probably has minimized IARI interest in close cooperation with INTSORMIL, and my judgement is that such cooperation is not very likely to occur.

6. Other Contacts in India.

Through arrangements made by USAID/Delhi, we had discussions with Dr. Norman Collins, Ford Foundation Program Advisor, and Mr. Bunbry of the World Bank office in New Delhi. Both expressed keen interest in the CRSP concept and the efficient mechanism it could provide for contacts between U.S.-based agricultural research centers of excellence and developing-country needs for up-to-date research information. Both earnestly pledged cooperation of their agencies with CRSP activities (if any develop) in India.

We also met Dr. K. L. Bajaj, a biochemist from the Punjab Agricultural University, Ludhiana, whose principal research is on the biochemistry of tannin-related compounds in vegetables. Tannins are common constituents of grain sorghum seed, and are involved in bind resistance, weathering resistance, and digestibility/nutrition problems in humans and animals. Since Dr. Bajaj's department would not normally be involved in cooperation with INTSORMIL, he was interested to learn how his research might be utilized. We suggested that he should place himself in direct contact with the Purdue research group who are working on tannin problems.

A valuable, accidental contact was made with Dr. Hugh Doggett, of the Canadian International Development Research Center. Dr. Doggett is one of the world's leading experts on sorghum research, and was for some years in charge of ICRISAT's cereal grains improvement programs. We discussed various aspects of the CRSP program with him, and also sounded him out about service as a member of the INTSORMIL External Evaluation Panel. He enthusiastically agreed to serve on this panel, subject to his formal selection and to clearance from his supervisors in IDRC.

7. Yemen.

My planned trip was interrupted in Sana'a by lack of a visa for the country. I had mistakenly been informed that the necessary visa could be obtained in Bahrain; when this proved not to be correct, I telephoned the Embassy in Sana'a to inform them of the situation. My understanding was that I would be admitted on arrival at Sana'a; this proved not to be the case. Since the only solution offered by local officials was to leave Yemen, and since the only flight available was the Jeddah-Cairo-London Egypt Air plane, I accepted a ticket exchange and left. This proved, in retrospect, to lead to added complications.

It should be noted here, for the record and for future information, that "tourist" visas to Yemen are not issued in Washington, D.C., but only in New York. Apparently, visas also can be obtained in Kuwait, although the waiting time is not known.

8. Egypt.

During a brief stopover in Cairo (brief because hotel rooms were almost impossible to obtain), I contacted Dr. R. J. Edwards, Food and Agriculture Officer, USAID/Cairo. Dr. Edwards, a former student of mine at the University of Illinois, outlined in some detail the very large agricultural research assistance program funded by USAID in Egypt. He further stated that because of the size and scope of this country-specific program, USAID/Cairo and the Government of Egypt were not in position to become involved directly in GS/PM CRSP activities. He did, however, express a desire to be kept informed of the progress and results of INTSORMIL research.

9. Food and Agriculture Organization, United Nations (FAO), Rome.

Discussions with FAO officials were friendly and constructive. The three officials contacted are at very senior levels in the organization, and their interest in cooperation with the CRSP activities is most encouraging.

Dr. Alessandro Bozzini, Chief of the crop production program in FAO, expressed keen interest in tying together CRSP work in developing countries with closely related FAO efforts. Country projects mentioned where FAO has ongoing work and special interest in CRSP cooperation are:

- a. Senegal
- b. Upper Volta
- c. Kenya (rainfed crops project)
- d. Pakistan (rainfed crops project)

Dr. C. H. Bonte-Friedheim, deputy chief of agricultural operations, reiterated FAO's interest in cooperation, and undertook to send a list of present and planned FAO projects with which cooperation might be developed. He appeared to be particularly interested in arrangements by which FAO-sponsored extension ("outreach") programs could provide field contacts for USAID-CRSP sponsored research activities.

Dr. R. DeVred, acting chief of the FAO Research Development Center, was particularly interested in discussing coordination with ICRISAT and other international research centers. His group is the official FAO contact point for the Technical Advisory Committee (TAC) and the international centers. Dr. DeVred appeared to be pleased with our discussions regarding coordination with ICRISAT, and promised to relay the substance of our discussions to Dr. Dieter Bommer, FAO Assistant Director-General for Agriculture, who was out of Rome on official business.

10. AID/W and BIFAD.

On return to the United States, I discussed CRSP progress and results of the trip with a number of AID and BIFAD officials (see list of contacts). My general impression was that the CRSP concept still is being tested on all levels, and that only actual experience can lead to resolution of some of the problems which are perceived. The major concern expressed to me by AID personnel questions the Land-Grant universities intentions and capabilities to impact meaningfully on the real food production problems in developing countries. This concern emphasizes the need for early, effective overseas operations in the CRSP program.

Observations and Recommendations:

Experiences from this trip lead to the following observations and recommendations:

1. Interest in, and willingness to cooperate with the GS/PM CRSP is high. In order to capitalize on this interest, and to insure that major problems and misunderstandings are avoided, it is important that potential cooperators be informed quite precisely of the approved INTSORMIL work program and research objectives.

RECOMMENDATION: Concise, clear summaries of each project plan and of the overall GS/PM CRSP program should be furnished to USAID field Missions, potential host country governments, international research institutes, and major international development assistance agencies (FAO, UNDP, World Bank, IDRC, IADS, etc.)

2. The precise nature of INTSORMIL collaboration will vary from country to country. Factors involved in this variation will include importance of the crops, existing in-country research structure and strengths, involvement to other assistance programs dealing with agricultural research, and specific research topic interfaces with INTSORMIL staff.

RECOMMENDATION: All the following forms of collaboration should be developed, specific programs to be worked out in each individual case:

- a. Country-level collaboration between major host country coordinating agency and the INTSORMIL program as whole.
- b. Individual institution or project coordination between specific best country institutions and one or more INTSORMIL components.
- c. Individual U.S.-based research worker collaboration with a host-country institution (may differ in scale from b. above)
- d. Collaboration with appropriate international research centers.
- e. Collaboration with other international development agencies (FAO, World Bank, etc.) and associated regional development projects (SAFGRAD, etc.).

3. Advance attention to significant travel arrangements is necessary to avoid potential difficulties of the type I encountered in traveling to Yemen without the required visa.

RECOMMENDATION: In addition to required travel clearances by AID/W, missions, INTSORMIL headquarters, and the traveler's home institution, each INTSORMIL traveler must personally be sure that he has a valid passport and all required visas before departing the U.S. An exception might arise when the traveler is sure he can obtain a required visa at an intermediate point. AID/W and INTSORMIL headquarters should give all possible information to travelers which might facilitate obtaining visas.

4. The anomalous (semi-official) status of travel on INTSORMIL business, vis-a-vis USAID field missions and host country governments, could be improved, and efficiency of the traveler's impact enhanced, by AID granting official status to travelers on INTSORMIL official business. USDA regularly does this for non-USDA employees through use of the "collaborator" appointment mechanism.

RECOMMENDATION: BIFAD and AID/W should explore the possibility of granting official status (with "Official" passports and visas) to international travelers on Title XII business.