

PN-PAQ-587

ISN. 0501

International Service for  
National Agricultural Research

1983  
Annual Report

The logo consists of the letters 'ISIRI' in a bold, italicized, sans-serif font. The letters are rendered in a 3D perspective, appearing to be raised and casting shadows. The 'I' at the end has a small rectangular block at its top right corner. The entire logo is filled with a dense stippled or halftone pattern.

The International Service for National Agricultural Research (ISNAR) began operating at its headquarters in The Hague, Netherlands on September 1, 1980. It was established by the Consultative Group on International Agricultural Research (CGIAR), on the basis of recommendations from an international task force, for the purpose of assisting governments of developing countries to strengthen their agricultural research. It is a non-profit autonomous agency, international in character, and non-political in management, staffing, and operations.

ISNAR is the youngest of the 13 centers in the CGIAR network, and it is the only one which focuses primarily on national agricultural research issues. It provides advice to governments, upon request, on organization, planning, manpower development, staff requirements, financial and infrastructure requirements, and related matters, complementing the activities of other assistance agencies. In addition, ISNAR has active training and information programs which cooperate with national agricultural research programs in developing countries.

ISNAR also plays an active role in assisting these national programs to establish links with both the international agricultural research centers and donors.

ISNAR is supported by a number of members of CGIAR, which is an informal group of more than 30 donors; it includes countries, development banks, international organizations, and foundations.

**Citation:**

International Service for National Agricultural Research. Annual Report 1983. 1984. The Hague, Netherlands.

PNHQ-587

International Service for  
National Agricultural Research

May 1984  
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The logo for the International Service for National Agricultural Research (ISNAR) is rendered in a large, bold, italicized, sans-serif font. The letters are thick and black, with a grainy, stippled texture. The 'I' and 'S' are particularly prominent, with the 'S' having a large, open loop. The 'N' and 'A' are also thick and blocky, while the 'R' is more slender but still maintains the overall heavy, stylized appearance. The logo is positioned to the right of the text 'Annual Report'.



## Foreword

The program carried out by ISNAR in 1983 continued on the lines established in its previous two years of operation. As it completed its third full year of operation, the thrust of its activities continued to be for direct work with national agricultural research systems. However, as had been foreseen, the work began to shift from an almost full emphasis on review and planning missions in cooperation with national programs, to more emphasis on cooperation on research planning, priority setting, program planning, analysis of manpower and training needs, and specific organization and management issues.

ISNAR has continued to carry out its role to help bring about more effective linkages between national agricultural research systems, the international agricultural research centers of the CGIAR, and the international scientific community. Also, as a result of earlier review and planning work with national systems, many of those systems are beginning to use the recommendations and conclusions from the reports of the work to try to match their needs with donor interests.

Resources for the development of ISNAR in 1983 were below its needs and a significant increase in resources is required to enable ISNAR to develop the program required to carry out its mandate as determined at the time of its establishment in the Consultative Group on International Agricultural Research.

The strong interest and support of a great many leaders of national agricultural research systems and of many donors is much appreciated.

On behalf of the Board of Trustees and the staff of ISNAR, I am pleased to present the 1983 Annual Report.

William K. Gamble  
Director General

## Table of contents

- 2 Foreword
- 4 Board of Trustees
- 5 1983 Donors
- 6 1983 Staff
- 7 **Planning ISNAR's Program**
- 8 ISNAR's staff functions as a team, stressing continuing, intermediary roles
- 11 **Working with Research Systems**
- 12 Building a continuing relationship  
— Indonesia
- 16 A chronology of ISNAR activities with Rwanda
- 19 Starting in the Dominican Republic
- 20 Somalia: an international network in action
- 23 **Country-by-Country Reports**
- 24 Working with nations to help strengthen their research systems
- 24 Asia and the Pacific
- 28 Africa
- 31 Latin America
- 32 ISNAR works with research leaders through IFARD
- 33 **Planning Management Training**
- 34 Strengthening management capacity of national research systems
- 37 Meeting research training needs in Africa
- 38 Managing research with a farming systems perspective
- 40 Communications and information activities
- 41 **Research on Organization and Management**
- 42 Research objective: to strengthen ISNAR's institutional capacity
- 43 Studying the interface between research and extension
- 45 **Staff and Consultant Activities**
- 46 1983 participation by staff members
- 49 1983 publications
- 50 1983 consultants to ISNAR
- 53 **ISNAR's 1983 Financial Report**

## ISNAR BOARD OF TRUSTEES - 1983

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Cooperation with Developing Countries  
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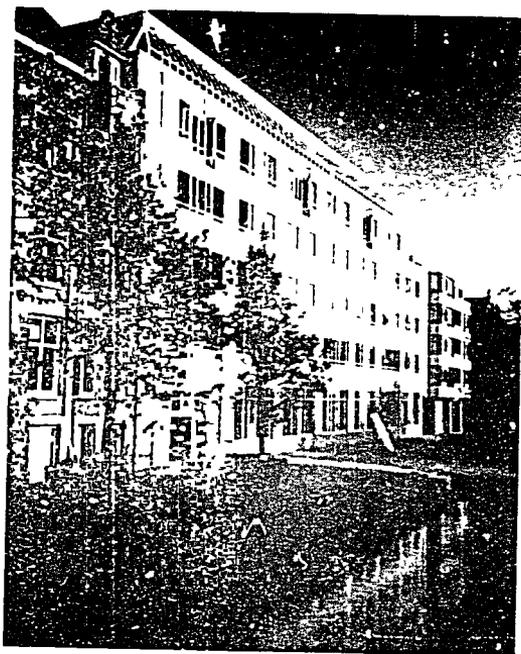
# ISNAR DONORS - 1983

## Donors to the core program

Australia (Australian Development Assistance Bureau)  
Canada (Canadian International Development Agency)  
Federal Republic of Germany (Bundesministerium für Wirtschaftliche  
Zusammenarbeit)  
The Ford Foundation  
France (Ministère de la Recherche et de l'Industrie)  
Ireland (Department of Foreign Affairs, Development Cooperation Division)  
Italy (Consiglio Nazionale delle Ricerche allo Sviluppo)  
Netherlands (Ministry for Development Cooperation)  
Philippines (Ministry of Agriculture)  
Spain (Instituto Nacional de Investigaciones Agrarias)  
Switzerland (Eidg. Departement für auswärtige Angelegenheiten)  
The World Bank  
United Kingdom (Overseas Development Administration)  
United States (Agency for International Development)

## Donors to special projects

Canada (International Development Research Centre)  
Ivory Coast (Government of the Ivory Coast, Ministry of Scientific  
Research) - with World Bank loan funds  
Rwanda (Government of Rwanda, Ministry of Agriculture and Livestock) -  
with World Bank loan funds  
United Kingdom (Overseas Development Administration)  
United Nations Development Programme - through CIMMYT  
United States (Agency for International Development)



ISNAR's offices were moved to consolidated quarters on three floors of the center building in 1983

## ISNAR STAFF - 1983

### Administration

Dr. William K. Gamble, Director General  
 Mr. Alexander von der Osten, Executive Officer  
 (one-half time on administration)\*\*  
 Dr. Robert B. Banks, Executive Officer  
 (one-half time on administration)\*  
 Ms. Alicia Mina, Administrative Officer

### Review, planning and development of national agricultural research systems

Dr. Robert B. Banks, Executive Officer  
 (one-half time on programs)\*  
 Dr. Rudolf B. Contant, Senior Research Officer  
 Dr. Matthew Dagg, Senior Research Officer  
 Mr. Rene Devred, Senior Research Officer  
 Dr. Santiago Fonseca, Senior Research Fellow\*\*  
 Dr. Ghazi Hariri, Senior Research Fellow\*  
 Dr. Fred Haworth, Senior Research Officer  
 Dr. Josette Murphy, Senior Research Officer\*  
 (one-half time on programs)  
 Dr. Z. M. Nyirira, Senior Research Fellow \*\*  
 Mr. Alexander von der Osten, Executive Officer  
 (one-half time on programs)\*\*  
 Dr. Chris Panabokke, Senior Research Fellow\*\*  
 Dr. Guy Rocheteau, Senior Research Officer  
 Dr. T. Ajibola Taylor, Senior Research Officer\*  
 Dr. Eduardo Trigo, Senior Research Officer\*\*\*  
 Dr. Carlos Valverde, Senior Research Fellow\*  
 Dr. Floyd Williams, Senior Research Officer

### Research on organization and management of agricultural research systems

Dr. Josette Murphy, Senior Research Officer\*  
 (one-half time on research)  
 Mr. Peter Oram, Senior Research Officer  
 (on secondment from IFPRI)  
 Dr. Eduardo Trigo, Senior Research Officer\*\*\*  
 Dr. Martin Piñeiro, Coordinator PROAGRO\*  
 (two-thirds time, based in Argentina)

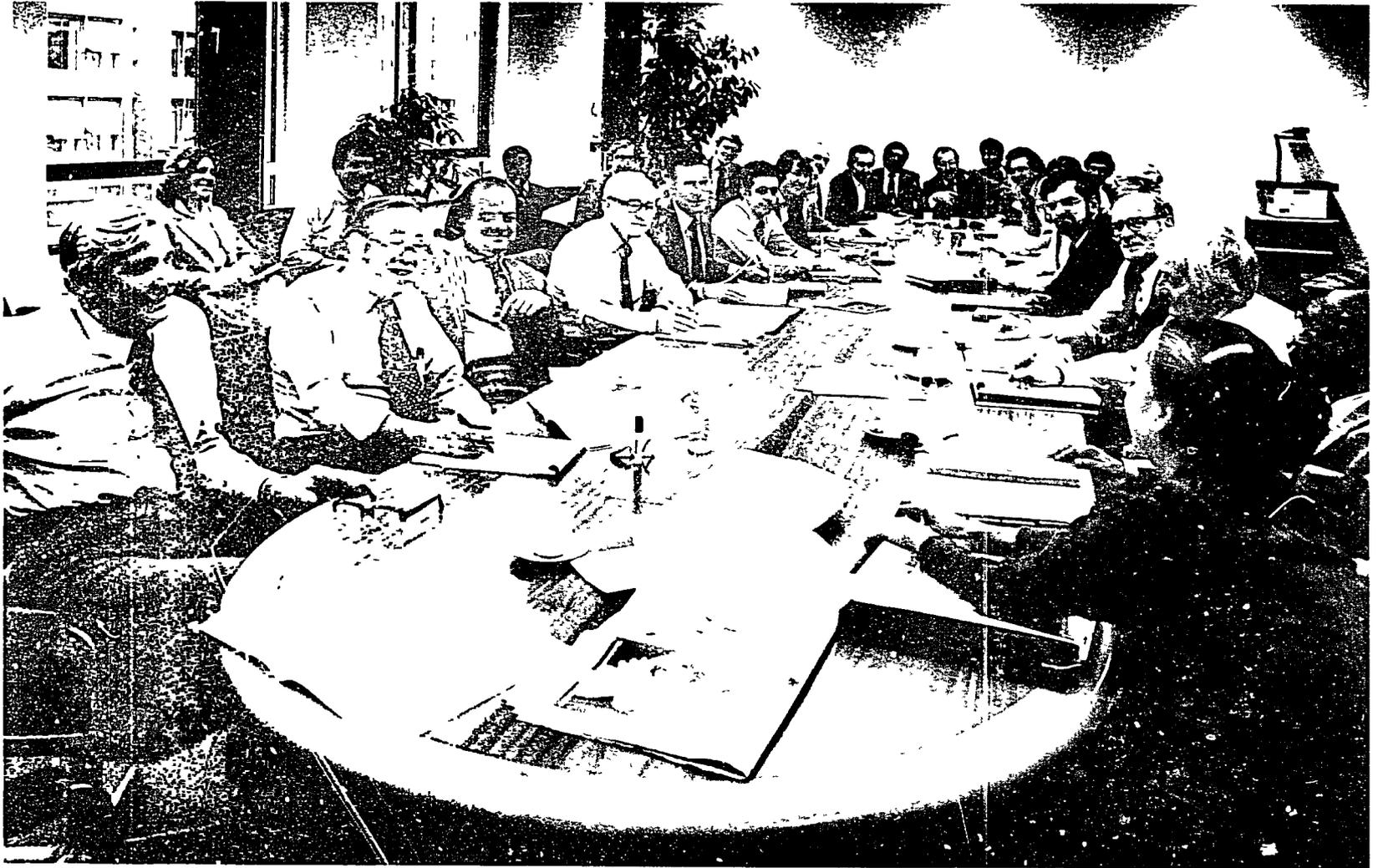
### Training and conferences

Dr. Byron T. Mook, Senior Research Officer  
 (Training)  
 Mr. Huntington Hobbs, Senior Research Officer  
 Dr. Paul Bennell, Research Fellow\*  
 Ms. Marie de Lattre, Research Fellow, Case Writing\*  
 Mr. John McKenzie, Research Fellow, Case Writing\*

### Communications and information

Dr. K. Robert Kern, Communications Officer  
 Ms. R. Katherine Jones\*\*  
 \* Joined during 1983  
 \*\* Completed appointment during 1983  
 \*\*\* Joined in 1983 and transferred to Research section in July, 1983

Members of ISNAR's Program Committee meet with staff and consultants during an in-house review, discussing future directions and areas of emphasis.



## ISNAR's Staff Functions as a Team, Stressing Continuing, Intermediary Roles

CGIAR created ISNAR to help national agricultural research systems improve their ability to plan, organize, and manage research more effectively

This is ISNAR's third annual report. It tells of a growing, developing institution.

ISNAR's mission and mandate remain the same, standing the test of that limited time and experience. They flow from the reason for ISNAR's creation, that is to fill a need.

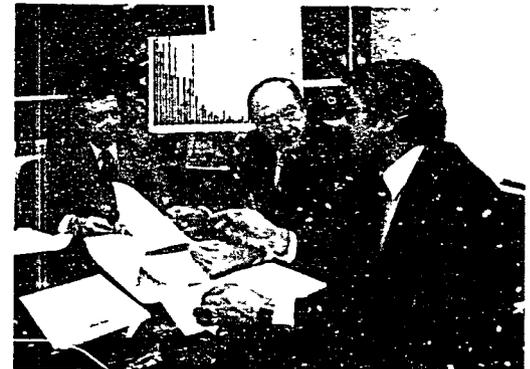
In the late 1970s, changes in the world food situation, predictions of food shortages, and higher prices had made leaders in many developing countries more aware of agriculture's importance and the need to markedly increase domestic food production. They also became aware of new technologies being developed, which promised help in attaining needed boosts in farm output. This, in turn, focused attention on agricultural research systems in those developing countries. Many were found wanting. Research leaders in these countries realized their systems needed to be strengthened to respond to development needs.

At about the same time, new technologies were being developed at the international agricultural research centers (IARCs). To be used most successfully in developing nations, these technologies needed to be adapted to local conditions. This called for national systems capable of more adaptive research — fitting the

technology and spreading the knowledge and other support so their farmers could use the new cultivars and methods.

National agricultural research officials, leaders in the IARCs, and other knowledgeable observers recognized the critical need to strengthen national agricultural research systems. This task was accepted within the Consultative Group on International Agricultural Research (CGIAR), which established ISNAR to meet the need — to help national agricultural research systems improve

Members of ISNAR's Spanish-speaking group plan future activities in Latin America. There also are French- and English-speaking members on ISNAR's international staff.



their ability to plan, organize, and manage research more effectively with their own as well as external resources.

#### Supporting objectives

Two supporting objectives were set out when ISNAR was established, and they remain operative today:

To serve an intermediary role in improving cooperation between national agricultural research systems and the IARCs.

To help national systems identify and make better use of other resources available from donors, by helping national leaders identify their needs which might be met through external aid. ISNAR also performs an intermediary role in promoting such bilateral cooperation.

Overall development of ISNAR continues to take place within this context. Experience in working with national agricultural research systems, learning of their greatest needs and how ISNAR can best work with them to increase their effectiveness, has led to some areas of emphasis in ISNAR's work. Three points are noteworthy:

#### Functions as a team

1. ISNAR's staff continues to function as a team, although it currently is organized in sections, by areas of activity:

- Review, diagnosis, planning, and continuing cooperation with national agricultural research systems in developing countries;
- Research studies on planning, organization, and management of agricultural research systems;
- Training and conferences;
- Communications and information.

While these staff sections serve current functional organizational delineations, members of the interdisciplinary ISNAR staff work with one mandate and one institutional thrust — helping to strengthen national agricultural research systems. Activities of all sections support that goal.

For example, activities in the Training and Conferences section are largely targeted at manpower training and development in support of the ISNAR thrust in developing increased management capability. Research is directed internally to provide specific information to help

ISNAR staff in analysis and planning of national agriculture research systems, and towards solution of problems and issues ISNAR finds in national systems to which answers are not yet available. Communications and Information is heavily involved in publishing reports on national systems, results of seminars and workshops, and other vital aspects of sharing information within ISNAR and between ISNAR and other systems and institutions with which it works.

Some ISNAR staff members look at areas of current involvement, and share information and ideas on new initiatives.





An ISNAR staff member discusses elements of research service management with a member of the Program Committee, who has had considerable first-hand experience as a research manager

#### Developing strong relationships

2. ISNAR is further developing strong, mutually beneficial, and supportive relationships with systems where it has established a basis for continuing collaboration. The review, analysis, and planning mission to agricultural research systems in developing countries usually is the first in-depth interaction between ISNAR and the system. But it is only one step. Out of such a review and analysis come recommendations for further development of the research system.

These recommendations are the subject of intensive, thorough discussions with authorities of the country involved. This interchange results in the country's determining its needs and goals for its research system. ISNAR then, if requested, becomes the partner and sometimes an intermediary for the system. Through these continuing relationships, ISNAR helps the developing country strengthen its national agricultural research system. Thus these relationships are stressed in ISNAR's work and form a major part of this report.

#### Effective intermediary role

3. National agricultural research systems are finding ISNAR's intermediary role especially effective and valuable in their further development. ISNAR is developing a unique ability to serve in that capacity. International development banks and donor agencies

frequently look to ISNAR for suggestions and help. ISNAR's acquired knowledge of research needs, shared with the national system and the donor, helps both work toward assuring greater benefits of assistance to the recipient country. And ISNAR works closely with sister IARCs in its continuing and growing intermediary role. Key emphasis in working with other institutions is helping national systems improve their capability to plan, organize, and manage agricultural research.

The year reported here, 1983, was a productive year of development for ISNAR. This report of ISNAR's activities describes the many ways in which it is growing and becoming more effective in fulfilling its mandate and objectives on behalf of developing countries in many regions of the world.

Indonesia was one of the first countries with which ISNAR conducted a review and established a continuing, cooperative relationship.



## Building a Continuing Relationship -- Indonesia



Indonesian crop scientists developed a rice variety rotation system to resist tungro disease attacks. The system is being used successfully in South Sulawesi.

Indonesia was one of the first countries with which ISNAR established a working relationship. It has one of the largest research systems in the developing world and presented excellent opportunities for cooperation between Indonesia's Agency for Agricultural Research and Development (AARD) and ISNAR. Thus, it is appropriate to look in some depth at the nature of the cooperation between Indonesia and ISNAR over time. That cooperation provides a good example of the way ISNAR works with a national system on a continuing basis.

ISNAR's relationship with Indonesia began in 1981. At about the time ISNAR was ready to offer its services, Indonesia requested those services. Indonesia was completing the first five years of a program for reorganizing and strengthening its national agricultural research activities. The Indonesian officials wanted an independent assessment of progress of the program.

Since 1975, Indonesia, with support from a World Bank loan and other international cooperation, had undertaken to restructure its agricultural research system. At the time of the

loan, agricultural research projects in Indonesia were scattered and needed better coordination and management. This was understandable. Indonesia is the fifth largest country in the world, made up of islands covering thousands of miles with widely varying soil, topographic, and growing conditions. Therefore, a colossal range of crops is grown -- from apples, tomatoes, and potatoes, to rice and tropical crops, to production of plantation crops such as palm oil, coffee, tea, and spices. Research projects had been initiated in response to widely varying needs.

These diverse research activities were pulled out of various sections of the agricultural ministry and put under a new Agency for Agricultural Research and Development (AARD) in 1974. When AARD first was established, it had limited staff and facilities. During its initial five years of existence considerable attention and support were given to create physical facilities and train staff. So, in addition to an independent evaluation of its progress, AARD wanted the ISNAR team to indicate priority areas for new research emphasis following the review.

Requested continuing cooperation  
Thus, Indonesia became one of the first countries in which ISNAR conducted a review,

analysis, and planning mission – in August, 1981 – in cooperation with AARD. A number of recommendations were made following the mission. Several recommendations relating to research emphasis and organization for more effective use of resources were made and accepted. Further, the Director General of AARD asked the Director General of ISNAR for continuing cooperation in working with Indonesian officials to plan for the implementation of some of the review recommendations as well as to jointly consider new issues which were arising. They sought cooperation in particular for forward planning in their research program, evaluation of programs and institutes, and cooperation in training activities.

ISNAR's Director General arranged for a member of the review mission who has a strong agricultural research and development background, good rapport with the AARD leadership, and experience in the country to lead ISNAR's continuing cooperation with AARD.

In 1982 and early '83, in the first stages of this continuing activity, the ISNAR consultant made several trips to Indonesia to work with the AARD committee established to prepare draft

proposals for its forward planning. Emphasis was placed on project proposals which would be suitable for external funding and would implement recommendations which had been determined by the AARD's planning group to be in Indonesia's priority interests. Proposals were prepared for nearly \$100 million of external assistance. The Indonesian government has incorporated most of these proposals in its current discussions with development banks and multilateral and bilateral agencies.

ISNAR's role essentially was bringing to the AARD planning group comparative experience and appropriate methodology, while the policy issues and the amounts clearly had to be internal decisions of the group. ISNAR was working in its intermediary role.

Involve other ISNAR sections

Through continuing liaison activities, AARD became interested in the work of other ISNAR sections. A member of the Training and Conferences Section went to Indonesia in the summer of 1983 to help organize and prepare the agenda for a one-week workshop for 25 AARD senior officials. Topics identified by the review team as areas within AARD which needed strengthening – project formulation and dissemination of the results of research – were

An Indonesian maize breeder examines yield prospects in a field. The Central Research Institute for Food Crops has bred and released seven maize varieties since 1980, four in 1983.



During the past three to four years, the human and physical facilities of AARD have improved and a wide-ranging research program has become operational

subjects of an in-depth AARD internal review in October 1983. ISNAR then worked with AARD in drafting proceedings of the meeting.

ISNAR staff worked closely with AARD's Center for Agricultural Economics Research (CAER) in the planning work of the Center. Most of the recommendations coming from the Center/ISNAR study have been incorporated into AARD's programs. Their implementation is receiving support from within the country and from international development banks and donors.

This is a new sweet potato variety released by Indonesia's Central Research Institute for Food Crops.



During the past three to four years, the human and physical facilities of AARD have improved and a wide-ranging research program has become operational. Under terms of its loan from the World Bank, the government of Indonesia was committed to establish a mechanism for monitoring and evaluating the research program once it became fully operational. Now that this stage has been reached, AARD has requested ISNAR to assist in developing an appropriate evaluation methodology.

This request was particularly interesting to ISNAR since in 1983 its staff began an internal project to develop a handbook of evaluation procedures. Work on this was linked to the AARD request by bringing together the senior AARD staff member responsible for evaluation and the team of ISNAR staff and consultants preparing the handbook.

#### Developing evaluation capability

At ISNAR's invitation, this AARD staff person visited ISNAR headquarters to interact with its staff in developing methodology for the evaluation and to plan for the individual reviews. There are mutual benefits. ISNAR's

evaluation capability is being used to help develop the methodology for the Indonesian evaluation reviews. And ISNAR gets the feedback of results from using its methodology in the nine subsector reviews which AARD will conduct from 1984 to 1986. At the same time, AARD will be able to strengthen its own in-house evaluation capability.

This linkage has been formalized through an agreement between the Directors General of AARD and ISNAR whereby each will provide a person to form a two-person secretariat to

Rice growing in volcanic ash from Mt. Galunggung, West Java, which erupted in 1982. Indonesian agricultural researchers evaluated the ability of crops to grow in this ash.



service each of the reviews to be carried out over the three year period.

ISNAR is helping AARD identify consultants for the reviews through its contacts with sister IARCs and CGIAR donors which have interests in Indonesian agriculture -- to provide specialist personnel for the specific review teams. It is serving as an intermediary to communicate with these donor agencies to seek their support for the review process. Donors are interested and supportive of these efforts because they gain opportunities to relate their inputs to accomplishments of the increasingly comprehensive Indonesian research system. As AARD is successful in improving the research management capability of the system, it increases the effectiveness of the investments of the donor groups. Bilateral donors are interested in learning of research gaps so they know where they can make investments of most value.

Work on this evaluation process is another example of the complementarity of ISNAR's sections -- what is learned from this experience

expands ISNAR's capacity to help strengthen national agricultural research systems in many other countries.

Indications are that AARD will request ISNAR to work closely with it as it continues to build and strengthen its growing capability to plan, organize, and manage agricultural research.

Rice cultivation is more efficient using newly developed hand weeders in Indonesia



# A Chronology of ISNAR Activities with Rwanda in 1981

January

May

September

SEMINAR

REVIEW

IDA/LOAN

The Rwandan example illustrates the many steps which must be taken by ISNAR, by research leaders, government officials, and others in the country involved, and by other interested people and institutions, in developing a continuing relationship with a national agricultural research system. Steps involved will vary by country, persons, system, and institutions involved, of course.

The Rwandan Minister, who heads the Ministry of Agriculture and Animal Production (MINAGRI), requests, through a World Bank official, that ISNAR help organize a national agricultural research seminar in Rwanda.

ISNAR and World Bank representatives visit Rwanda for exploratory talks about the proposed seminar and discuss the suggested possibility of ISNAR's reviewing Rwanda's research system before the proposed seminar.

On November 13, Minister of Agriculture requests ISNAR work with Rwandan government in carrying out a research system review and organizing a seminar. Purposes: to define research orientation for the next decade, recommend resources needed, and enlist donor funding.

ISNAR agrees by letter to MINAGRI to carry out a review and help Rwanda organize a seminar.



Population pressure in Rwanda is causing steep hillsides to be brought under cultivation, resulting in severe erosion problems. This is one of the problems being addressed by the national agricultural research system.

The Rwandan government indicates interest in obtaining funding from the International Development Agency (IDA) of the World Bank for a long-term agricultural research project. Both parties realize need for help in planning and organizing such a project.

# ISNAR Activities in Rwanda in 1982

January

May

September

ISNAR and MINAGRI correspond regarding objectives, size, and scope of seminar. ISNAR does in-house study of Rwanda policy papers, scientific and technical literature, and donor project documents, preparing for review mission.

ISNAR visits Rwanda for discussions with Presidency, MINAGRI, Rwandan Institute for Agricultural Sciences (ISAR), World Bank, aid missions, and bilateral projects, further preparing for the review and seminar.

Review study team is formed. ISNAR and MINAGRI discuss terms of reference and program for the mission. ISNAR team will evaluate how well research program meets farmers' felt needs and government's objectives, analyze system's structure, manpower and training needs, and national agricultural policy -- and relate these factors to needs for the next decade.

Minister's letter discusses participants, logistics, and persons and institutions ISNAR might invite to prepare papers for the seminar.

Letter sent from ISNAR to MINAGRI with final proposal for seminar program and suggested responsibilities for each institution.

As a result of the review and discussions with MINAGRI, ISNAR makes further detailed proposals for the seminar.

Letter goes from ISNAR to MINAGRI with agreed formal terms of reference, detailed checklist of aspects to be studied, and a desired itinerary for the system review mission.

June 1 to 20 -- in cooperation with MINAGRI, ISNAR study team conducts a review of the Rwandan agricultural research system.

Team prepares preliminary report, and sends its recommendations and conclusions to MINAGRI for initial review.

Detailed logistical arrangements for the seminar made at ISNAR .

On behalf of the Rwandan Government, ISNAR sends formal invitations to prospective authors of invited papers for the February 1983 seminar and arranges for their participation.

ISNAR visits MINAGRI, followed by visit of Secretary General of MINAGRI and Director of ISAR to ISNAR for discussions and Government approval of report -- and for final consultations on seminar arrangements.

The draft ISNAR review report is sent to MINAGRI for Government comments.

Final approved version of the mission report, 'The National Agricultural Research System of Rwanda,' is published in French. Report recommends adopting an integrated research approach taking farming systems into account, suggests specific measures for reorganizing, integrating, and coordinating the research system, establishing planning and programming procedures, implementing a 10-year recruitment and training program, and strengthening relations between research and extension.

MINAGRI and ISNAR distribute copies of the report to seminar speakers and invitees.

# ISNAR Activities in Rwanda in 1983

January

May

September

ISNAR staff arrives in Rwanda to make local seminar arrangements with MINAGRI personnel.

Seminar on 'Agricultural Research in Rwanda: Assessment and Perspectives,' held in Kigali, from February 5 to 12. More than 160 persons participate, including 108 government policy makers, research scientists and others based in Rwanda, 24 from nine International Agricultural Research Centers, 10 from other research institutions and development agencies, and more than 20 special representatives. Thirty-eight technical papers dealt with crops and livestock, forestry, soil conservation, tools for small farmers, and farming systems research. Seminar also discussed ISNAR review findings, and long-term Rwandan agricultural research orientation related to development priorities and farmers' needs.

English edition of review report is prepared and published.

World Bank Agricultural Research Project pre-preparation mission visits Rwanda, with ISNAR participation as follow-up on review findings and seminar conclusions.

ISNAR participates in World Bank main Agricultural Research Project preparation mission in Rwanda. Rwanda and Bank call for recruiting and posting two advisors to ISAR.

English and French editions of seminar proceedings finalized for publication.

End of '83

At the end of 1983, the ISNAR staff person to be posted in Rwanda is at ISNAR headquarters, preparing to go to Rwanda in March, 1984. The advisor appointed as head of administration and finance will arrive at the same time.

Other IARCs are getting involved or increasing their Rwandan involvement, along with members of the donor community. Example: Following the seminar, CIAT received funding from the Swiss Government to station three scientists in Rwanda for a bean research project.

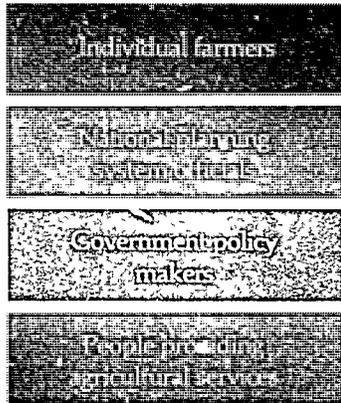
At the request of MINAGRI, ISNAR recruits an advisor in agricultural research planning and programming to be posted to ISAR, and assists Rwandan Government recruit a head of administration and finance for ISAR. Support for the two positions will come from IDA loan to the Government of Rwanda.

ISNAR participates in World Bank final Project Preparation Mission to Rwanda. The project, if approved, will incorporate most of the ISNAR review recommendations, as approved by the Government of Rwanda.

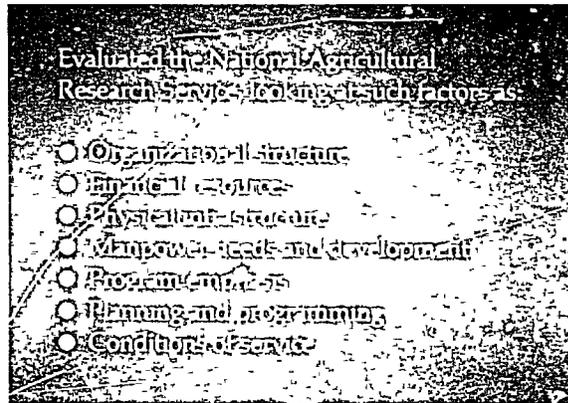
# Starting in the Dominican Republic

## Some Steps in ISNAR's Review, Analysis, and Planning of Agricultural Research in the Dominican Republic

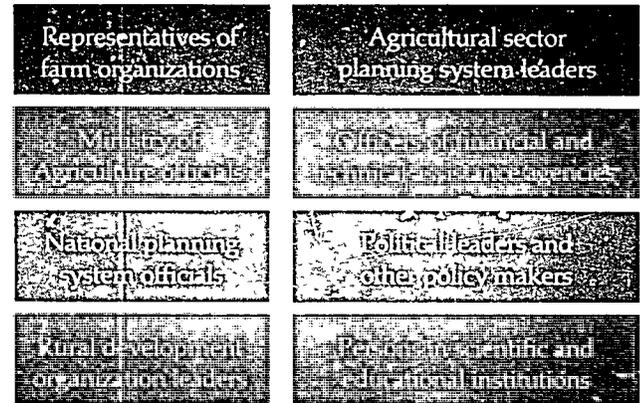
Held discussions with users of research



Exploratory mission determined need, scope, timing, and terms of reference of the mission, as well as commitment by the government.



Held discussions with those concerned with research policy



Developed tentative recommendations and discussed them with officials in the Ministry of Agriculture and others.

Report of findings and recommendations were presented to a full meeting of the National Agricultural Council, chaired by the President of the Dominican Republic.

Acceptance of the report.

## Somalia: An International Network in Action

The map on the facing page shows the many institutions around the world which have programs in Somalia. The text here and on page 22 spells out the institutions and their involvement with the Somalia agricultural research system

Developments came quickly in Somalia. The ISNAR team reviewed the agricultural research system in 1983. On presentation of the review findings, the Minister of Agriculture requested ISNAR's cooperation and support in implementing the recommendations, virtually all of which were accepted.

ISNAR is working closely with ministry and donor officials in its linking role. An agreement with the Government of Somalia provides for consultants in specific areas for program planning, priority setting, and determination of resources required. FAO staff already is playing an important role, and a number of donors and other international agencies are assisting Somalia in ways that help build the research capability. Five international agricultural research centers (IARCs) of the CGIAR system have agreed to provide necessary expertise to structure commodity programs on which they have expertise. For consultants who are not available through the IARCs or supported by other means, the Government of Somalia and the USAID program there have agreed funding will come from USAID support to Somalia. ISNAR's involvement, in its intermediary role, will extend into 1984 and beyond.

Following are some of the donor agencies and institutions involved in helping improve the agricultural research capability in Somalia.

AVDRC -- Asian Vegetable Research and Development Center provides vegetable cultivars for testing

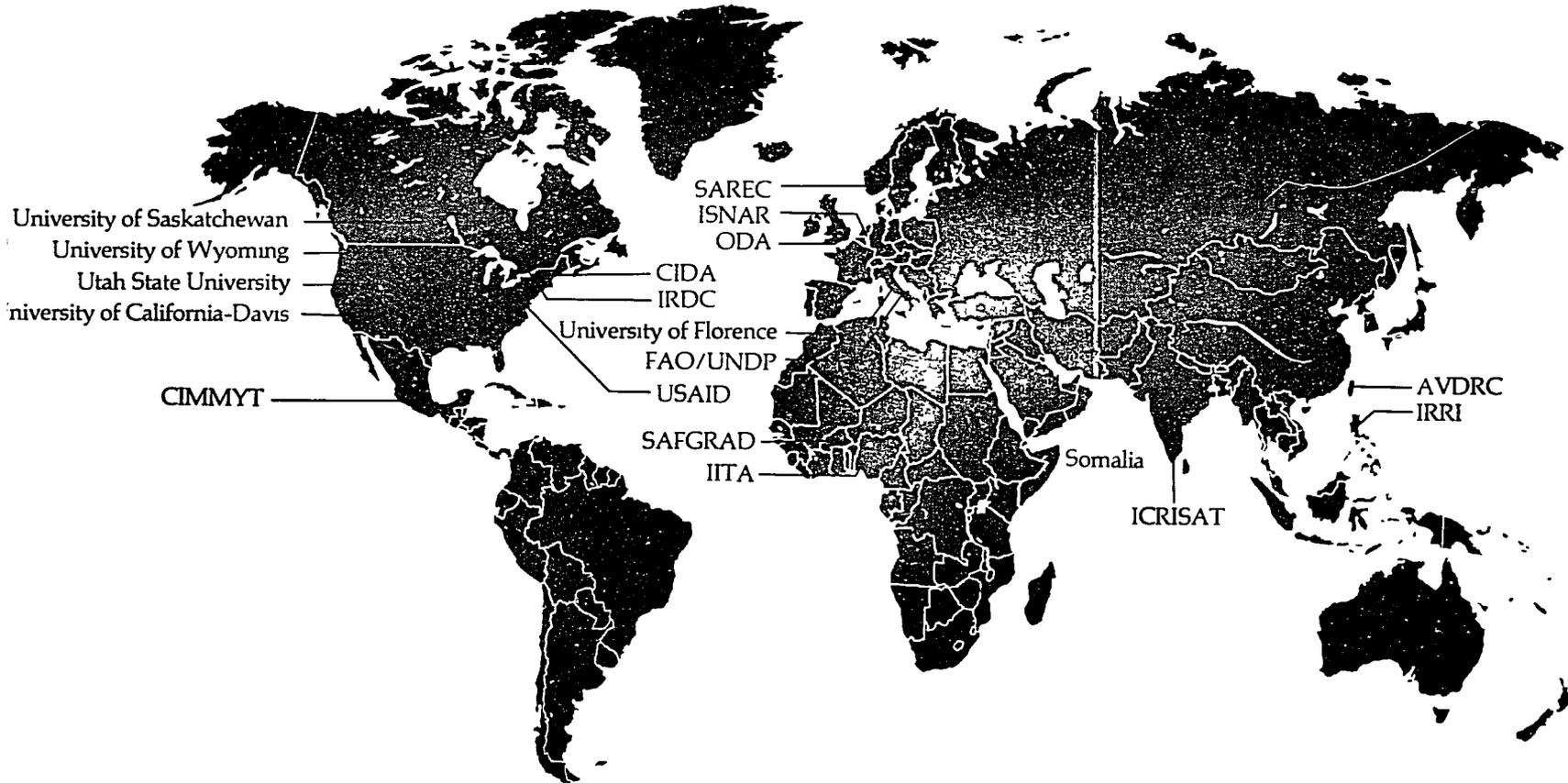
CIDA -- Canadian International Development Agency provides funding for the University of Saskatchewan program with the Somalia National University.

CIMMYT -- International Maize and Wheat Improvement Center supplies materials, short-term assistance, and training to help develop the maize research program.

FAO/UNDP -- Food and Agriculture Organization, with United Nations Development Programme funding, implements a program for strengthening leadership in crops research.

ICRISAT -- International Crops Research Institute for the Semi-Arid Tropics supplies training, materials, and short-term assistance for sorghum, millet, and ground nut research.

*(continued)*



Utah State University, with funding by USAID, supplies technical assistance and training for extension specialists and for liaison with the research program.

University of California-Davis, with USAID funding, supplies training and short-term assistance in developing a livestock research program.

University of Florence, and other Italian universities with Government of Italy funding, assists in teaching and in training members of the faculties of the Somalia National University.

University of Saskatchewan, with funding by the Canadian International Development Agency (CIDA), supplies faculty training and resident teaching personnel for the Somalia National University.

University of Wyoming, with USAID funding, supplies technical assistance and long-term support for dryland crop production research.

USAID -- United States Agency for International Development provides funding for a number of activities, including U.S. university assistance and training, in experiment station development, and liaison with ISNAR.

IDRC -- International Development Research Centre (Canada) supplies funding and technical assistance for sorghum research.

IITA -- International Institute of Tropical Agriculture supplies training, short-term assistance, and materials for cowpea research and experiment station development.

ODA -- Overseas Development Administration (U.K.) funds the U.K. Tropical Development and Research Institute and the Land Resources Development Centre in helping implement a pilot project to control tsetse flies in the riverine areas.

SAFGRAD -- Semi-Arid Food Grain Research and Development furnishes germ plasma for the sorghum research program.

SAREC -- Swedish Agency for Research Cooperation with Developing Countries supplies funding for a series of research activities implemented through the Somali National Academy of Science and Arts.

In 1983, plans were laid by the Government of Somalia for further cooperative efforts: with Colorado State University to supply assistance in irrigation management research; the International Centre of Insect Physiology and Ecology (ICIPE) for cooperation in sorghum varietal selection for stem borer and shoot fly resistance; the International Livestock Centre for Africa (ILCA) for short-term technical assistance to the livestock research program; and the International Laboratory for Research on Animal Diseases (ILRAD) for training for livestock disease research.

Members of ISNAR's staff have written reports of reviews of some 20 agricultural research systems. They are valuable resources for the agricultural research and government leaders of countries involved, and are important to ISNAR's work with the systems.

# Country-by-Country Reports



## Working with Nations to Help Strengthen Their Research Systems

This section summarizes some of the on-going activities with other countries with which ISNAR has conducted full system review, analysis, and planning missions, or cooperated in other activities

On preceding pages, different aspects of ISNAR's work with four national agricultural research systems were examined in some detail. Space does not permit such detailed examination of all systems with which ISNAR has established relationships. This section summarizes some of the ongoing activities with countries and regions in which ISNAR has conducted system reviews.

### Asia and the Pacific

#### Fiji

After the government accepted the ISNAR team report and recommendations in early 1983, the Minister of Agriculture and Fisheries requested that ISNAR help its research division develop a research plan, determine research priorities, plan a research program, and do a further in-depth analysis of its research facilities. This development came as a result of the recommendations of the ISNAR mission which conducted a review of the Agricultural Research Division during the second half of 1982, and two follow-up visits to Fiji by ISNAR staff members to discuss the recommendations and how, through cooperation, they could best be achieved.

During the first half of 1984, ISNAR staff, through a series of visits to Fiji, will be working

with a task force appointed by the Ministry to develop a research plan, priorities, and resources required.

Also as a result of ISNAR's interaction with officials there, Fiji was chosen as one of the countries for participation in the East-West Center/ISNAR study of the interface between research and extension, and a look at alternative ways to transfer technology. This field study in Fiji has been completed. Results will be reported when the project is completed in 1984.

The ISNAR research system review, planning, and analysis team examines a field in Fiji.



## Pakistan

The Chairman of the Pakistan Agricultural Research Council invited ISNAR to examine and make recommendations regarding the working and administrative relationships among the major federal research units, and between them and the provincial units, including the agricultural universities. The review mission recommended specific ways to increase emphasis on the provincial units, with a supporting role for the National Research Center, and an increasing role for the universities.

After the review report was discussed and accepted by the chairman of the PARC and other officials in the Ministry of Agriculture, it was widely distributed. Council officials have used the findings in their own internal planning and in planning for further assistance and cooperation with donor agencies.

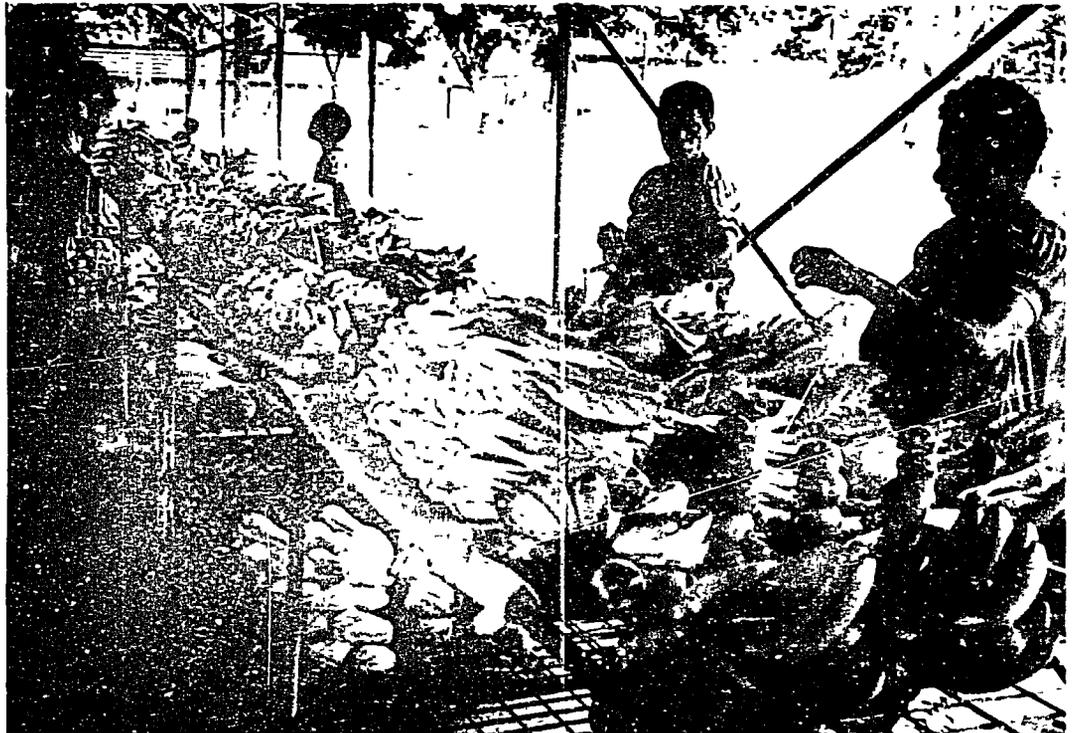
## Papua New Guinea

Many of the recommendations coming out of the review of agricultural research in Papua

New Guinea (PNG), carried out and accepted in 1982, were included in the World Bank's subsequent support project for agricultural research and development.

ISNAR has played a supporting role in development of position descriptions for

recruitment of research system staff during visits and through regular communication between ISNAR staff and the Chief Agronomist and the Permanent Secretary of Agriculture of PNG. The government has established new positions, including provision for research to



One end result desired in ISNAR's work with national agricultural research systems is an adequate food supply, as indicated by this market scene in Rabaul, Papua New Guinea, visited by the review team.



An ISNAR senior research officer looks over research station projects in Western Samoa with a member of the Western Samoa extension field staff

have a stronger role in policy making, as recommended by the review mission.

ISNAR has helped heads of programs and officers in charge of research stations deal with effects of changes in organization proposed and coming into effect.

Because of the particular complexity of the relationship and divided responsibilities between research and extension, PNG also was included in the East-West Center/ISNAR study, noted under comments on Fiji.

A close working relationship has developed with senior officials in PNG and ISNAR's activities are expected not only to continue but to expand.

#### Sri Lanka

Sri Lanka is looking to improvement in its agriculture, food, and nutrition strategy, and has been working with bilateral donor agencies on this issue. Many ministries are involved in developing such a strategy -- eight ministries are doing agricultural research and yet others use the research results. Agricultural research has an important role to play in development of a more

coherent policy. In late 1983, ISNAR was invited by the government to join a Sri Lanka subcommittee of senior agricultural research officers to help develop appropriate policies.

The outcome of this joint work of ISNAR and the subcommittee will be submitted to the Sri Lanka Government in early 1984.

#### Western Samoa

A priority need in Western Samoa for its agricultural research, as determined by the ISNAR mission and affirmed by the Minister of Agriculture, is for a clear statement of policies and plans which are within the resources available, so those resources can be used to maximum advantage. The needs of the system are not large, but they are critical.

Western Samoa presents an excellent example of the problem faced by many countries -- especially smaller nations -- as to how to organize and manage a research program with very limited human, financial, and physical resources, yet with a wide variety of commodities. This problem is of considerable interest to ISNAR as it tries to find guidelines which can be used by several countries.

As in many countries, there is need to promote general support for research. The ISNAR team discussed with officials of the Ministry of Agriculture possible ways to communicate the

rationale for its research program and benefits such a program could bring to farmers, consumers, and policy makers in order to gain more support.

Another specific need in Western Samoa, also common to many research systems, is for training nationals to increase input of Samoans in the research system and reduce dependence on expatriates with short-term tenure.

#### South Pacific Agricultural Study

This study, conducted by the Director General of ISNAR under a consultancy arrangement for the Asian Development Bank (ADB) and in

An officer of the Asian Development Bank and ISNAR's director general discuss research system activities during a South Pacific agricultural study



cooperation with the Developing Member Countries of ADB in the South Pacific, focused on alternative ways to organize agricultural research in those Developing Member Countries. It recommended a networking approach with a regional research support team, rather than a centralized research facility.

The recommended approach was accepted by the ADB and the member countries generally concurred. ADB then asked ISNAR to join with it in preparing a project proposal to implement the recommendations. This project preparation was carried out in late 1982 and the report was accepted by ADB.

Subsequently, ADB requested ISNAR to take the leadership in implementing the project and establishing the regional research support team. The ISNAR Board reviewed this proposal at its meeting in May, 1983 and recommended that ISNAR staff provide assistance to others in identifying an appropriate organization to implement the project and to continue to cooperate in its development.

Interest in the project remains high in the Member Countries and in some donor agencies, as does interest in ISNAR's participation.

#### Thailand

In its work with Thailand, ISNAR is helping develop procedures for the Department of Agriculture to use in reviewing its manpower needs and the career structure for its staff. The procedure will be of value to Thailand — it also will be helpful to ISNAR, serving as a guide for its work with other countries.

The ISNAR study is an essential component of a major project to develop the research system, which has support from the World Bank and the Australian Development Assistance Bureau.

One reason the study is of special interest to ISNAR is that "conditions of service" frequently is a problem in motivating and keeping

Cattle graze in lush pasture on an experiment station examined as part of the South Pacific study.



**A major recommendation to come out of the Kenya review was for a thorough study of its manpower and training needs.**

**Such a study resulted in a manpower development plan for the next 10 years**

competent persons in research posts in developing countries. Thailand's Director General of the Department of Agriculture requested ISNAR to study conditions of service of staff in the department. The committee with which ISNAR is cooperating is chaired by the Deputy Secretary General of the Civil Service Commission, giving ISNAR staff a unique opportunity to gain knowledge of the system while contributing its expertise.

The activity is planned to continue well into 1984 and is expected to go beyond personnel issues, into issues of manpower program development for the various staff levels of the Department of Agriculture.

#### **Bangladesh**

ISNAR's work to date in Bangladesh has been limited to initial project preparation which was carried out in early 1981, in which the International Agricultural Development Service (IADS) provided the mission leader. The project is being implemented with support by the World Bank and ISNAR has kept in touch with the work. ISNAR staff held further discussions with agricultural leaders in Bangladesh in late 1983 and active cooperation in Bangladesh is expected in 1984.

## **Africa**

### **Ivory Coast**

Early in 1983, following the 1982 review of agricultural research in the Ivory Coast, the Minister of Scientific Research requested ISNAR's help in identifying candidates for long-term positions as advisors in research organization, farming systems, and agrotechnology. The positions are to be funded by the government in part from its loan from the World Bank.

The Minister further requested that, once these staff positions were filled, ISNAR provide small consulting teams to work with the long-term advisors and Ivorian staff. The consulting teams would help formulate programs — and develop standard monitoring and evaluation procedures through continuing work with the Ministry and the individual programs. After consulting with the senior agricultural staff in the Ministry of Scientific Research, ISNAR staff put forth a number of candidates for the long range positions.

Continued cooperation between ISNAR and the Ivory Coast is envisioned as soon as the staff positions are filled by the Ivory Coast.

## Kenya

One of the major recommendations to come out of the review of Kenya's research system was for a thorough study of its manpower and training needs. ISNAR carried out this study jointly with a team appointed by the National Council for Science and Technology (NCST). The result was a manpower development plan for the next 10 years. The plan was accepted by NCST and related ministries, and appears to have full support for implementation. ISNAR staff and the leaders of NCST, in close consultation with leaders in related ministries, are developing a program and budget document to be used as a basis to seek support for a manpower training program for Kenya's agricultural research system. The plan is to have this document ready for presentation by Kenyan officials in early 1984 to a group of donors who have a strong interest in the country's agriculture. The goal is to establish a consortium of these donors and the long-term commitment to the training program.

The review of Kenya's research system was carried out in mid-1981, early in the life of ISNAR. ISNAR staff has made numerous visits to the country since, and several Kenyan scientists have visited ISNAR headquarters to follow up on various aspects of the study.

## Madagascar

When the results of the ISNAR review were presented to the Minister of Agricultural Production, he requested ISNAR to work closely with the Ministry on a program to advise on the reorganization of the National Center for Applied Agricultural Research for Rural Development (FOFIFA).

The ISNAR team look intensively at the research and dissemination of results to farmer-users. As illustrated

Also, the Minister requested an ISNAR staff person be placed in Madagascar on a long-term basis (initially for one year but to be extended if mutually agreed) to work with the director of research on organization and program development, and to help implement the ISNAR report recommendations. The position

on this farm in Madagascar, rice is the most important crop grown and subject of research attention.



The Government of Upper Volta and the World Bank requested ISNAR to identify an appropriate person to serve as an advisor to help implement the review recommendations. This was done and the advisor started his assignment there in July 1983

would be fully funded by the Government of Madagascar from World Bank loans. ISNAR expects to have a staff person in place in Madagascar in early 1984.

The main report recommendation placed emphasis on research planning and programming as part of a new master plan for national agricultural research in the new Ministry of Research. Another recommendation was that the system take a multidisciplinary approach in identifying research problems in relation to agricultural development needs and

Marketing systems differ greatly in different countries. This is a market visited by the Madagascar team.



in search for technical solutions. Another recommendation called for establishing direct links between researchers, extension workers, and farmers at the grass roots for better exchanges of information and joint participation in on-farm trials and field testing.

The review of the system was carried out in early 1983, and the report with its recommendations was accepted by the government in mid-1983.

#### Malawi

Following the ISNAR mission in 1982, the Government of Malawi requested specific help in further review and planning work by one of the consultants on the original mission.

Unfortunately, this was not possible due to the untimely death of that consultant. This resulted in a temporary break in communications and follow-up plans. However, some recommendations in the report have been acted upon, and there are reports that research and extension personnel are giving increased attention to problems at the farm level, and research is being concentrated at stations where most effective work is being done.

Malawi research system staff members have participated in ISNAR-sponsored conferences and workshops. With reestablishment of communications between ISNAR and leaders of the research system, it is thought further cooperation will develop in 1984.

#### Upper Volta

Three institutions -- the U.N. Food and Agriculture Organization, the World Bank, and ISNAR -- cooperated closely in the review of the agricultural research program in Upper Volta. Following the review in late 1982 and acceptance of the report findings in early 1983, the Government of Upper Volta and the World Bank requested that ISNAR identify an appropriate person to serve as advisor to the Director of Agricultural Research to help implement the review recommendations.

ISNAR identified such a person and provided him with several months of orientation at ISNAR, preparing him for his assignment to Upper Volta. He started his assignment there in July, 1983 and has maintained close contact with ISNAR through visits by ISNAR staff.

#### Zimbabwe

ISNAR has not conducted a formal review and analysis of the agricultural research system. Rather, Zimbabwe was one of the countries in which ISNAR carried out a survey of agricultural research training needs as part of the CDA/ISNAR project (see next section), furthering contacts with the research system staff there. Also, Zimbabwe has requested ISNAR help with an agricultural research manpower study, and other continuing activities are contemplated.

#### A regional institute: Institut de Recherche Agronomique et Zootechnique (IRAZ), Burundi

Early in ISNAR's existence, it joined a sister IARC, the International Institute of Tropical Agriculture, in a review of IRAZ, a regional institute of Burundi, Rwanda, and Zaire -- the Communauté Economique des Pays des Grands Lacs. The review request came from the Director General of the Institute.

Continuing activities consist mainly of correspondence with the Institute's Director General and with member countries regarding IRAZ program orientation and staffing. Basic

contacts have been established for further program development, when IRAZ program direction has been determined.

## Latin America

#### Costa Rica

The government accepted the report following the ISNAR review mission carried out in 1981 and plans were made for close cooperation between ISNAR and the Ministry of Agriculture for implementing the recommendations. However, extreme financial difficulties within the Government of Costa Rica and a change of government following the review mission have delayed further action.

ISNAR staff and officials of the Costa Rican Ministry of Agriculture maintain active communication and correspondence. Recent visits to Costa Rica by ISNAR staff indicate a favorable position to increase cooperation.

#### Guyana

A senior staff member from the Department of Agriculture of Guyana spent some time at ISNAR headquarters during 1983, for discussions concerning the preparation of a pre-

Since its inception, ISNAR has cooperated with IFARD in joint sponsorship of meetings and regional seminars dealing with such subjects as manpower needs and research management

feasibility paper for submission to the sector review team of the Inter-American Development Bank. The paper, completed in June 1983, was to form part of a loan request to finance proposed changes in the research system. Several staff members have visited Guyana for follow-up discussions but the government is giving further consideration to other options presented by the ISNAR team in its 1982 report before a final decision is made on specific cooperation to be carried out.

### ISNAR works with research leaders through IFARD

A memorandum of understanding was signed, providing for continued close cooperation between ISNAR and the International Federation of Agricultural Research Systems for Development (IFARD), during the November 15-16, 1983 meeting of IFARD officers at ISNAR headquarters.

IFARD was established at Bellagio, Italy in 1977 to provide an institutional framework for sustained, concerted activity by research systems in developing countries. IFARD's membership comes from national agricultural research systems and regional associations, including non-governmental research institutions, and private institutions such as universities. IFARD membership is dedicated to promoting and strengthening national agricultural

research systems by exchanging experiences, and other activities. Thus the roles of IFARD and ISNAR are complementary.

This complementarity is recognized in the memorandum of understanding. It cites work of the two organizations "in serving the common cause of helping developing countries to improve the relevance, quality and effectiveness of national agricultural research systems."

Since its inception, ISNAR has cooperated with IFARD in joint sponsorship of meetings and regional seminars dealing with such subjects as manpower needs and research management, which are direct concerns of ISNAR. IFARD regional associations -- in Africa, Asia, and Latin America -- look to the international agricultural research centers, FAO, and other institutions in their regions for support and cooperation.

Members of ISNAR's interdisciplinary staff discuss plans for management training and conferences with some program committee members.

## Planning Management Training



## Strengthening Management Capacity of National Research Systems

**ISNAR puts considerable emphasis on manpower planning, personnel development, and management training in its program and work**

Strengthening management capabilities of national agricultural research systems is fundamental to strengthening the systems. Facilities, personnel, funding, national commitment -- these and other necessary elements for a potentially strong research system can be there without getting desired results if managerial skills and leadership ability are missing or are inadequate.

This problem goes to the heart of ISNAR's objectives. ISNAR was developed "to help national agricultural research systems improve their ability to plan, organize, manage, and execute research more effectively with their own as well as external resources." All those factors involve people and their skills. That's why ISNAR puts considerable emphasis on manpower planning, personnel development, and management training in its program and work. ISNAR's work is with people -- not development of new cultivars or agricultural technology. It can't point to massive adoption of a new variety and resulting improvement of national agricultural output. But its output -- in terms of long run enhancement of capabilities of people and systems -- is no less important in contributing to agricultural and national development.

The Training and Conferences Section develops many of the "tools" ISNAR uses in manpower training and development and takes the lead in arranging many activities in these vital areas. It complements the work of staff members who are in more direct contact with national systems and largely depends on them to learn of needs in the manpower area and initiate contacts. Other staff members also are deeply involved in manpower issues, making strengthening management and leadership skills in national systems an ISNAR staff priority.

There are several aspects to this work which may be illustrated by specific activities during 1983.

### **Seminars for research managers**

Seminars provide opportunities for ISNAR to work intensively with groups of research managers for a period of time on a specific subject and usually in cooperation with other institutions. Some examples:

- The Economic Development Institute (EDI) of the World Bank and ISNAR conducted a seminar in Washington, D. C., U.S., bringing together some 20 leaders of national agricultural research systems to discuss key management issues they will face in the rest

of the 1980s and beyond. The seminar was held in November, during Centers Week, giving the research leaders a further opportunity to interact with representatives of ISNAR's sister international agricultural research centers around the world. Most participants were leaders of national programs with which ISNAR is working.

- A two-week workshop at the Eastern and Southern African Management Institute (ESAMI), in Tanzania, an activity of the

Two of the 20 agricultural research leaders who attended the Economic Development Institute (EDI)/ISNAR seminar, held in Washington, D C , during Centers Week in November, 1983



Cooperative Development for Africa (CDA)/ISNAR project, provides an example in which a seminar was part of an integrated ISNAR approach to improving management capacity.

- In Indonesia, ISNAR assisted in arrangements for a one-week workshop for senior officials to examine in depth some important management issues in the system, and helped prepare proceedings.
- A one-week seminar on organization and management of research with a farming systems perspective, conducted at The Hague in cooperation with CIMMYT.

#### Sharing experiences in conferences

In addition to accomplishing specific purposes, conferences provide opportunities for leaders of different national systems to share experiences, discuss approaches which work and don't work, and establish bases for further contact.

- In June, ISNAR and IFARD held a conference in Nigeria, in cooperation with IITA, and with partial support by the Government of the Netherlands and the Swedish Agency for Research Cooperation with Developing Countries (SAREC).

National agricultural research leaders discussed management issues, planned a program for the African Chapter of IFARD, and learned more about what IITA and ISNAR have to offer -- and how they might use services of the two centers.

- A conference was held in Trinidad in September, organized by the U.N. Economic Commission for Latin America and ISNAR, with partial support by SAREC. It provided a forum for leaders of national research programs in the Caribbean to discuss establishing a cooperative research network and related subjects -- as well as policy and management issues they will be confronting in the region in the years ahead.
- Similarly, a conference on Cyprus in October, sponsored by the Food and Agriculture Organization of the United Nations (FAO), ICARDA, and ISNAR, provided a forum for establishing a regional association of agricultural research leaders. Also these research leaders from West Asia and North Africa became acquainted with programs of ICARDA and ISNAR.

**ISNAR works with national research leaders to carry out recruitment and career planning within those systems, and analyses of conditions of service for the research staff**

**Analyzing manpower and training needs**

Two manpower planning activities are conducted as part of ISNAR's continuing relationships with national systems. They include working with national leaders to carry out. (1) recruitment and career planning within those systems, and (2) analyses of conditions of service for the agricultural research staff. Such cooperation with a nation's research officials may include:

- helping conduct inventories of the size and composition of present manpower in the system.
- advising on development of recruiting and training plans which reflect future needs and probabilities.
- assisting in developing conditions of service for research personnel.

Some specific examples of these activities in 1983:

- At the request of the government, ISNAR worked on the first stages of a manpower and training plan for Senegal. This work is ongoing.

- ISNAR is providing staff input into an interagency committee analyzing conditions of service for Department of Agriculture personnel in Thailand.
- ISNAR is involved in work on developing a research management training project in Central and South America. In 1983, this included visits to training institutions in six countries, discussions with prospective donors, and liaison with IFARD in preparation of a firm proposal. ISNAR expects to cooperate closely with IFARD in seeking special project funding for this work in 1984.
- ISNAR was involved in discussion and follow-up on implementation of a manpower and training plan, prepared in collaboration with the National Council for Science and Technology of Kenya in 1982.
- The work that ISNAR did in surveying management training needs in three African countries -- Cameroon, Sudan, and Zimbabwe -- as part of the CDA/ISNAR project is related to manpower and training analyses.

## Meeting research training needs in Africa

Helping national systems improve their management is an important ISNAR challenge. It is natural that ISNAR is deeply involved in a large African project with that goal -- improving management of research organizations.

This is a special project funded by the U.S. Agency for International Development and the Overseas Development Administration (U.K.), under the Cooperative Development for Africa (CDA), a coordinating approach adopted by a group of donors with interests in Africa. These donors, too, have found that the improvement of organization and management of research resources is important for African agricultural research (as it is in other parts of the world). The CDA/ISNAR project takes a logical approach involving three steps, some being taken concurrently:

1. Surveying management training needs in Africa. This has been done in three countries and results are being evaluated.

2. Producing training materials for teaching important elements in managing agricultural research, as identified in the survey.
3. Planning and organizing training workshops for African agricultural research managers. The training materials have been used and tested in some workshops and more are planned.

### Surveying training needs

Research management training needs were surveyed in three African countries -- Cameroon, Sudan, and Zimbabwe. Each survey team interviewed more than 60 individuals -- in the national agricultural research institutions, government ministries, agricultural colleges, and parastatal agricultural production schemes; also donor representatives and other local officials concerned with agricultural production. Some conclusions from the surveys:

- Management requirements. Research managers in a number of countries need to have a greater awareness of the managerial problems in their organizations. Most research systems increasingly will face shortages of personnel, funds, and facilities, requiring more skilled and effective management of available resources.

- Functional needs. Most critical areas seem to be program planning, budgeting and finance, and personnel administration.
- Strategic considerations. Change may require developing a "critical mass" of research managers committed to management improvement in each country. Also, improvements in organizational structures are needed.

### Developing training materials

These training needs are reflected in training materials being developed and refined at ISNAR. ISNAR now has a large collection of research management training materials -- developed by its staff, and gathered and adapted from universities, other IARCs, especially CIMMYT, and special materials from other international institutions. Adapted materials have been put in an agricultural research management framework.

Ten management case studies have been developed, some under an agreement with CIMMYT and the United Nations Development Programme (UNDP), which provided project support. The cases deal with

**Interest in research with a farming systems perspective is growing. Management of such research was the subject of an ISNAR workshop in September**

program planning, budgeting and accounting, personnel management, and information management. More are being produced. Materials are being divided into modules and organized so they can be put together to fit training needs of specific groups.

(In 1981, ISNAR began cooperating with CIMMYT on a special project to prepare case materials on agricultural research policy. Project emphasis shifted to agricultural research management issues in 1982 and ISNAR assumed responsibility for the project.)

#### Conducting training workshops

A research training workshop, part of the CDA / ISNAR project, was held in Arusha, Tanzania in partnership with the Eastern and Southern African Management Institute (ESAMI).

Twenty-six directors and deputy directors of research stations from 10 African countries took part. This workshop, and others, provide opportunities to use and test the management case study materials. The training workshops also include lectures and films.

The ESAMI workshop made a contribution to developing a long-term training capacity in Africa. In addition to ISNAR staff, workshop

instructors came from ESAMI and from the Mananga Agricultural Management Centre in Mhlume, Swaziland. This will provide continuity, and help in planning and teaching in a four-week research station management workshop ISNAR plans to hold in conjunction with the Mananga center in mid-1984.

### Managing research with a farming systems perspective

Interest in research on farming systems is growing. Most ISNAR mission reports cite the need for greater attention to client- or farmer-oriented research than is generally being given at present. This especially is true in developing countries where small farmers represent a high percentage of agricultural activity.

Research with a farming systems perspective usually refers to an interdisciplinary approach, focused on the needs of farmer clients -- including on-farm testing and demonstration plots -- and involving integrated and interrelated practices as essential components.

Much of the methodology for doing research on farming systems has been worked out and developed by national and international research organizations, including the IARCs.

Attention in such research has focused on generating technology, doing field work, and analyzing and documenting results. So that's not a problem. The problem is how to institutionalize the methodology and means of organizing and managing this research approach, which is different from managing single discipline, commodity-oriented research. That is a theme for ISNAR.

That theme -- management of research with a farming systems perspective -- was the subject of an ISNAR workshop at its headquarters September 27-30, 1983. The workshop was designed to gain the knowledge of people using this research approach, and give participants an opportunity to learn from the experience of others.

Researchers shared experiences  
Representatives of several developing countries doing research with a farming systems perspective shared their experiences. A representative of the World Bank addressed the Bank's interest in funding such research and its reasons for doing so. A representative from CIMMYT told of experiences of that institute. A regional research center scientist addressed issues dealt with there.

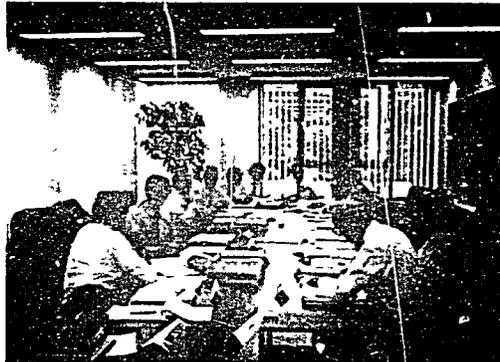
Among research management issues considered was the problem of incentives, of setting standards for promotion and salary increase that will encourage workers to devote significant portions of their professional careers to these activities. Communication between those undertaking on-farm research and those in other kinds of research may be a challenge.

Ways are needed for those in closest contact with farmers to contribute their insights on farmers' problems and potential solutions.

#### Conclusions and recommendations

The workshop also developed some conclusions and recommendations. One conclusion was that research on farming systems should consider diagnosis, priority determination, experimentation in relevant environments, monitoring and evaluation, and communication of interpreted conclusions to users. A research management recommendation was that strong linkage mechanisms should be established between those carrying out research on farming systems and the rest of the research system (for generating better technology) and with the extension service (for rapid diffusion of results).

Seminar participants share information about working with research systems from a farming systems perspective.



## Communications and Information activities

A major activity in ISNAR's work involves documenting and sharing knowledge produced -- in the form of reports on its work with individual countries and regions, conference reports and proceedings, and its own contributions to the literature of agricultural research management.

An increasing number of publications are being produced in French, English, and Spanish. A list of 1983 publications appears near the back of this report.

Publications on research management in 1983 include French translations of two texts authored by Dr. A. T. Mosher for wide circulation, especially in francophone Africa.

ISNAR is contributing to strengthening communications and sharing the knowledge bases of the international agricultural research centers (IARCs) in two ways. One is by chairing a committee cooperating with the International Development Research Centre (Canada) in a feasibility study of an electronic network for

data and message transfer. Second is production in 1983 of a narrated slide series which describes the work of the IARCs, emphasizing their relation to national agricultural programs in developing countries.

Full-time librarian added  
ISNAR requires a good information base on agricultural research management for use by staff and to support national review, training, and system development activities. Serving these current and growing requirements called for a professional level of collecting and utilizing such materials. ISNAR added a full-time librarian to its staff in 1983, and is examining the need for an agricultural research management information service for staff use and to serve national agricultural research systems with which it works.

Members of ISNAR's section working on research on organization and management of agricultural research systems review activities.



**ISNAR seeks to develop new knowledge and synthesize it with currently available information to gain new insights of value to all those involved in managing national research organizations**

## **Research Objective: To Strengthen ISNAR's Institutional Capacity**

The primary objective of ISNAR's research program is to strengthen its capacity to help national agricultural research systems. More information is needed to learn more about the "workings" of agricultural research systems. ISNAR seeks to develop new knowledge and synthesize it with currently available information to gain new insights of value to all those involved in managing national research organizations.

ISNAR's research on organization and management of agricultural research systems commands only a small portion of ISNAR's resources and is still in its early stage of work. It will only be in subsequent years that results will have been obtained in sufficient quantity for detailed reporting. Its present work is directed to:

- Identifying components of research systems which appear to be essential for success of the systems through a comparative analysis of existing systems.
- Developing information about selected functional components of research systems.
- Further developing and using ISNAR's data base on national systems.

Identifying key components essential for success of systems through review and analysis of its experiences increases ISNAR's understanding of the factors affecting the structure, performance, and evolution of national agricultural research systems. ISNAR will continue to develop materials on critical organizational and management issues which are valuable in review missions and continuing country activities.

### **Developing ISNAR's data base**

In 1981, ISNAR and the International Food Policy Research Institute collaborated in a study. They compiled and analyzed trends of resources allocated to agricultural research in 50 countries during the 1970s. The information proved useful to ISNAR, to donors, and to national research planners.

New information now is available, both from countries in the earlier study as well as from a number of other countries. ISNAR will continue to update its information on the state of agricultural research throughout the developing world.

### Study of mission reports

Analysis of reports of ISNAR missions is the first step in the search for components which contribute to a successful national agricultural research system. Such analysis also helps ISNAR identify major areas which need strengthening -- so it then can look in depth at those areas, seeking better ways to help national systems.

Analysis of ISNAR's experiences with systems in which it has conducted reviews also serves as a feedback mechanism for permanently improving its methodology for working with collaborating countries.

ISNAR has made a preliminary examination of its reports of missions to 15 countries to determine main areas of concern to leaders of national systems and aspects of research systems where opportunities for improvement

ISNAR and the East-West Center, Hawaii, U.S.A., carried out collaborative research on the interface of research and extension in three South Pacific island countries in 1983. Interviews were conducted by, among others, the East-West Center project manager and a principal agricultural officer of the Fiji Ministry of Agriculture and Fisheries

exist. Further analysis of these is required before any conclusions can be drawn, but preliminary findings stress the importance of a favorable policy environment for agricultural research, concern with organizational structure, the need for better research planning, including manpower planning, and continuity of support

### Studying the interface between research and extension

More knowledge is needed about how research results are prepared and delivered to clients of national research systems. Equally important is learning how researchers get feedback on



farmers' needs, and on the relevance and impact of research results and resultant technologies.

This process involves the communications process by which information passes back and forth, learning who are intermediaries, knowing how the linkages function, and seeing if the process can be strengthened and improved. Effectively transmitting research results to users is particularly important in countries with widely separated or limited research bases, such as exists in many South Pacific island nations.

East-West Center project officers interviewed a wide range of respondents in the collaborative study with ISNAR.



There are unique factors related to island cultures, with which ISNAR is involved in several countries -- where relatively small land areas are surrounded by water, inhibiting long-distance travel.

For these reasons, ISNAR teamed up with the East-West Center's Communication Institute, Hawaii, U.S.A., to study the interface of research with extension and informal information transfer systems in three South Pacific island countries -- Fiji, Papua New Guinea, and Western Samoa. Researchers conducted extensive field interviews there in 1983. The report of results is expected in 1984.

Here again, ISNAR's research and communications activity is directly related to information needed to improve the ability of national systems to plan, organize, and manage research more effectively.

A senior research officer and a consultant discuss work on a project, responding to a specific ISNAR need.



## 1983 Participation by Staff Members

January 6, 7. Workshop on agricultural research management. Agency for Agricultural Research and Development. Denpasar, Indonesia. Presentation by Dr. W. K. Gamble.

January 8. Ad Hoc Panel of Specialists, United Nations Centre for Science and Technology for Development, Advisory Committee on Human Resources Development for the Planning, Management, and Implementation of Science and Technology Programmes in Developing Countries. Kuwait. Dr. Byron Mook, official observer.

January 18 Meeting of Foreign Affairs Committee (Overseas Development Subcommittee), House of Commons, United Kingdom. London, U K. Statement on scientific and special units of the Overseas Development Administration by Dr. W. K. Gamble.

February 5-12. Seminar on Agricultural Research in Rwanda: Assessment and Perspectives. Kigali, Rwanda. Opening address by Dr. W. K. Gamble; presentation of the ISNAR report on the national agricultural research system of Rwanda by Dr. R. B. Contant; editor of proceedings, Dr. M. Joseph Chang.

February 15, 17, and 21. International Course in Food Science and Nutrition. Netherlands Universities Foundation for International Cooperation (NUFFIC). Wageningen, Netherlands. Lectures by Dr. Byron Mook and Mr. Huntington Hobbs.

February 22-24 International Course for Development-Oriented Research in Agriculture. Wageningen, Netherlands. Lectures by Dr. Matthew Dagg, Dr. K. Robert Kern, Dr. Byron Mook, and Dr. Z. M. Nyira.

February 28. Meeting on Guide for Evaluation of Research Institutions in Developing Countries. BIFAD. Washington, D. C., U.S.A. Dr. W. K. Gamble.

March 7. Seminar on Resource Allocation to National Research Systems. Minnesota and Kentucky, U.S.A. Presentation by Mr. Peter Oram.

March 14. Department of Non-Western Sociology. International Agricultural Centre. Wageningen, Netherlands. Case sessions on private and public sector links in agricultural research in developing countries taught by Mr. Huntington Hobbs.

March 15-22. World Bank Agricultural Research Project Pre-preparation Mission to Rwanda. Member of mission, Dr. R. B. Contant.

March 21, 22. IFARD Meeting on Research Management Training. ISNAR and the Capacitación para la Investigación Agrícola. Bogota, Colombia. Presentation by Dr. W. K. Gamble.

April 5-7 Steering Committee Meeting of the Amazon Agroecological Research Network. REDINAA. Lima, Peru. Dr. Carlos Valverde, ISNAR member of committee.

April 18, 19. Meeting of Board Chairmen of CGIAR International Agricultural Research Centers. The Hague, Netherlands. Dr. W. K. Gamble; presentation of audio-visual module on the CGIAR system prepared by ISNAR by Dr. K. Robert Kern.

May 9-June 4. World Bank Agricultural Research Project Preparation Mission to Rwanda. Member of mission, Dr. R. B. Contant.

June 6. International Course on Agroindustry. NUFFIC. The Hague, Netherlands. Lecture by Dr. Byron Mook.

June 6-8. Database '83 Congress. Budapest, Hungary. Presentation on impact of new information and documentation technology in the developing countries by Mr. Peter Thorpe.

June 6-10. First African Congress of IFARD. Ibadan, Nigeria. Presentation on ISNAR services by Dr. T. Ajibola Taylor; Dr. Guy Rocheteau, Mr. John McKenzie (editor of proceedings), and Ms. Marie de Lattre, participants.

June 13-17. Meeting of the International Advisory Panel for the International Soil Museum. Wageningen, Netherlands. Representing ISNAR and Latin America, Dr. Carlos Valverde.

June 26-July 1. Meeting of IARC Directors and the CGIAR Technical Advisory Committee. Tunis, Tunisia. Dr. W. K. Gamble; presentation of CGIAR audio-visual program and chairman of committee on study of electronic data transfer, Dr. K. Robert Kern.

July 3. Seminar of Overseas Development Institute, Windsor, England, U.K. Paper by Peter Oram on recurring funding of research and extension systems.

July 6-13. International Symposium on Amazonia. Interciencia Association and Sociedade Brasileira para o Progresso de Ciencia. Belem, Pará, Brazil. Dr. Carlos Valverde, invited participant.

July 15. Workshop on International Agricultural Communication for USAID Trainees. Iowa State University, Ames, Iowa, U.S.A. Presentation on ISNAR findings on studies of communications in NARS by Dr. K. Robert Kern.

July 17-21. Agricultural Communicators in Education Annual Meeting and Workshop for International Agricultural Communicators. Madison, Wisconsin, U.S.A. Paper on alternative mailing systems for IARCs by Ms. R. Katherine Jones; keynote paper for workshop by Dr. K. Robert Kern.

August 30-September 2. First Annual Review of Extension and Research Program of Zimbabwe. Harare, Zimbabwe. Dr. Matthew Dagg and Dr. T.A. Taylor. Paper "How best can Zimbabwe benefit from IARCs?" Dr. M. Dagg.

August 31-September 2. Agricultural Research and Extension in Zimbabwe. Inyanga, Zimbabwe. Dr. Matthew Dagg and Dr. T. Ajibola Taylor.

September 11-14. International Society of Wang Users Conference. Boston, MA, U.S.A. Mr. Peter Thorpe.

September 12-16. IBSRAM/ACIAR Workshop on Soil Research Constraints. Townsville, Queensland, Australia. Invited participant and discussant, Dr. Carlos Valverde.

September 14-16. SADCC Seminar on "Agronomic adjustment to the environment of the 400 - 600 mm rainfall zone". Harare, Zimbabwe. Participant: Dr. Matthew Dagg.

September 19. Climatic Change and Its Implications on Agricultural Production. Villach, Austria. Paper by Mr. Peter Oram.

September 26-30. Conference on Women in Rice Farming Systems. IRRI. Los Baños, Philippines. Official observer, Dr. Josette Murphy.

September 26-30. Workshop on Agricultural Research Policy. Economic Commission for Latin America. Port of Spain, Trinidad, and Tobago. Presentation by Dr. T. Ajibola Taylor; Dr. Guy Rocheteau, participant.

October 5-7. International Workshop on Role of Science and Technology in the Fight Against World Hunger. Consiglio Nazionale delle Ricerche. Rome, Italy. Dr. R. F. E. Devred.

October 10-13. Second Technical Consultation of CARIS Participating Centers. FAO, Rome, Italy. Mr. Peter Thorpe.

October 17-19. Technical Consultation on Agricultural Research Cooperation in the Near East and North Africa. Nicosia, Cyprus. Sponsored by FAO in cooperation with ICARDA and ISNAR. Address by Dr. W. K. Gamble; Dr. Ghazi Hariri, participant.

October 17-20. Meeting of Information Heads of International Agricultural Research Centers. CGIAR. Frankfurt, Federal Republic of Germany. Dr. K. Robert Kern and Ms. R. Katherine Jones.

October 20. Role of ISNAR and planning research programs. Seminar in Agricultural Research Planning and Management Course at the University of East Anglia, England. Dr. Matthew Dagg.

October 24-28. Meeting of the Inter-American Board of IICA. Kingston, Jamaica. Official observer, Dr. Carlos Valverde.

October 26-Nov. 4. Meeting of IARC Directors and Centers Week of CGIAR. Washington, D. C., U.S.A. Dr. W. K. Gamble; chairman of committee on study of data transfer, Dr. K. Robert Kern.

November 3-10. ISNAR/EDI Seminar on National Agricultural Research Planning and Management. Co-chairman, Dr. Byron Mook; address by Dr. W. K. Gamble; presentation by Dr. Eduardo Trigo.

November 10. Seminar on the CGIAR and National Agricultural Research Systems. National Council for Science and Technology. Nairobi, Kenya. Dr. T. Ajibola Taylor.

November 21. Workshop on Alternate Production Strategies. USAID, Washington, D. C., U.S.A. Presentation on perceptions of alternative production strategies by farming households by Dr. Josette Murphy.

November 21-24. Seminar: Transformations foncières et changement social dans les sociétés rurales de la Carabe. Centre de Recherches Agronomiques des Antilles et de la Guyane, Institut National de la Recherche Agronomique (France). Pointe-à-Pitre, Guadeloupe. Dr. Guy Rocheteau.

December 7. Study Circle for Development Problems: International and National Agricultural Research for Development. International Agricultural Centre. Wageningen, Netherlands. Presentation on international agricultural research by Dr. W. K. Gamble.

December 13, 14. Meeting of Technical Committee on Agricultural Research. Cooperative Development for Africa. Paris, France. Official observer, Dr. R. B. Contant; status report on management training by Mr. Huntington Hobbs.

December 13-15. Meeting on Training in the CGIAR System. Rome, Italy. Comments on the ISNAR training and conference program in 1983 by Dr. W. K. Gamble.

December 21, 22. National Symposium on Agricultural Research (marking tenth anniversary of Bangladesh Agricultural Research Council). Dhaka, Bangladesh. Dr. W. K. Gamble.

## 1983, Publications

Working to Strengthen the National Agricultural Research Systems of Developing Countries. ISNAR Brochure. September 1983.

Publications List. September 1983. A current list of publications available from ISNAR.

Annual Report '82. June 1983. Second annual report of ISNAR.

Program and Budget for 1984. August 1983.

ISNAR's Program for the Mid- and Late-Eighties (in press). The strategy and plan for the ISNAR program for the next five years.

Reports of Reviews and Continuing Cooperation with National Agricultural Research Systems.

Strengthening Agricultural Research for National Development in the South Pacific. January 1983. Project proposal prepared in association with the Asian Development Bank.

La Recherche Agronomique et Zootechnique Haute-Volta. March 1983. Report of the joint review mission to Upper Volta by ISNAR, FAO, and the World Bank.

La Recherche Agricole Madagascar: Bilan et Perspectives du FOFIFA. August 1983. Report of the ISNAR review mission to Madagascar.

The National Agricultural Research System of Rwanda. (English translation of review mission report.) August 1983.

Agricultural Research in Rwanda: Assessment and Perspectives. September 1983. Report of a seminar sponsored by ISNAR and the Government of the Democratic Republic of Rwanda.

La Recherche Agricole au Rwanda: Bilan et Perspectives. September 1983. French edition of the report of the Rwanda Seminar.

Development of an Agricultural Research System (Somalia). November 1983. Report of the ISNAR review mission to Somalia.

Selected Aspects of the Pakistan Agricultural Research System. August 1983. Report of the ISNAR review mission to Pakistan.

El Sistema de Investigación Agropecuaria en la República Dominicana. Julio 1983. Report of the ISNAR review mission to the Dominican Republic.

Agricultural Research in Western Samoa (in press). Report of the ISNAR review mission to Western Samoa.

#### Reports of Conferences and Publications on Agricultural Research Management

Agricultural Research for Development: Potentials and Challenges for Asia. March 1983. Report of a conference sponsored by ISNAR and the German Foundation for International Development.

First Congress of the African Chapter, The International Federation of Agricultural Research Systems for Development (in press). Report of a conference sponsored by ISNAR, IITA, Swedish Agency for Research Cooperation with Developing Countries, and Government of the Netherlands.

Selected Issues in Agricultural Research Management in Latin America (in press). Report of a conference sponsored by ISNAR, IFARD, and the Government of Spain.

Mosher, A. T. Trois moyens pour stimuler la croissance agricole. September 1983. (French translation of the IADS edition of Three Ways to Spur Agricultural Development.)

## 1983 Consultants to ISNAR

Ms. Anita Albert  
Consult on graphics and design of publications.  
Iowa State University  
Ames, Iowa, U.S.A.

Dr. K. R. M. Anthony  
Prepare project proposal on integration of IARC programs in SADCC region of Africa.  
Oxted, Surrey,  
England, U.K.

Dr. Pierre Antoine  
Member of review mission to Zaïre and preparatory mission to Morocco.  
IADS  
Arlington, VA, U.S.A.

Dr. Isaac Arnon  
Member of team for manpower planning project in Senegal; consultant for papers on agricultural research management.  
Ramat Gan, Israel

Dr. Robert Ayling  
Member of team to study research management training needs in Sudan.  
U.S. Department of Agriculture  
Washington, D.C., U.S.A.

Dr. Felipe Baeza  
Member of review mission to Madagascar; consultant to prepare position description for staff adviser in Madagascar, Colima, Mexico  
Universidad de Colima

Ms. Elizabeth Benamar  
Translator to French for papers in the proceedings of Rwanda seminar.  
Saint-Genis Pouilly  
France

Dr. Paul Bennell  
Consultant to training section on manpower planning studies.  
Private consultant  
Brighton, Sussex  
England, U.K.

Dr. Pete Boonruang  
Consultant for interview of graduates  
on staff of Department of Agriculture  
for work descriptions.  
Kasetsart University  
Bangkok, Thailand

Dr. N'Guetta Bosso  
Member of review missions to Senegal  
and Zimbabwe; participant in follow-up  
activities in Upper Volta and Ivory  
Coast.  
Ministère de la Recherche  
Scientifique  
Abidjan, Ivory Coast

Dr. Louk de la Rive Box  
Member of review mission to the  
Dominican Republic.  
Agricultural University  
Wageningen, Netherlands

Mr. C. W. Brookson  
Member of review mission to Sri Lanka.  
Private consultant  
Bampton, Oxfordshire  
England, U. K.

Dr. Joseph Casas  
Member of review mission to Madagascar.  
INRA/ENSA  
Montpellier Cedex, France

Dr. Joseph Chang  
Editor of proceedings of Rwanda seminar  
and workshop on farming systems  
research.  
Private consultant  
Augusta, GA, U.S.A.

Mr. Robert Cowell  
Consultant on design and preparation of  
mailing list.  
University of Wisconsin  
Madison, WI, U.S.A.

Dr. Ralph Cummings, Sr.  
Member of 1982 review mission to  
Pakistan; consultant for report and  
presentation to Pakistan Agricultural  
Research Council.  
Private consultant  
Raleigh, NC, U.S.A.

Dr. Edward Felton  
Consultant and teacher for management  
training course at ESAMI, Arusha,  
Tanzania.  
Babcock Graduate School  
of Management  
Winston Salem, NC, U.S.A.

Ms. Tilly Gaillard  
Translator of English texts to French  
for proceedings of the Rwanda seminar.  
Private translator  
Saint Cloud, France

Dr. William P. Gormbley  
Consultant on management policies and  
office procedures.  
The Ford Foundation  
New York, NY, U.S.A.

Dr. Ross Gutteridge  
Member of review mission to Western  
Samoa.  
University of Queensland  
St. Lucia, Queensland  
Australia

Dr. David E. Hansen  
Member of review mission to the  
Dominican Republic  
University of California  
Davis, CA, U.S.A.

Mr. Sam T. Harmon  
Developer of training materials for  
workshops in agricultural research  
management.  
MOD and MBA Programs  
Nairobi, Kenya

Dr. Thomas G. Hart  
Member of review mission to Somalia;  
CIMMYT  
Mexico City, Mexico

Professor J. A. Laing  
Member of followup mission to study  
postgraduate development at the  
University of Nairobi.  
University of London  
Hertfordshire, England, U. K.

Dr. Luis Marcano  
Member of review mission to the  
Dominican Republic.  
FUSAGRI  
Caracas, Venezuela

Dr. A. T. Mosher  
Member of review mission to Sri Lanka.  
Private consultant  
Ithaca, NY, U.S.A.

Dr. Barry T. Nestel  
Consultant for continuing activities  
with AARD, Indonesia; editor of  
Madrid conference report.  
Redhill, Surrey  
England, U.K.

Dr. William Pritchard  
Member of review mission to Somalia.  
University of California  
Davis, CA, U.S.A.

Ms. Jane Roth  
Consultant to develop a handbook on  
evaluation of agricultural research  
institutions and programs.  
Private consultant  
Bethesda, MD, U.S.A.

Dr. Vernon W. Ruttan  
Consultant on reorganization and  
programming to the minister and  
office of ICA, Colombia.  
University of Minnesota  
St. Paul, MN, U.S.A.

Mr. Wayne E. Swegle  
Consultant to assist preparation of  
1982 and 1983 annual reports.  
Private consultant  
West Des Moines, IA, U.S.A.

Mr. Hal R. Taylor  
Consultant on preparation of database  
on research and training programs  
and the work of the CGIAR centers.  
Private consultant  
Falls Church, VA, U.S.A.

Dr. José Toledo  
Member of review mission to the  
Dominican Republic.  
CIAT  
Cali, Colombia

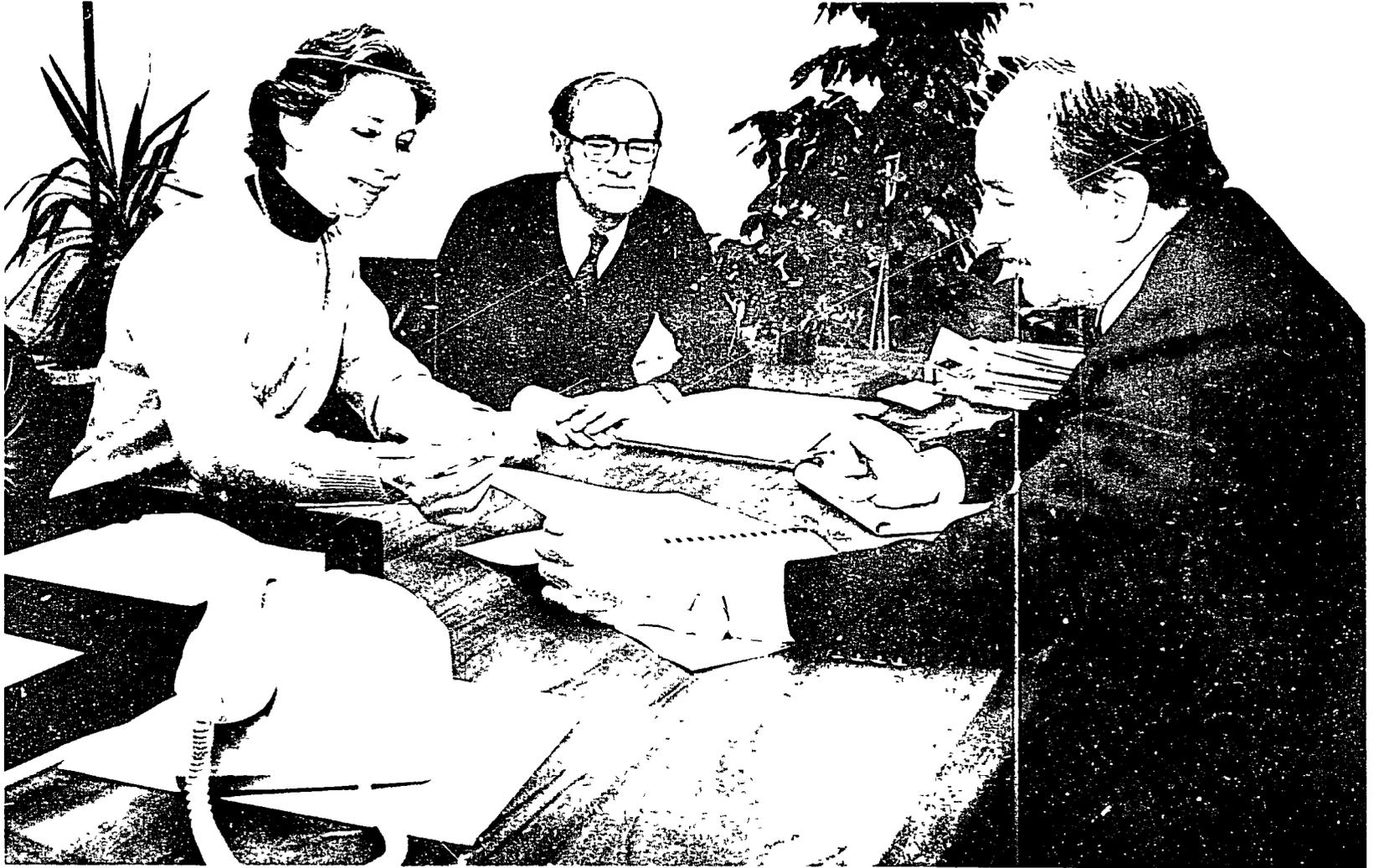
Mr. Sunday J. Udoh  
Consultant on accounting system.  
IITA  
Ibadan, Nigeria

Mr. Declan Walton  
Consultant to prepare manuscripts on  
strategy and long-term planning.  
Private consultant  
Loro Ciuffenna, Italy

Ms. Teresa Weersma-Haworth  
Consultant to the program of research  
on research organization and management.  
Private consultant  
Wassenaar, Netherlands

Dr. Dirk Zwart  
Member of review team to Sri Lanka.  
Rijks Universiteit  
Utrecht, Netherlands

ISNAR's administrative staff looks over financial  
documents for the past year and analyze requirements  
related to future program needs.



**TABLE OF CONTENTS**

<b>Auditor's Report</b>	<b>Page</b>	<b>55</b>
<b>Balance Sheet</b>		<b>56</b>
<b>Receivables from Donors</b>		<b>57</b>
<b>Statement of Sources and Application of Funds</b>		<b>58 - 59</b>
<b>Funds Provided and Costs</b>		<b>60</b>
<b>Schedule of Earned Income</b>		<b>61</b>
<b>Comparative Statement of Actual Expenses and Approved Budget</b>		<b>62</b>
<b>Notes to the Accounts</b>		<b>63 - 64</b>

**AUDITORS REPORT**

We have examined the accompanying accounts for the year to December 31, 1983 of the International Service for National Agricultural Research (ISNAR).

Based on our examination, we are of the opinion that these accounts have been properly prepared using accounting principles consistent with those used in the preceding year to give the information required to be shown in accordance with the accounting procedures contained in the instructions issued by the Consultative Group on International Agricultural Research, Washington.

*Price Waterhouse Nederland*

March 9, 1984.

**BALANCE SHEET AT DECEMBER 31, 1983  
(STATED IN US DOLLARS)**

	Notes	1983	1982		Notes	1983	1982
<b>Current Assets</b>				<b>Liabilities</b>			
Cash		391,266	249,598	Accrued Expenses	4		
Receivables from Donors		28,914	57,633	<b>Total Liabilities</b>		<u>252,110</u>	<u>125,769</u>
Other Receivables	2	105,673	346,162				
Prepayments		<u>74,294</u>	<u>5,682</u>				
<b>Total Current Assets</b>		<u>600,147</u>	<u>659,075</u>	<b>Fund Balances</b>			
 				Invested in Fixed Assets		644,011	577,011
<b>Fixed Assets</b>	3			Unexpended Funds:			
Vehicles		23,234	23,234	Core-Unrestricted		(3,438)	199,940
Furnishings and Office Equipment		<u>620,777</u>	<u>553,777</u>	Working Fund	5	310,000	310,000
<b>Total Fixed Assets</b>		<u>644,011</u>	<u>577,011</u>	Special Projects	8	<u>41,475</u>	<u>23,366</u>
				<b>Total Fund Balances</b>		<u>992,048</u>	<u>\$1,110,317</u>
 				<b>TOTAL LIABILITIES AND CAPITAL</b>		<u>\$1,244,158</u>	<u>\$1,236,086</u>
<b>TOTAL ASSETS</b>		<u>\$1,244,158</u>	<u>\$1,236,086</u>				

**RECEIVABLES FROM DONORS AS AT DECEMBER 31, 1983**  
**(STATED IN US DOLLARS)**

<u>Donor</u>	<u>Amount Pledged in Original Currency</u>	<u>US\$ Equiv. at time of Pledge</u>	<u>Payment in Original Currency</u>	<u>Received During the Year</u>	<u>Balance Outstanding at the Year End</u>	<u>Total Grant for the Year</u>
<b>CORE UNRESTRICTED OPERATING GRANTS</b>						
+ Australia	A\$ 90,000	84,333	A\$ 90,000	86,655	—o—	86,655
+ Fed. Rep. of Germany	DM 400,000	155,642	DM 400,000	165,596	—o—	165,596
Ford Foundation	US\$ 75,000	75,000	US\$ 75,000	75,000	—o—	75,000
France	FF 500,000	64,939	FF 500,000	64,939	—o—	64,939
IBRD	US\$ 710,000	710,000	US\$ 710,000	710,000	—o—	710,000
+ Ireland	IrE 50,000	66,225	IrE 50,000	65,000	—o—	65,000
+ Italy	L200 million	136,286	L200 million	122,039	—o—	122,039
Netherlands	US\$ 200,000	200,000	US\$ 200,000	200,000	—o—	200,000
Philippines	US\$ 50,000	50,000	US\$ 21,086	21,086	28,914	50,000
Spain	US\$ 25,000	25,000	US\$ 25,000	25,000	—o—	25,000
+ Switzerland	SF 350,000	157,871	SF 350,000	175,961	—o—	175,961
+ UK	StE 120,000	199,336	StE 120,000	192,742	—o—	192,742
USAID	US\$ 900,000	900,000	US\$ 900,000	900,000	—o—	900,000
+ Canada	Can\$ 225,000	<u>190,000</u>	Can\$ 225,000	<u>183,608</u>	—o—	<u>183,608</u>
<b>Total Core Operating Grants</b>		<u>\$ 3,014,632</u>		<u>\$ 2,987,626</u>	<u>\$ 28,914</u>	<u>\$ 3,016,540</u>

+ Differences arose due to exchange rate fluctuations

**STATEMENT OF SOURCES AND APPLICATION OF FUNDS**

**(STATED IN US DOLLARS)**

**FOR THE YEAR ENDED  
DECEMBER 31, 1983**

	<b>1983</b>	<b>1982</b>
<b>Source of Funds</b>		
<b>1.- Core Operations</b>		
Unrestricted	3,016,540	2,196,017
Unexpended balance from prior year	199,940	216,010
Earned Income Applied in Year	<u>100,428</u>	<u>41,025</u>
	<u>3,316,908</u>	<u>2,453,052</u>
Restricted	---0---	200,000
Transfer to Special Projects	<u>---0---</u>	<u>(200,000)</u>
	<u>---0---</u>	<u>---0---</u>
<b>2.- Capital</b>		
Unrestricted	---0---	95,000
Unexpended balance from prior year	---0---	50,000
Working Fund	310,000	310,000
Earned Income Applied in Year	<u>67,000</u>	<u>50,000</u>
	<u>377,000</u>	<u>505,000</u>
<b>3.- Special Projects</b>		
Cumulative Income on Projects not Completed	440,159	257,811
Transfer from Restricted Core	<u>---0---</u>	<u>200,000</u>
	<u>440,159</u>	<u>457,811</u>
<b>TOTAL FUNDS</b>	<u><b>\$4,134,067</b></u>	<u><b>\$3,415,863</b></u>

# STATEMENT OF SOURCES AND APPLICATION OF FUNDS

(STATED IN US DOLLARS)

FOR THE YEAR ENDED  
DECEMBER 31, 1983

	1983	1982
<b>Application of Funds</b>		
<b>1.- Core Operations - Unrestricted</b>		
Review and Planning NARS	1,371,168	1,087,066
Research Studies	372,924	126,485
Conferences and Training	368,154	205,211
Information Services	294,340	173,140
General Administration	379,937	350,367
General Operating Costs	<u>533,823</u>	<u>310,843</u>
	<u>3,320,346</u>	<u>2,253,112</u>
<b>2.- Capital</b>		
Capital Additions	<u>67,000</u>	<u>195,000</u>
<b>3.- Special Projects</b>		
Cumulative Expenditure on Projects not Completed	<u>398,684</u>	<u>434,445</u>
<b>4.- Unexpended Balance</b>		
Core - Unrestricted	(3,438)	199,940
Working Fund	310,000	310,000
Special Projects	<u>41,475</u>	<u>23,366</u>
	<u>348,037</u>	<u>533,306</u>
<b>TOTAL APPLICATION OF FUNDS</b>	<u>\$4,134,067</u>	<u>\$3,415,863</u>

**FUNDS PROVIDED AND COSTS**  
**FOR THE YEAR ENDED DECEMBER 31, 1983**  
**(STATED IN US DOLLARS)**

	<u>Funds Available</u>	<u>Fixed Assets</u>	<u>Review &amp; Planning NARS</u>	<u>Research Studies</u>	<u>Conferences and Training</u>	<u>Information Services</u>	<u>General Admin.</u>	<u>General Operating Costs</u>	<u>Total</u>	<u>Transfer to Unexpended Balance</u>
Unrestricted Core	3,316,908	---0---	1,371,168	372,924	368,154	294,340	379,937	533,823	3,320,346	(3,438)
Capital Grants	67,000	67,000	---0---	---0---	---0---	---0---	---0---	---0---	67,000	---0---
Working Fund	310,000	---0---	---0---	---0---	---0---	---0---	---0---	---0---	---0---	310,000
Special Projects	<u>440,159</u>	<u>---0---</u>	<u>398,684</u>	<u>---0---</u>	<u>---0---</u>	<u>---0---</u>	<u>---0---</u>	<u>---0---</u>	<u>398,684</u>	<u>41,475</u>
<b>TOTAL GRANTS &amp; EXPENSES</b>	<u>\$4,134,067</u>	<u>\$ 67,000</u>	<u>\$1,769,852</u>	<u>\$ 372,924</u>	<u>\$ 368,154</u>	<u>\$ 294,340</u>	<u>\$ 379,937</u>	<u>\$ 533,823</u>	<u>\$3,786,030</u>	<u>\$ 348,037</u>

SCHEDULE OF EARNED INCOME

FOR THE YEAR ENDED  
DECEMBER 31 1983  
(STATED IN US DOLLARS)

	1983	1982
<b><u>Source of Earned Income</u></b>		
Bank Interest	60,663	79,002
Income Arising on Special Projects Completed	<u>106,765</u>	<u>12,023</u>
	<u>\$167,428</u>	<u>\$91,025</u>
<b><u>Application of Earned Income</u></b>		
Applied to Core Operations	100,428	41,025
Applied to Capital	<u>67,000</u>	<u>50,000</u>
	<u>\$167,428</u>	<u>\$91,025</u>

**COMPARATIVE STATEMENT OF ACTUAL EXPENSES AND APPROVED  
BUDGET FOR THE YEAR ENDED DECEMBER 31, 1983  
(STATED IN US DOLLARS)**

	<u>Core Unrestricted</u>		<u>Capital</u>	
	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>	<u>Actual</u>
<b>Programs</b>				
Review and Planning NARS	1,558,000	1,371,168		
Research Studies	291,000	372,924		
Conferences and Training	346,000	368,154		
Information Services	305,000	294,340		
General Administration	470,000	379,937		
General Operating Costs	<u>466,000</u>	<u>533,823</u>		
Approved Budget	\$3,436,000	\$3,320,346		
Budget Shortfall	<u>119,092</u>			
Revised Budget	\$3,316,908	<u>\$3,320,346</u>		
Unexpended Balance-Deficit		<u>(3,438)</u>		
<b>Capital</b>				
Fixed Assets			67,000	67,000
Working Fund			<u>310,000</u>	<u>310,000</u>
			<u>\$377,000</u>	<u>\$377,000</u>

**NOTES TO THE ACCOUNTS**  
**DECEMBER 31, 1983**

**1.- Basis of Financial Statements**

Balances in Dutch Guilders have been translated to US dollars at the rate of exchange ruling at the Balance Sheet date - DFL 3.05 = US\$1 (1982 - DFL 2.64 = US\$1).

**2.- Other Receivables**

The contribution from the OPEC Fund was cancelled during 1983. Consequently, the donation of \$200,000 shown in the Statement of Sources and Application of Funds for 1982 as a Special Project income source is no longer included in these accounts. Correspondingly, on the Balance Sheet the Receivable has been eliminated.

**3.- Fixed Assets**

Fixed assets are stated at cost with no charge for depreciation.

**4.- Accrued Expenses**

Commitments made up to 15 December, 1983 and remaining unexecuted as of the Balance Sheet date have been accrued for.

**5.- Working Fund**

This represents approximately 30 days average operating cost requirement based on the 1984 budget.

**6.- Retirement Fund**

ISNAR contributes to a pension fund for all staff for which all vested benefits are fully paid annually.

**7.- Office Rent**

The rental contracts for the office premises located at Bezuidenhoutseweg 52 and Emmapark 4 in The Hague were cancelled and new premises were rented at Oranje Buitensingel 6 in The Hague. The new lease is for a period of five years commencing on 1 December, 1983 with an option for an additional five years. There is a rent increment each year based on the CBS cost of living index of the Netherlands. ISNAR has the option to sub-let if it should terminate or transfer from The Hague.

**8.- Special Projects**

Special Projects are those funded outside the core budget and are accounted for on completion and not on a calendar year basis. The net balance of \$106,765 on projects completed during 1983 has been taken to Earned Income. The balance on projects not completed at the balance sheet date is included in Unexpended Fund balances.

Special Project movements for the year can be summarized as follows:

	<u>Cumulative Income</u>	<u>Cumulative Expenditure</u>	<u>Net Balance</u>
Balance January 1	457,811	434,445	23,366
Addition in the year	691,237	366,363	324,874
Cancellation of OPEC Fund Contribution	(200,000)	—0—	(200,000)
Projects Completed	<u>(508,889)</u>	<u>(402,124)</u>	<u>(106,765)</u>
Balance December 31	<u>440,159</u>	<u>398,684</u>	<u>41,475</u>

Funds received during the year comprise the following:

(i) \$78,728 received from the International Maize and Wheat Improvement Center (CIMMYT) for their support of a case writing program and seminar based on the results of the cases.

(ii) \$14,746 received from the International Development Research Centre (IDRC) in support of the Rural Social Science in Africa Project.

(iii) \$68,175 received from the International Development Research Centre (IDRC) in support of the agricultural research organization and performance program being carried out in Latin America with PROAGRO.

(iv) \$120,000 received from the Government of the Ivory Coast/IDA as reimbursement for the review carried out by ISNAR.

(v) \$55,415 (£37,500) received from the Overseas Development Administration of the United Kingdom as continued support toward a field study on agricultural management, case writing, and workshops in Africa.

(vi) \$110,575 received from the Government of Rwanda/IDA as reimbursement for the review carried out by ISNAR.

(vii) \$81,280 received from the Government of Rwanda/IDA as an advance against expenditures incurred on the Seminar carried out in Rwanda in February, 1983.

(viii) \$43,024 received from the Asian Development Bank as reimbursement for expenses incurred in the project preparation review.

(ix) \$130,000 received from the United States Agency for International Development as continued support toward a field study on agricultural management, case writing, and workshops in Africa.

Deducted from the total under item **Addition in the Year** is the amount of \$10,706 refunded to the Deutsche Stiftung fur Internationale Entwicklung (DSE) from their support to the Conference held in Jakarta, Indonesia in September, 1982.