APAARI NEWSLETTER

VOL. 4 NO. 1 JUNE 1995 ISSN: 0858-6063

CONTENTS

EDITORIAL

Among different regions of the world, Asia-Pacific is the most vibrating region in terms of accelerated growth for both production and productivity of different crop commodities, especially the foodgrain crops. It is also encouraging that the region sustains more than half of the world's population from only 33 per cent of global land. It is this region, which has also witnessed successfully the "Green Revolution" - thanks to the cutting edge of science and untiring efforts of both the farmers and the developmental agencies. Many nations have travelled a long way from the status of 'Begging Bowl' to that of self-sufficiency as well as household food security.

In spite of these spectacular developments, it is this region where maximum impoverished people live and the 'access' to food is yet a major socio-economic problem facing many developing countries. Also, the issue of household nutrition security is becoming more important. Obviously, this would require major R&D thrust on diversification, value addition, post-harvest processing and handling, and also commercialization and globalization. In a recent global debate on food, agriculture and environment - A Vision for 2020, it was unanimously concluded that in order to successfully meet future challenges, NARS in the developing countries would do well if they are supported well by their respective Governments. In this context, it is heartening that many NARS are being re-organized and strengthened in the region to meet newer challenges. Also there is greater realization now to support better own NARS than to wholly depend on borrowed technology. In the process, some of the NARS are being funded well than ever before. Unfortunately, donor support in real terms is declining for agricultural research and development which puts obvious pressure on national governments to ensure better internal support. APAARI is making needed efforts to catalyse the NARS leaders for better support in future.

Editors

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, REGIONAL OFFICE FOR ASIA AND THE PACIFIC
MALIWAN MANSION, PHRA ATIT ROAD, BANGKOK 10200, THAILAND. TEL: 281-7844, TLX: 82815 FOODAG TH, FAX: 280-0445

REGIONAL EXPERT CONSULTATIONS

SEVENTH SESSION OF REGIONAL COMMISSION ON FOOD SECURITY FOR ASIA AND THE PACIFIC

The Seventh Session of the FAO Regional Commission on Food Security for Asia and the Pacific was held at FAO/RAP, Bangkok, Thailand from 4-7 July 1995.

Officers and Secretariat of the Consultation on the Podium

The objectives were to review the food security situation and outlook; and consider LIFDC issues, particularly sustaining food production growth, impact of the Uruguay Round Agreement (URA), food security policy and programme formulation, and national nutrition plans. It was attended by 37 representatives from 16 countries. Observers from ADB, ESCAP, IFAD and UNDP also participated. Dr. R.S. Paroda, Director General, Indian Council of Agricultural Research participated as a resource person.

The Commission agreed that the 19 LIFDCs of the Region faced profound changes in the production, consumption and trading environment as a result of the ongoing structural adjustments and the Uruguay Round Agreement (URA). Among others, erosion of food subsidies, shift to open markets and reduced trade barriers spelled both opportunity and threat to the food security. It was imperative that the LIFDCs improved agricultural productivity and efficiency, maximized benefits from new employment and income-generating opportunities and, at the same time, strengthened the safety net for the hardcore poor.

Progress depended on an effective policy framework and comprehensive action programme to redress six critical issues namely:

(i) land and water degradation;
(ii) lack of preparedness for acute food shortages;
(iii) risks associated with food import dependence;
(iv) short-term adverse impacts of market reforms;
(v) safety nets for vulnerable households; and
(vi) persistent and pervasive malnutrition.

Additionally, the Commission recommended that concerned governments undertake special action programmes within a sustainable development strategy to: raise food and agricultural productivity; improve marketing efficiency; develop agro-industries and agri-business; strengthen commodity trade; and target assistance to vulnerable households.

The Commission agreed that the planned World Food Summit to raise political commitment for attacking the root causes of food insecurity was sound and timely.

EXPERT CONSULTATION ON REGIONAL PERSPECTIVE FOR USE OF BOTANICAL PESTICIDES IN ASIA AND THE PACIFIC

The overall objectives of the Expert Consultation which was held at FAO/RAPA, Bangkok, Thailand, from 24-28 October 1994, were to review the progress, problems, and prospects of crop pest control with botanical pesticides in Asia and the Pacific Region and , based on this, to formulate a framework for regional cooperation in the use of botanical pesticides using selected plant species which have been identified as promising for the control of major crop pests (both in the field and in storage) in the Region.

In the above context, the 21 invited experts of the Consultation from Bangladesh, India, Indonesia, Malaysia, Myanmar, Pakistan, Philippines, Republic of Korea, Sri Lanka, Thailand, Vietnam, Germany and U.S.A. had the opportunity to:

i) Understand the major pest problems and their control measures in the Region; ii) Review what is known about botanical pest control in the Region; iii) Analyse regulatory, quarantine, and other current policies in various countries vis-a-vis the use of botanical pest control products; iv) Discuss constraints that hinder large-scale processing, marketing, and use of promising pest control plant materials; v) Identify specific technical, socio-economic, and policy studies that may be conducted on a coordinated basis in the region; vi) Develop plans for exchange visits of scientists among the cooperating coun-

tries; and vii) Identify training needs and its funding sources.

Based on resource papers, country reports, government policies, progress and problems of developing the use of botanical pesticides in the Region, the ***Consultation recommended to emphasize on research and policy issues.*** Because of the knowledge already available regarding Neem (*Azadirachta indica*), the Consultation considered on-farm trials of the products from this tree; and the research studies in the case of other potential plant materials.

Participants attending the Regional Expert Consultation on Botanicel Pesticides

Since a major driving force behind the use of botanical materials for agricultural pest control is to find safe and non-poisonous alternatives to the use of synthetic pesticides, the Consultation recommended the use of the term "Botanical Pest Control" (BPC) and "Botanical Pest Control Materials/Agents" (BPCM/BPCA) instead of the term "Botanical pesticides", which still connotes a killing action.

It was recommended that the plant species for testing should be selected by using the following criteria:

a) Should be easily available; b) Should be easy to cultivate; c) Should have pest control quality already determined; d) Should be environmentally safe; e) Should be socially acceptable; f) Some indigenous knowledge on the plant should be locally available; g) Should not become a weed or host to other plant pests; h) Should not compete with other agricultural crops; i) Should have complementary uses; j) Should be easy to process and use; and k) Should be economically attractive.

Botanicals suggested for testing are:

a) Neem; b) *Curcuma longa* (Turmeric); c) *Acorus calamus* (sweetflag); d) *Polygonum* spp. (Hydropiper); e) *Vitex negundo*; f) *Ipomoea* spp.; g) *Artemesia* spp.; h) *Annona squamosa*; i) *Cymbopogon nardus* or *winteranus*; j) *Corchorus capsularis* (jute); k) *Pongamia glabra* (Karanja); l) *Parthenium hysterophores*; m) *Ageratum conyzoides*; n) *Madhuca indica* (Mahua); o) *Derris elliptica*; p) *Lantana camara*; and q) *Aglaia ordorata*

Recommended major target crops are:

a) Rice; b) Vegetables (beans, crucifers, okra, and eggplant); c) Legumes; d) Mango; e) Cotton; f) Oilseeds; g) Citrus; and h) Stored grains.

The Consultation recommended the formation of a **Network on Botanical Pest Control in Asia and the Pacific Region** to encourage interaction and dialogue, promote research and development, and facilitate exchange of material related to botanical pest control. Details of its aims, objectives, scope, and responsibilities, set out in the Report, have also been endorsed by the Consultation. The Secretariat of the Network shall be provided by the FAO Regional office for Asia and the Pacific (RAPA), in Bangkok. **Linkages with the Asia-Pacific Association of Agricultural Research institutions (APAARI) will be sought.**

Proposed activities of the Network on Botanical Pest Control to be carried out by the countries and FAO are:

a) Countries

i) Identify promising pest control plant species for a monograph on Promising Pest Control Plant Species of Asia and the Pacific; ii) Revise the handbook of Plants with Pest-Control Properties; iii) Develop funding proposals for BPC Network Studies; iv) Conduct recommended studies; and v) Organize Workshop on Toxicity and Safe Use of Botanical Pesticides.

b) FAO

i) Establish the Secretariat of the BPC Network; ii) Publish and distribute the monograph on Promising Pest Control Plant Species of Asia and the Pacific; iii) Publish and distribute the Handbook of Plants with Pest-Control Properties (revised edition); iv) Organize Workshop on Registration and Analytical Methods of Plant Based Pesticides; and v) To publish and distribute the Consultation Report and Proceedings.

SAARC Technical Committee on Agriculture

The 14th meeting of SAARC Technical Committee on Agriculture was held at Thimphu, Bhutan on May 30-31, 1995. Representatives from all member countries, Bangladesh, Bhutan, India, Pakistan, Maldives, Nepal and Sri Lanka participated. Intersectoral coordination and formation of SAARC Independent Group for poverty alleviation through sustainable agricultural development was resolved.

Each country report highlighted the initiatives, achievements and probable future course of action from the respective member nation. "Reaching the millions - training the farmers and farm women in SAARC Region by 2000 AD" was considered an important activity. The need to have a consensus view on issues of PGR and IPR which have assumed importance in the wake of global developments was emphasized and the need for developing common approach by having a meeting in India was agreed. Urgent action was desired on developing modalities for networking of the various programmes and to improve the SAIC in Bangladesh. It was decided to provide professional input from different countries for this purpose. Also, India agreed for organising programmes on training of trainers and seminar on seed technology and seed health.

tries; and vii) Identify training needs and its funding sources.

Based on resource papers, country reports, government policies, progress and problems of developing the use of botanical pesticides in the Region, the ***Consultation recommended to emphasize on research and policy issues.*** Because of the knowledge already available regarding Neem (*Azadirachta indica*), the Consultation considered on-farm trials of the products from this tree; and the research studies in the case of other potential plant materials.

Participants attending the Regional Expert Consultation on Botanicel Pesticides

Since a major driving force behind the use of botanical materials for agricultural pest control is to find safe and non-poisonous alternatives to the use of synthetic pesticides, the Consultation recommended the use of the term "Botanical Pest Control" (BPC) and "Botanical Pest Control Materials/Agents" (BPCM/BPCA) instead of the term "Botanical pesticides", which still connotes a killing action.

It was recommended that the plant species for testing should be selected by using the following criteria:

a) Should be easily available; b) Should be easy to cultivate; c) Should have pest control quality already determined; d) Should be environmentally safe; e) Should be socially acceptable; f) Some indigenous knowledge on the plant should be locally available; g) Should not become a weed or host to other plant pests; h) Should not compete with other agricultural crops; i) Should have complementary uses; j) Should be easy to process and use; and k) Should be economically attractive.

Botanicals suggested for testing are:

a) Neem; b) *Curcuma longa* (Turmeric); c) *Acorus calamus* (sweetflag); d) *Polygonum* spp. (Hydropiper); e) *Vitex negundo*; f) *Ipomoea* spp.; g) *Artemesia* spp.; h) *Annona squamosa*; i) *Cymbopogon nardus* or *winteranus*; j) *Corchorus capsularis* (jute); k) *Pongamia glabra* (Karanja); l) *Parthenium hysterophores*; m) *Ageratum conyzoides*; n) *Madhuca indica* (Mahua); o) *Derris elliptica*; p) *Lantana camara*; and q) *Aglaia ordorata*

Recommended major target crops are:

a) Rice; b) Vegetables (beans, crucifers, okra, and eggplant); c) Legumes; d) Mango; e) Cotton; f) Oilseeds; g) Citrus; and h) Stored grains.

The Consultation recommended the formation of a **Network on Botanical Pest Control in Asia and the Pacific Region** to encourage interaction and dialogue, promote research and development, and facilitate exchange of material related to botanical pest control. Details of its aims, objectives, scope, and responsibilities, set out in the Report, have also been endorsed by the Consultation. The Secretariat of the Network shall be provided by the FAO Regional office for Asia and the Pacific (RAPA), in Bangkok. **Linkages with the Asia-Pacific Association of Agricultural Research institutions (APAARI) will be sought.**

Proposed activities of the Network on Botanical Pest Control to be carried out by the countries and FAO are:

a) Countries

i) Identify promising pest control plant species for a monograph on Promising Pest Control Plant Species of Asia and the Pacific; ii) Revise the handbook of Plants with Pest-Control Properties; iii) Develop funding proposals for BPC Network Studies; iv) Conduct recommended studies; and v) Organize Workshop on Toxicity and Safe Use of Botanical Pesticides.

b) FAO

i) Establish the Secretariat of the BPC Network; ii) Publish and distribute the monograph on Promising Pest Control Plant Species of Asia and the Pacific; iii) Publish and distribute the Handbook of Plants with Pest-Control Properties (revised edition); iv) Organize Workshop on Registration and Analytical Methods of Plant Based Pesticides; and v) To publish and distribute the Consultation Report and Proceedings.

SAARC Technical Committee on Agriculture

The 14th meeting of SAARC Technical Committee on Agriculture was held at Thimphu, Bhutan on May 30-31, 1995. Representatives from all member countries, Bangladesh, Bhutan, India, Pakistan, Maldives, Nepal and Sri Lanka participated. Intersectoral coordination and formation of SAARC Independent Group for poverty alleviation through sustainable agricultural development was resolved.

Each country report highlighted the initiatives, achievements and probable future course of action from the respective member nation. "Reaching the millions - training the farmers and farm women in SAARC Region by 2000 AD" was considered an important activity. The need to have a consensus view on issues of PGR and IPR which have assumed importance in the wake of global developments was emphasized and the need for developing common approach by having a meeting in India was agreed. Urgent action was desired on developing modalities for networking of the various programmes and to improve the SAIC in Bangladesh. It was decided to provide professional input from different countries for this purpose. Also, India agreed for organising programmes on training of trainers and seminar on seed technology and seed health.

Regional Expert Consultation on Use and Analysis of Food and Agricultural Data

The Expert Consultation on Use and Analysis of Food and Agricultural Data was held at FAO/RAP in Bangkok, 5-9 June 1995. The objectives of this Consultation were to:

(i) identify major types of data analysis and methods used in various food and/or agricultural studies,

(ii) develop and improve statistical analysis programmes in member countries, and

(iii) promote use and analysis of food and agricultural data

It was attended by ten experts from various countries of the Asia and Pacific Region. In addition, ESCAP as well as the Ministry of Agriculture and Cooperation and other organizations of the Government of Thailand sent thirteen observers to the consultation. FAO staff served as the Secretariat of the meeting.

Eighteen technical documents were presented. The papers were grouped under seven themes:

(a) Situation of Use and Analysis of Data;

(b) Selected Indicators in Food and Agriculture;

(c) Overview of Data Use and Analysis;

(d) Food and Agricultural Data for Economic Analysis;

(e) Use of Data for Agricultural Studies;

(f) Data for Food Grain Policy; and

(g) Data Analysis for Food and Nutrition Policies and Programmes.

Methodologies for different types of data use and analysis were discussed/presented with special reference to:

- agricultural production index;
- food balance sheets;
- socio-economic indicators for monitoring and evaluating agrarian reform and rural development
- agricultural price index numbers;
- agricultural indicators and the environment;
- economic accounts for agriculture;
- identification of people affected by poverty;
- macro-management adjustment in China's agriculture under the market economy system condition;
- use of data for food security and early warning;
- food grain marketing and price statistics for policy use;
- calculation of apparent consumption of food and associated nutrient data;
- evolution of food availability in selected Asian countries; and
- application of factor analysis to data on food and nutrition.

Some of the important conclusions/recommendations formulated by the experts are as follows;

- Countries of the Asia and Pacific Region should take steps to institutionalize work on compilation of indicators to monitor progress in agricultural/rural development and agrarian reform.
- It was observed that analysis of data in order to present the overview and to construct simple indicators was widely practiced while analysis to estimate economic indicators was still needed to be promoted.
- Utilization of farm level data being given adequate attention now, there was need for putting more attention to data analysis at sectoral level.
- FAO should prepare a handbook giving details about methods and techniques of agricultural data analysis.
- In order to effectively perform the analysis and use of agricultural data, more economic data related to analysis at the macro or sectoral levels were needed at this point of time. The needed data include shadow price, input-output coefficients, conversion factor and standard production coefficients, which would help make more dynamic sense out of the static aspect of food and agriculture data.
- Data analysis could be generally improved not only by suggestion of the users but also by the comments of external experts. The latter might provide some sound recommendations for improving the use and analysis of food and agricultural data. Effective agricultural planning and development should be made from consideration of all relevant academic aspects and from all interested parties.
- The Experts recognized the need for a Handbook outlining sampling methodology for obtaining precise and objective estimates of livestock products as well as livestock numbers.
- It would be useful to prepare a Handbook on crop forecasting techniques.
- It was pointed out that there was a strong relationship between an area classified as being poor or less developed and the well-being of population.

Asian Seed '95

The Asia Pacific Seed Association will be holding its second annual conference ASIAN SEED '95 from 27-29 september 1995 at New Delhi, India. In all, about 500 delegates are expected to attend this important conference in which both public and private seed organizations would participate. The Conference will be inaugurated by Dr. Bal Ram Jakhar, Minister of Agriculture, Government of India.

The Conference is being hosted by the Seed Association of India. About more than 300 delegates from outside India, representing Asia-Pacific Region, will participate.

IFPRI MEETING ON - "A 2020 VISION FOR FOOD, AGRICULTURE AND THE ENVIRONMENT"

- An Over View and Summary Recommendations

An international conference on "A 2020 Vision for Food, Agriculture and the Environment", organised by the International Food Policy Research Institute (IFPRI), was held at Washington DC,USA on June 13-15, 1995. Ministers of Agriculture and Environment, senior officials of several UN organizations, heads of several CGIAR Institutes, heads of National Agricultural Research Systems and several renowned food scientists and policy makers from about 50 countries participated in the conference. Her Excellency Speciosa Wandira Kazibwe, Vice President of Uganda, Dr. Ismail Serageldin, Chairman of the CGIAR and Vice President, Environmentally Sustainable Development, World Bank and Dr. Norman E. Borlaug, Nobel Laureate also participated.

The 2020 Vision sees a world where every person has economic and physical access to sufficient food. It envisages a world which is free from malnutrition and is equipped with a food production and distribution system which is sustainable, profitable and equitable. It was generally agreed that the world's natural resources can support the 2020 Vision provided timely and effective actions are taken to achieve the goal. The urgency of initiating the necessary action today rather than tomorrow was emphasised as everyday delay means thousands of deaths and millions of people going to bed hungry, let alone continued erosion of the earth's carrying capacity.

Madam Vice-President Kazibwe in her opening address emphasised that small farmers are the key to both increase in production and protecting the environment. Research to improve the productivity of small holder farmers should be strengthened and appropriate technologies suiting to the requirements also of woman farmers should be developed. Educating girls, she stressed, is essential to successful economic development. The Vice President also flagged the issue of equality in global markets.

Dr. Per Pinstrup Anderson, Director-General, IFPRI in his overview paper observed that "the most important question today is not whether we can feed the world, rather it is whether civil society and governments in both developing and developed countries alike have the political will to feed the world and commit to taking the actions that are needed today". This was echoed by several speakers who cautioned developed and developing countries alike, as well as aid agencies and non governmental organisations, of a wide range of political, economic and social measures required to achieve a world free from hunger.

The conference emphasised that the agriculture sector will continue to play a key role in fostering sustainable economic growth and meeting future food needs in most of the developing countries, especially the low income countries, where it provides the major share of the employment, gross domestic product (GDP) and export earnings. In such countries, agriculture is the foundation of the growth of other sectors of the economy. Therefore, the conference stressed that no developing country can ill afford to neglect the agricultural sector. The conference also underlined that to achieve broad based desired level of economic growth, the role of women in decision making and improved access by low income people, specially women, to productivity assets, market, employment, clean water and sanitation and family health care were essential.

To deal with the various complex issues involved, the following six point action programme, as proposed by IFPRI Director General, was "endorsed" by the conference.

- Developing country governments must be strengthened to undertake necessary activities which are best done by public sector, and other activities which could best be done by private sector and NGOs should be apportioned to them.
- Developing countries must increase their rates of agricultural growths as agricultural is the backbone of the national economy of such countries and growth in agriculture is the most efficient means of alleviating poverty, protecting environment and generating income and overall economic growth. It was suggested that most developing countries should spend atleast 1 per cent of the value of their agricultural production on agricultural research which is fundamental for ensuring sustained agricultural growth through the development and adoption of appropriate technologies.
- Greater attention must be paid to noncongenial agricultural conditions including fragile soils, limited rainfall areas and resource-poor farmers. Development assistance and national policies should specifically be oriented to meet the requirements of such areas and people.
- Governments should also invest in improving rural infrastructures so that physical distribution of food is improved. The public and private sectors should join in this effort.
- The current downward trend in international development assistance was a matter of great concern and should be reversed. Recognising that although foreign assistance can provide only a small fraction of the resources that are generally mustered from within countries, industrialisd countries should contribute atleast 0.7 per cent of their GNP to foreign assistance. Moreover, the assistance should be channelised first to the most needy countries.

As for other regions, the conference also "endorsed" recommendations of the workshop in South Asia held in

Nepal from 26-29 March, 1995. The outcome of the Nepal's meeting was based on discussions among 19 South Asian researchers, technical experts and policy makers and 9 IFPRI staff who had participated in the workshop. Senator Sartaz Aziz of Pakistan presented the recommendations of the Nepal meeting. Analysis of the South Asian scenario revealed that during the past 30 years conditions relating to food, agriculture, and the environment had improved and for the region as a whole the population growth rate had shown a declining trend. Per capita availability of food in the region has been rising essentially as a result of the yield increases associated with the Green Revolution. In general, there has also been increase in the per capita income which has considerably influenced food demand both in quantity and quality.

Despite the various favourable income and food security trends, poverty and malnutrition remains a serious problem in South Asia where 58 per cent of the children are currently malnourished. Even with the projected increases in the food availability and better sanitation and health conditions, 46 per cent of the children are still projected to be malnourished in the year 2020. It was emphasised that no significant scope exists for improving the amount of cultivated land in South Asia and therefore future production increases must come from yield increases. The momentum of Green Revolution has generally waned and there is a need for recommitment and dedication to usher in a new and much stronger Green Revolution in the region to meet the challenges.

The following strategies to meet the challenges were recommended in South Asia: increase investment in the agricultural sector; enhance access to improved agricultural technologies; develop productive, sustainable, environmentally friendly technologies; strengthen efforts to protect the environment; improve commercial agriculture; increase investment in human resources; improve trade linkages; and improve government policies. It was concluded that for South Asia, over the next 25 years, the challenge would basically be to create conditions that will allow continued and sustainable growth in agricultural output and improve the livelihood of those currently malnourished and living in poverty. The sheer number of people, high population densities and current low nutritional status in the region suggest Thai global projections of hunger and poverty depend to a large extent on improving conditions in South Asia.

India comprises bulk of South Asia. India's Minister of Agriculture, Honorable Dr. Bal Ram Jakhar emphasised that through establishing a strong national agricultural research system and complementing it with the desired political will and involvement of the farmers, India has amply demonstrated to the world that a food deficit country could become a food surplus country through synergistic interplay of necessary elements. Committing India to assist other developing countries, the Minister urged for a strong and fruitful cooperation among developing countries as well as between developed and developing countries. In the same spirit, Dr. R.S. Paroda, Secretary, Department of Agriculture, Research and Education and Director General, Indian Council of Agricultural Research underlined the need for establishing a strong and effective national agricultural research system which must be vibrant and dynamic to meet the challenges and opportunities of comprehensive and sustainable food security and nutritional adequacy. He eluded to the various steps that the Government of India had taken to create such a responsive NARS.

The IFPRI conference particularly highlighted the significance of research and technology assessment and transfer for attaining and sustaining comprehensive food security. Serious concern was expressed on the declining financial and institutional supports to agricultural research both in national and international programmes. Given the magnitude of malnutrition, the increasing complexities of environmental degradation, the need for congruence between increased productivity and sustainability, and considering that modern technologies (in consort with conventional technologies) are the most effective solutions to the problems, the Conference urged that the trend of support to R&D should not only be reversed but much more funding should flow to the sector. As a follow-up to the Washington Conference, IFPRI is planning a series of national level meetings to sensitise policy makers to initiate the process of formulating new policies and programmes geared to meet the 2020 Vision.

APAARI Promotes Technical Cooperation among Developing Countries (TCDC)

Singing of MOUs

During the Third Gneral Assembly meeting of APAARI held at PCARRD, Los Baños, Philippines on 25 November, 1994 four bilateral Memorandum of Understanding (MOU)/Workplans were signed to promote further the regional collaboration among developing countries. These were:

(i) PCARRD and ICAR.
(ii) PCARRD and MARDI.
(iii) PCARRD and BARC.
(iv) PCARRD and ICRISAT.

Singing of MOUs

AN INTERNATIONAL CONFERENCE TO EXAMINE THE STATE OF THE WORLD'S PLANT GENETIC RESOURCES

The Fourth International Technical Conference on Plant Genetic Resources, organised by FAO, will be held in Leipzig, Germany in June 1996. The preparation to the Conference is expected to be country-driven. The Conference is expected to discuss two main things: firstly the state of the World's Plant Genetic Resources and secondly the Global Plan of Action. The reports will depend on *inter alia*: the content of Country Reports on Plant Genetic Resources; sub-regional synthesis reports and the outcome of sub-regional and regional meetings; commissioned studies and scientific consultations; and deliberations of the Commission on Plant Genetic Resources and its Working Group.

The Report on the State of the World's Plant Genetic Resources will describe the current situation of plant genetic resources for food and agriculture, at the global level, and identify the gaps and needs for their conservation and sustainable utilization, as well as for emergency situations. The Report will encompass plants of social and economic interest, especially for agriculture and forestry, concentrating on domesticated crop species and their wild relatives, forest species of current or potential economic value, and promising species of plants which could be developed into new crops. In particular, the Report will:

- assess the present state of genetic diversity, the degree of genetic erosion, and the current coverage and status of in situ and ex situ conservation, and utilization of plant genetic resources for food and agriculture. The Report will build upon assessments by country and by sub-region, and, to the extent feasible, by crop group;
- identify major constraints to plant genetic resources conservation, utilization and exchange;
- evaluate the extent to which collections are used and developed and identify problems which hinder their full utilization for plant breeding;
- assess national and regional capabilities for the conservation and utilization of plant genetic resources for food and agriculture, in terms of human resources, institutional structures and legal mechanisms, and the methodologies employed;
- examine areas of special interest for the conservation and utilization of plant genetic resources for food and agriculture, such as informatics, new biotechnologies, local technologies, and issues such as on-farm conservation, and the scope for new approaches to plant breeding which would maintain diversity in production systems; and
- identify technologies appropriate for meeting the special needs of the developing countries, and assess the current state and pattern of technology transfer in plant genetic resources.

The Report should be able to provide the basis for drawing up the Global Plan of Action. It must therefore, as far as possible and feasible, include a full assessment of the state of conservation and utilization of plant genetic resources. This should include an assessment of the value of plant genetic resource for development, an analysis of the causes of loss of plant genetic resources; a survey of the methods and resources available for their conservation and use; and an assessment of capacities to employ such methods and resources.

The Report is expected to be synthetic, providing a global view of the state of genetic resources at all levels. The Report will treat conservation and utilization aspects, as well as the various methods of conservation, in an integrated manner. This will permit an analysis of the inter-relations between conservation and utilization, including the issues of improving incentives for conservation, overcoming obstacles to using conserved germplasm, and examining the relationship between plant breeding and diversity.

In summary, the Report is expected to encompass the following three substantive parts::

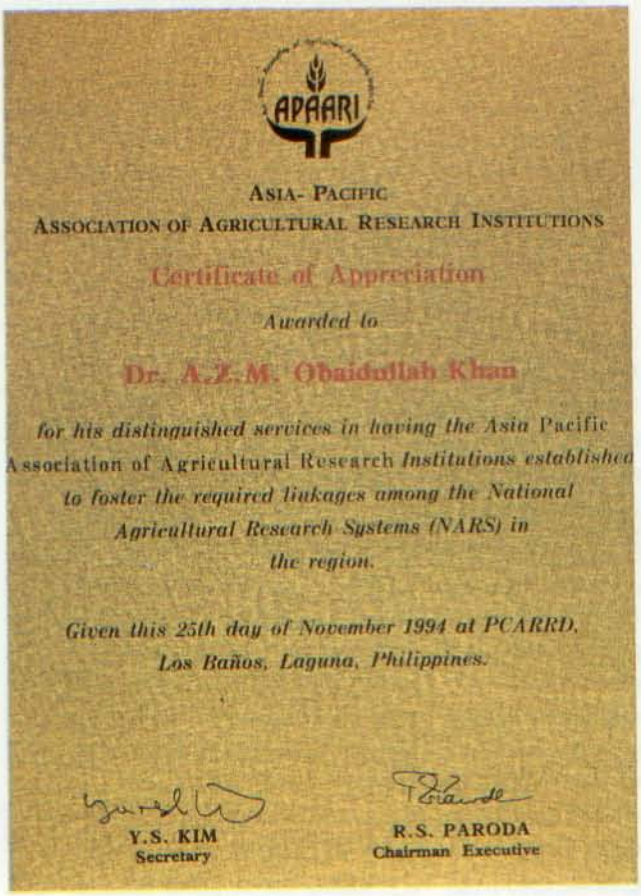
- Part I: "State of Diversity" - providing an assessment of the state of conservation, erosion and utilization of plant genetic resources; and an analysis of the underlying processes;
- Part II: "State of the Art" - providing a survey of the state of scientific, technical, legal and other methodologies and tools for the conservation and utilization of plant genetic resources;
- Part III: "State of Capacity" - providing a review of the state of human resources, institutional structures, and capacity to use relevant methodologies and tools, for the conservation and utilization of plant genetic resources, at the national, (sub-) regional, and global levels.

Each of the three parts would include an assessment of the gaps and needs for improving the conservation and sustainable utilization of plant genetic resources including an identification of the major constraints to conservation, utilization and exchange, and an evaluation of the extent to which plant genetic resources are used and developed, identifying in particular problems which hinder their full utilization for plant breeding.

An mentioned earlier, the Report on the State of the World's Plant Genetic Resources is expected to identify the gaps in policies, programmes, technologies and access to plant genetic resources. Based on these gaps, challenges and opportunities, the Global Plan of Action will be prepared. The very process of collecting the information at various levels may reveal that in several cases and on several aspects reliable information is not readily available. For instance, the estimates of degree of erosion of genetic resources vary widely for a given country and commodity. The very process of collecting the information may induce some action to bridge the gaps.

APAARI Honours: Mr. A.Z.M. Obaidullah Khan, Dr. M.S. Zehni, Dr. Md. Yosof bin Hashim and Dr. R.B. Singh

During the Third General Assembly meeting of APAARI, valuable contributions made by Mr. A.Z.M. Obaidullah Khan, Assistant Director General, FAO, RAPA, Dr. M.S. Zehni, Director, AGR, FAO, Rome, Dr. Yosof bin Hashim, Ex-Director General, MARDI, Malaysia and Dr. R.B. Singh, Ex-Executive Secretary of APAARI were appreciated by all the members present for their valuable services rendered in establishing APAARI. A Plaque of Honour was presented to them by Dr. Young-Sang Kim, President, APAARI.


APAARI

ASIA- PACIFIC
ASSOCIATION OF AGRICULTURAL RESEARCH INSTITUTIONS

Certificate of Appreciation

Awarded to

Dr. A.Z.M. Obaidullah Khan

for his distinguished services in having the Asia Pacific Association of Agricultural Research Institutions established to foster the required linkages among the National Agricultural Research Systems (NARS) in the region.

Given this 25th day of November 1994 at PCARRD, Los Baños, Laguna, Philippines.

Y.S. KIM
Secretary

R.S. PARODA
Chairman Executive

The Indian NARS

The Indian National Agricultural Research System has emerged to be one of the strongest NARS among the developing countries in the Asia-Pacific Region. The Indian Council of Agricultural Research (ICAR), established in 1929 and re-organised twice in 1965 and 1973 is the nodal agency for agricultural research and education in the country. The NARS consists of 45 Institutes, 4 National Bureaux, 30 NRCs, 79 All India Coordinated Projects, 28 State Agricultural Universities (SAUs) and one Central University for agriculture. Presently about 30,000 scientists are working in these institutions and annual in-take of agricultural students in various institutions is around 10,000.

The annual budget allocation of ICAR alone is Rs.5,000 million. About 25% of its budget is meant for support to SAUs which are being funded by the respective State Governments.

Both ICAR and SAUs work in close collaboration as effective partners and are responsible for generating the required farm technologies which have resulted in not only the Green Revolution but also significant improvement in oilseeds, milk, eggs, fish and horticultural products. Adoption of technologies has resulted in self-sufficiency of foodgrains with an all time record buffer stock of 35 million tones.

Dr. R.S. Paroda, Executive Secretary of APAARI, is presently heading the ICAR.

APAARI'S VISION TOWARDS CGIAR

APAARI in collaboration with FAO had organized an Expert Consultation on NARS vision towards Future Challenges and Opportunities for Sustained and Enhanced Productivity and Food Security in the Asia-Pacific Region at PCARRD, Los Baños, Philippines from 22-25 November, 1994. Heads of NARS from 14 countries and representatives of Seven CGIAR Centres, The World Bank and IFAD, 4 FAO Experts and a number of resource persons participated.

Adoption of Declaration

During the consultation, delegates debated threadbare the issue of "NARS vision towards CGIAR" and adopted unamimously a resolution which could be considered as joint APAARI's vision towards CGIAR. Following text of the Declaration is reproduced below:

"We the members of the Asia-Pacific Association of Agricultural Research Institutions (APAARI):

Place on record our deep appreciation of the valuable contributions made by the CGIAR Centres in the generation of the Green Revolution technology in the past 30 years. We welcome the move to strengthen and restructure the GC System so that it can respond effectively to new and changing priorities of agriculture in the developing countries;

Recall the spirit of Bellagio where the vision of the founding fathers laid the moral and technological ground and made bold commitments for the Green Revolution which resulted in a quantum jump in food production and saved millions of lives;

Recognize the major investments made by the developing countries in strengthening their NARS in the past 30 years and propose that the earlier principle of the CG Centres substituting for weak NARS will be increasingly replaced by one of greater partnership and devolution of responsibility to encourage them to become self and interdependent.

Realise the persistence of hunger and malnutrition coupled with creeping degradation of the life support systems.

Resolve to work for a second Green Revolution by raising the genetic yield potential of major food crops and overcoming the emerging yield ceilings, mobilising for this purpose, advances in science, especially in biotechnology and molecular biology.

Further resolve to help double food production in the next 20 years in the vast drylands, where most of the poor people in the developing countries make their living, through improved agricultural production by increasing the effectiveness and efficiency of moisture conservation and water use, soil fertility restoration, and other relevant technologies.

Underscore the urgency of developing new paradigms in technology transfer and ecological science which lead to the conservation and improvement of the environment while achieving the necessary productivity gains and food increases.

Recognise that CG Centres have made significant contributions in the strengthening of NARS through their training programmes and other institution building activities, and reaffirm continued support for these activities to equip NARS for future scientific challenges.

Realize that with the more widespread use of Intellectual Property Rights, the CG Centres will continue to hold in trust the world's plant genetic resources and make them freely available to scientists in the developing countries, and to all others for the purpose of public good research.

Commit to provide more stable and long term funding support for the CG Centres so that they could produce the technologies which will be needed to resolve the increasingly complex problem of enhancing productivity while preserving the natural resources base."

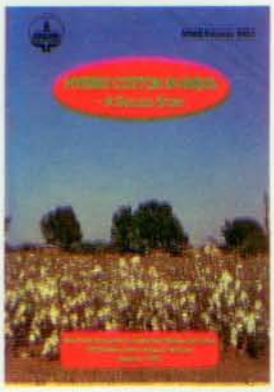
FELICITATION

Dr. R.B. Singh, Ex-Executive Secretary, APAARI has taken over his new assignment as Director, Indian Agricultural Research Institute, New Delhi, India after having worked with FAO for more than 15 years. He joined his new, prestigious assignment on 1 January 1995.

Indian Agricultural Research Institute is the premier institution for agricultural research and education in India.

APAARI takes this opportunity to felicitate Dr. R.B. Singh on this well deserved recognition.

New APAARI Publications



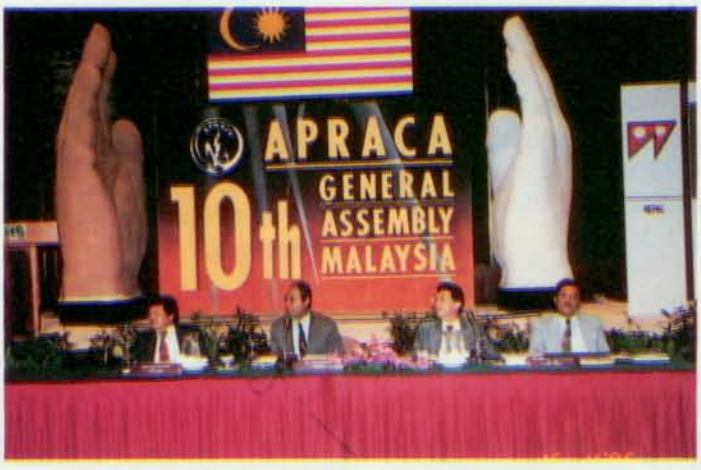
Hybrid Cotton in India
- A Success Story
(APAARI Publication:1995/1)

Palm Oil Industry in Malaysia
- A Success Story
(APAARI Publication:1995/2)

For copies, please write to the APAARI Secretariat.

APRACA CONVENES ITS TENTH GENERAL ASSEMBLY

The Asia Pacific Rural and Agricultural Credit Association (APRACA) convened recently its 10th General Assembly in Kuala Lumpur, Malaysia. The General Assembly is APRACA's highest policy making body constituted by executive officers of all its member institutions.



Outgoing and Incoming office Bearers of the Asia Pacific Rural and Agricultutural Credit Association (APRACA)

Like APAARI and AFMA, the APRACA also started as an FAO-sponsored body and is located at the premises of the Food and Agriculture Organization Regional Office for Asia and the Pacific (FAO-RAP) in Bangkok. While agricultural research institutes and food marketing agencies constitute the former and the latter, respectively, financial intermediaries involved directly in rural finance and institutions and bodies working indirectly for the development of rural finance schemes and banking systems in Asia Pacific region comprise APRACA. It is an autonomous body having the capacity of a legal personality with a registered head office in Bangkok, Thailand.

Apart from conducting statutory meetings of its executive committee and general assembly, the APRACA, through its training arm, the APRACA-Center for Training and Research in Agricultural Banking (CENTRAB) hosts training and exposure programmes on various fields of rural finance for its member-institutions. Its Consultancy arm, the APRACA Consultancy Services (ACS) also provides consulting services and conducts researches and case studies on relevant rural finance related issues. The APRACA generates a quarterly publication on rural finance: the "Asia Pacific Rural Finance Journal" and a semestral APRACA Newsletter.

In this 10th APRACA General Assembly, Myanmar is welcomed into the APRACA fold with Myanmar Agricultural and Rural Development Bank (MARDB) now admitted as a member. Three other institutions were also accepted: the BINASWADAYA NGO in Indonesia, and the Commercial Bank of Ceylon and National Savings Bank, both of Sri Lanka, expanding APRACA membership to 19 countries and 53 member institutions.

A new set of office bearers for 1995-1997 were also elected during the Assembly. Malaysia and Iran now assumes Chairmanship and Vice Chairmanship of APRACA, respectively. The Secretary General was appointed in the person of Mr. Zulkifli M. Noor, Deputy General Manager of Bank Pertanian, Malaysia.

Among other matters, the 10th APRACA General Assembly approved in principle the workplan of the Association for the incoming biennium. A number of significant activities are in store for the incoming years such as: conduct of an inventory of interesting rural finance schemes; country studies focused on grassroots financial systems development; and studies on rural finance models. These are on top of the regular training programmes mounted by its training arm and the short term research consultancies done by its counsultancy services arm. A couple of APRACA projects are also in the process of conceptualization and are anticipated to spin off within the next two years. Its existing project, the APRACA-GTZ Programme on Linkage Banking and Grassroots Financial Systems Development continues for another one and a half years.

AN INSTITUTE PROFILE

The establishment of some agricultural research institutes in Iran dates back to more than 50 years ago. The research institutes were generally independent and some had their own branches in different provinces.

The Headquarters of Agricultural Research, Education and Extension Organization

THE AGRICULTURAL RESEARCH, EDUCATION AND EXTENSION ORGANIZATION

AREEO

IRAN

In 1975, the Agricultural and Natural Resources Research Organization (ANRRO) was established as a central entity to formulate policies, make decision on research priorities and coordinate the activities of the existing research institutes. This organization has played an important role in supporting the agricultural sector and enabling the executive bodies to achieve remarkable progress in their programmes as evidenced by the pronounced increase in production of the field and horticultural crops during the five-year Development Plan. The organization was headed by the Deputy Minister of Agriculture for agricultural research and education. A Central Agricultural Research Council was created as the highest coordinating and decision making body. The council is chaired by the Deputy Minister with the participation of the Directors General of all research institutes and two senior agricultural scientists.

An Agricultural Research Center was established in each province to coordinate the activities of different branches of research institutes and to implement integrated and multidisciplinary research. The provincial research council decides on research priorities at the local level and makes preliminary approval of research projects.

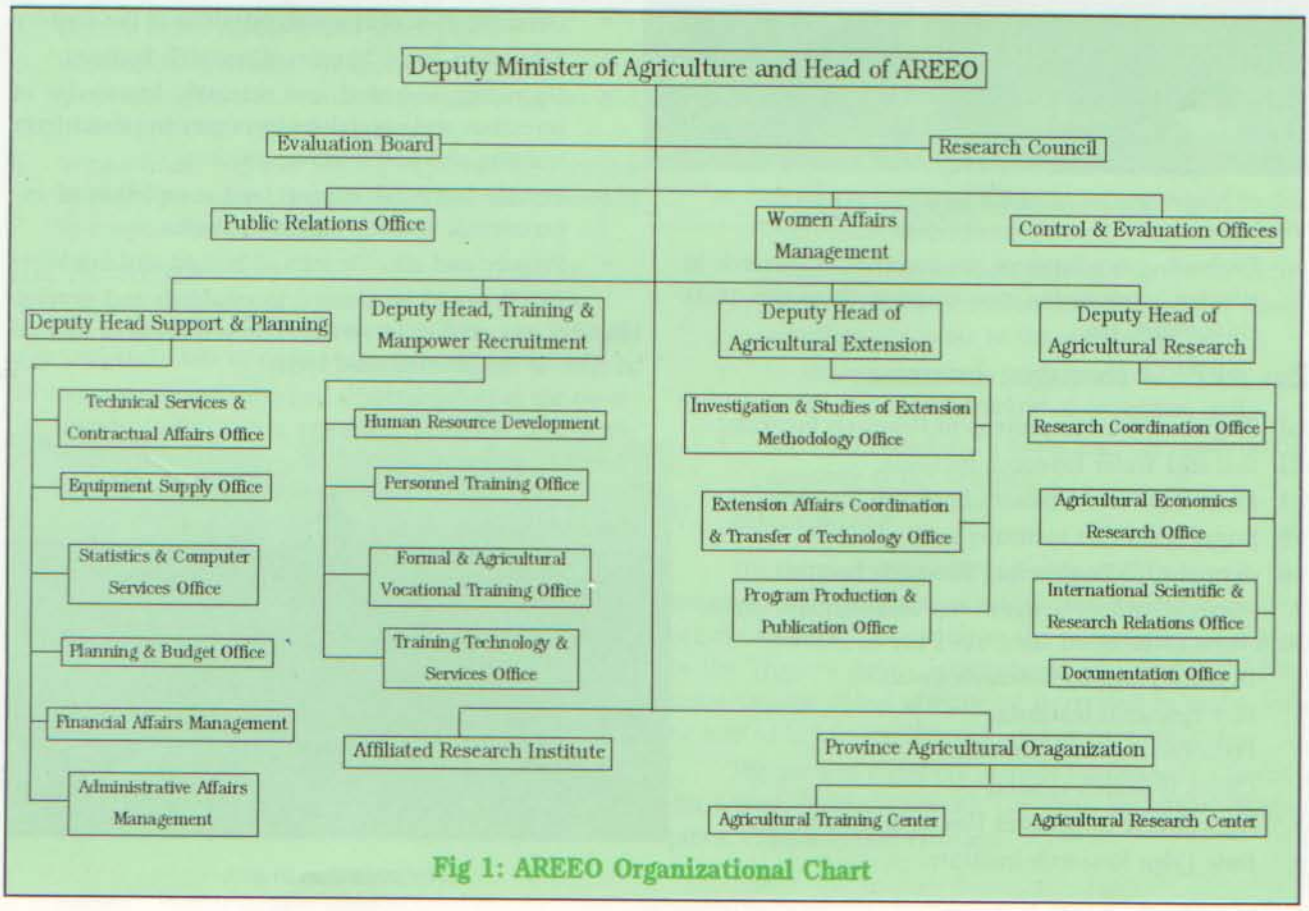


Fig 1: AREEO Organizational Chart

In 1990, the research institutes related to the range, forest and animal sciences were transferred from the Ministry of Agriculture to the Ministry of Jehad-e-Sazandegi. Meanwhile the Agricultural Research organization was also reorganized and merged with the Agricultural Education and Agricultural Extension Organization leading to the formation of the Agricultural Research, Education and Extension Organization (AREEO)

At present, the research staff involved in different fields, include 67 Ph.D, 292 M.Sc, 1039 B.Sc degree holders and 1086 technicians.

I. The Mandate of AREEO

- To draw up an overall agricultural research, education and extension policy of the country.
- To draw up agricultural research programmes of mutual concern with international and local research institutes.
- To draw up programmes interrelating researchers and scientists in different fields of agriculture, in and out of the country.
- Planning necessary programmes to provide research manpower from local and foreign sources.

Experiments on improved maize

- Evaluating development programmes of research institutes concerning monocrops such as rice, pistachio, citrus, etc.

II. AREEO Research Institutes

(a) Seed and Plant Improvement Research Institute;
(b) Soil and Water Research Institute;
(c) Plant Pests and Diseases Research Institute;
(d) Sugar beet Seed Institute; and
(e) Agricultural Engineering Research Institute.

Several research institutes and centers which have been established since 1992 are as follows:

- Dryland Farming Research Institute;
- Rice Research Institute;
- Pistachio Research Institute;
- Citrus Research Center;
- Agricultural Economics Research Bureau; and
- Date Palm Research Institute.

Research on water use efficiency

It should be noted that most of the research works carried out by the institutes established recently, were among those tasks done by others but due to the need for more integrity and unity, the above mentioned institutes were also established.

In addition to the aforementioned institutes, AREEO has under its supervision 29 provincial agricultural research centers.

The research institutes transferred to the Ministry of Jehad-e-Sazandegi are as follows:

- Range and Forest Research Institute;
- Animal Husbandry Research Institute; and
- Razi Serum Research and Production Institute

III. Organizational Objectives of Research Institutes

- Preparation of programmes and annual reports
- Determination of research priorities of the country
- Education and extension of research findings
- Upgrading technical and scientific knowledge of scientists and specialists by organizing short-term training and postgraduate studies.
- Provide logistical support and completion of experimental stations and laboratories
- Prepare and allocate annual budget and funds.

AREEO would be pleased to establish and develop bilateral cooperation in various relevant areas of mutual interest at the International level.

Mechanization in Iran

TROPICAL ASIAN MAIZE NETWORK - TAMNET

History: The participants of the first South-East Asian Maize Workshop which was held at the Asian Institute of Technology in Bangkok, from 12-15 January 1993 recommended for the establishment of the Tropical Asian Maize Network (TAMNET). The statute which was endorsed at the Workshop is as follows:

I. Overall Objective

The overall objective of the Network is to assist the participating institutions/departments to promote voluntary exchange of information, material, experimental data in selected subject matters, fields, expertise, as well as establish effective cooperation in research on mutually selected topics.

II. Specific Objectives

Specific objectives of the Network include the following:

a) to collect, collate and disseminate information on maize research, production, processing trade and development among the cooperating countries;

b) to document and disseminate success stories on maize production system and post-harvest handling under varying agro-climatic conditions of tropical Asia;

c) to exchange expertise and to organize training courses, workshops and expert meetings to improve manpower in the individual countries through TCDC arrangements;

d) to assist cooperating countries in bridging specific gaps in maize research and development;

e) to facilitate exchange of maize germplasm among cooperating countries and to monitor progress and usefulness of such exchanges; and

f) to coordinate regional testing of promising varieties and hybrids and other production systems developed by cooperating countires.

III. Activities

In pursuance of the above objectives, the Network may undertake one or more of the following activities:

a) periodic compilation and dissemination of the country-wise information regarding progress and problems of production, post-harvest handling, distribution and utilization of maize;

b) prepare a directory of maize research and development work currently being carried out, including list of researchers and available facilities, in the individual countries;

c) promote exchange and utilization of existing germplasm through preparing catalogues;

d) document and circulate success stories on production, processing and distribution of maize through the publication of technical bulletins and information leaflets on selected topics;

e) organize short-term training courses and inter-country study tours on breeding, seed production, agronomy, pest management, post-harvest handling, quality control, maketing and other areas as needed through TCDC arrangements;

f) organize meetings, workshops, and consultations for examining past progress and proposals for future work programs;

g) Undertake specific cooperative research to bridge technological gaps in areas identified by the Network;

h) Maintain liaison with other regional and international organizations concerned with maize research, development and information, and provide specialist advice on specific problems if needed; and

i) prepare annually a progress report for general distribution to members and other interested organizations on the progress of joint activities.

IV. Operation

The Network shall broadly be operated as follows:

a) The Secretariat of the Network shall be provided by the FAO Regional Office for Asia and the Pacific (RAPA, Bangkok). The Asia-Pacific Association of Agricultural Research Institutions (APAARI) and the Asian Regional Maize Program (ARMP) of CIMMYT will provide overall direction for linkages among various concerned national and international institutions.

b) The Regional Plant Production and Protection Officer of FAO/RAP shall be the Secretary of the Network and he shall convene all the meetings of the Network.

c) Participation in the Network will not entail any fee. However, the member institutions will be expected to assume the following obligations:

- to supply requisite information and report to the Secretariat of the Network periodically;
- to set apart some local currency funds for facilitating activities of the Network, particularly those activities which are in the spirit of TCDC;
- to share germplasm and research results and technologies with interested countries; and
- wherever possible, to share the cost of attending meetings of the Network

V. Membership

The membership of the Network shall be open to the national level maize research and development institute/organization/department from the cooperating countries in the Tropical Asia. International and Regional Institutes/Organizations working or interested in maize will be invited to join the Network, as resource institutes.

The present members include Bangladesh, Cambodia, China, India, Indonesia, Lao PDR, Myanmar, Philippines, Thailand, and Vietnam.

VI. Recent Action Undertaken

1. TAMNET Trials:

Regional yield trials were conducted to test commercially released materials by the national programmes, basically to identify the best varieties/hybrids available with the national programmes.

- *1993 Trial:* Voluntarily submitted materials from member countries were sent to FAO/RAPA in Bangkok. They were processed by Dr. Chamnan Chatkaew, Asian Regional Corn Coordinator (Dept. of Agronomy, Kasetsart University, Bangkok), and sent to all cooperators. A total of 20 entries including 4 open-pollinated varieties, 14 hybrids, and 2 local checks (1 OP and 1 hybird) were tested at 13 locations in seven countires, viz. Bangladesh, China, India, Indonesia, Philippines, Thailand and Vietnam. The result indicated that the top five entries were all hybrids from Kasetsart University.
- *1994 Trial:* There were 12 countries participating with 19 locations. Data are being processed.
- *1995 Trial:* Fifteen countries are participating with 26 locations. The trials are being conducted.

2. TAMNET Newsletter:

The Diretorate of Maize Research , Cummings Laboratory, IARI in New Delhi, India has agreed to publish half-yearly newsletter, named TAMNET Newsletter, with fund from FAO/RAPA. Two numbers were already issued in 1994.

3. TAMNET Meeting:

As was agreed at the First South-East Asian Maize Workshop, the first TAMNET Meeting was to held in February 1995. However, due to budget constraint, it was postponed to the latter half of 1995.

4. Acquisition of Inbred Lines:

Negotiations have been made with Kasetsart University to provide inbred lines for member countries to produce their own hybrid seeds. FAO will provide funds for the purchse of these inbred lines. The first lot includes three inbred lines to be used in two single crosses and one three-way cross.

ASIA PACIFIC ASSOCIATION OF FORESTRY RESEARCH INSTITUTION (APAFRI)

Background

The Asia-Pacific Association of Forestry Research Institutions (APAFRI) is an association of institutions and agencies involved in forestry research in the Asia-Pacific Region. It is an independent non-profit organization which aims to enhance research and technology development capabilities in support of conservation and management of forest resources in the Region. The headquarters of the Association is based at the FAO Regional Office at Bangkok.

Participants attending the APAFRI Executive Committee at FAO/RAP, on 5 - 6 July 1995

The establishment of the Association was prompted by the need to provide a viable institutional framework for collaboration in the Region. Since 1991 the Forestry Research Support Programme for Asia and the Pacific (FORSPA) has been fulfilling the networking function. FORSPA implemented by the FAO is supported by the Asian Development Bank, the United Nations Development Programme and the AusAID. Countries in the Region and the donor community wish to develop a more sustainable and participatory institutional mechanism as a logical follow up of FORSPA. The feasibility of establishment of an Association was discussed in the FORSPA Pre-implementation seminar held at Kuala Lumpur in January 1992. A draft constitution was prepared and circulated and subsequently a drafting committee prepared a revision. This was discussed, modified and adopted by Heads of Forestry Research Organizations in the Asia-Pacific in a meeting held at Bogor on 21 February 1995 resulting in the establishment of APAFRI.

Membership

Membership in the Association is open to all institutions in the Asia-Pacific Region actively engaged in forestry or forestry related research.

Objectives and Functions

Objectives

The overall objective of the Association is to foster research for sustainable forest management in the Asia-Pacific Region.

More specifically the Association aims to:

- promote exchange of scientific and technical know-how and information
- promote cooperative research and training programmes; and

- strengthen linkages between national, regional and international research centres and organizations.

Functions

In pursuance of the above objectives, APAFRI will facilitate the following functions:

- coordination, harmonization and facilitation of research;
- improvement of the efficiency of research and research personnel management;
- promotion of the cause of research and development;
- serve as a clearing house for information on all aspects of research; and
- promotion of excellence in research.

Organization

The organs of the association are:

General Assembly:

Consists of representatives of member institutions and is responsible for drawing up the policy of the Association, to review and endorse the programme of work and budget prepared by the Executive Committee and to review the progress in the attainments of the objectives for which the Association has been established.

Executive Committee:

An Executive Committee elected by the General Assembly consists of the Chairman, Vice-Chairman and four members. The Executive Committee is responsible for the management of the Association and will meet at least once a year. The Committee is responsible for approving the annual programme of work and budget and for preparing the general rules and procedures governing the management of the Association.

Secretariat:

The APAFRI will in due course establish a Secretariat headed by an Executive Secretary with necessary supporting staff. Until then, FORSPA based at the FAO Regional Office will provide the necessary support and function as the Secretariat for APAFRI.

Resources

Resources of the Association will be mobilised through membership subscription, grants and donations, proceeds from the sale of publications issued by the Association and fees from meetings, training courses and consultancies organized through the Association.

Based on the UN categorization of countries taking account of the stage of their development, three categories of membership have been established. The annual rates fixed for 1995 and 1996 are:

- Category I (institutions in developed countries): US$1,000;
- Category II (institutions in developing countries): US$250; and
- Category III (institutions in least developed countries or countries in transition): US$50.

Benefits of Membership

- Access to external funding secured by the Association in support of collaborative research programmes;
- Access to the publications of the Association at discounted prices, the discount level being decided by the Executive Committee;
- Opportunities to participate at reduced cost in the working groups, meetings and training programmes convened by the Association;
- Involvement in cooperative linkages with other entities undertaking similar activities, as facilitated by the Association; and
- Eligibility for the recognition for excellence in research.

Strategy Plan

APAFRI is currently drawing up its strategy or through participatory approaches. Problems and priorities are to be identified and the role of APAFRI in tackling these defined. Essentially APAFRI aims to play a facilitating/catalyzing role and to function as an independent, non-discriminatory, gender sensitive forum for exchange of ideas, views and information in the most transparent manner.

APAFRI Executive Committee

The inaugural Executive Committee elected during the meeting of the Heads of Forestry Research Organizations in February 1995 consists of:

1 Dr. Suree Bhumibhanom, Chairman (Thailand)
2 Dr. Hsu-Ho Chung (Taiwan)
3 Dr. Toshiya Ikeda (Japan)
4 Dr. Kamis Awang (Malaysia)
5 Dr. K.M. Siddiqui (Pakistan)
6 Dr. Virgilio Fernandez (Philippines)

Further Information

For further information please contact:

Dr. C.T.S. Nair
FORSPA/APAFRI Secretariat
FAO Regional Office
Phra Atit Road
Bangkok, Thailand
Tel: 66 2 2817844
Fax: 66 2 2804565

FACTS

Asia-Pacific Region is very rich in its flora and fauna. Two of the four cradles of agriculture are from this Region.

The Region has rich genetic diversity and rice. the most important stable food crop, has originated from the region. The largest collection of rice (about 75,000) is being maintained in the Gene Bank at IRRI, Los Baños, Philippines.

Future APAARI Publications

1. Report of Third General Assembly of the Asia-Pacific Association of Agricultural Research Institutions and Expert Consultation on NARS Vision towards Future Challenges and Opportunities for Sustained and Enhanced Productivity and Food Security in the Asia-Pacific Region (APAARI Publication: 1995/3)
2. Perspective Plan of APAARI (APAARI Publication: 1995/4)
3. Organization and Management of Agricultural Research Systems in South Asia by Dr. H.K. Jain (APAARI Publication: 1995/5)
4. Support for Agricultural Research System in Southeast Asia: Impacts on Growth and Development by Dr. William D. Dar (APAARI Publication: 1995/6)

Future Conferences

1. Title: Second International Crop Science Congress
   Venue: Vigyan Bhawan, New Delhi, India
   Period: November 18-23, 1996
   Contact: Prof. S.K. Sinha
   Organizing Secretary, and Director
   Indian Agricultural Research Institute
   New Delhi 110 012, India
   Fax: 91-11-5752006 or 5740722

2. Title: ASIAN Seed '95
   Venue: Le Meridien Hotel, New Delhi, India
   Period: 27-29 September, 1995
   Contact: Secretariat Asian Seed' 95
   c/o FAO Regional Office
   Phra Atit Road. Bangkok

3. Title: "1995 FAO Québec Symposium"
   People at the Heart of Development
   Venue: Québec, Canada
   Period: 11-13 October, 1995
   Contact: FORUM Québec
   30 Grande Allée Quest
   Québec, Canada GIR 246

Invitation

Agricultural Research and Educational Institutions in Asia-Pacific Region are invited to become members of APAARI. Queries in this regard should be sent to APAARI Secretariat, FAO/RAP, Bangkok.

Also Member of APAARI are invited to send information of interest which they would wish to be published in this Newsletter for sharing with others in the Asia-Pacific Region.

Recent RAP Publications

Some of the important publications brought out recently by the FAO Regional office for Asia and the Pacific (RAP) are listed below:

1. Asia-Pacific Fishery Commission Structure, Functions and Directory of the Subsidiary Bodies (RAP Publication: 1995/1)
2. Gender Issues in Rural Agriculture (RAP Publication: 1995/2)
3. Expert Consultation on the Changing Trade Environment for Oil Feeds and Production in the Asia and Pacific (RAP Publication: 1995/3)
4. Reform of the Forestry Sector: Towards a Market Orientation in CPR, Lao, Mongolia, Myanmar and Vietnam (RAP Publication: 1995/4)
5. Proceedings of the Expert Consultation on Management of Dairy Cooperatives in Asia and the Pacific (RAP Publication: 1995/5)
6. Proceedings of Regional Expert Consultation on Eucalyptus, Vol.1 (RAP Publication: 1995/6)
7. Pastures, Cattle and Coconuts (RAP Publication: 1995/7)
8. Proceedings of the Production of Pulse Crops in Asia and the Pacific Region (RAP Publication: 1995/8)
9. Report of the Expert Consultation of the Regional Network on Vegetable Crops (RAP Publication: 1995/9)
10. Report of the Expert Consultation on Curriculum Development for Food and Agro Industry in South Pacific Islands (RAP Publication: 1995/10)
11. After UNCED: Implementation of Agenda 21 and the Forest Principles in Asia and the Pacific (RAP Publication: 1995/11)
12. Progress and Problems in the Extension of Integrated Plant Nutrition System (IPNS) at Farm Level in Asia (RAP Publication: 1995/12)
13. Non-Wood Forest Products: Social, Economic and Cultural Dimensions (RAP Publication: 1995/13)
14. Report of the FAO Expert Consultation on Regional Perspective for Use of Botanical Pesticides in Asia and the Pacific (RAP Publication: 1995/14)
15. Food and Agro-industries Curriculum Development in Asia (RAP Publication: 1995/15)
16. Fodder Production from Tropical Forests in Asia and the Pacific Region (RAP Publication: 1995/16)
17. Directory of Farming Systems Research and Development Professionals in the Asia-Pacific Region (RAP Publication: 1995/17)

Note: Copies can be obtained upon request from FAO, RAP, Maliwan Mansion, Phra Atit Road, Bangkok 10200, Thailand