EDITORIAL

The Asia-Pacific Association of Agricultural Research Institutions (APAARI), as a regional forum, has been constantly striving to strengthen R&D activities through research networks in the region. For example, an expert consultation on networks was organized under the aegis of the Agricultural Education Extension Research Organization (AEERO) at Tehran, Iran in 1997, and another consultation on ‘Strengthening of Research Partnerships through Networks and Consortia’, was held recently at World Fish Centre (ICLARM), Penang, Malaysia, from 2-4 December 2002 (see report inside). A bout 60 participants, mostly from member NARS, IARCs, GFAR, FAO, CAI and private sector, such as APSA, deliberated upon national and regional concerns and issues vis-à-vis role of existing networks in the region for strengthening agricultural research for development. These included CORRA/INGER, RWC, CLAN, PGR networks including COGENT, BAPNET/INIBAP, TAMNET, GoFAR, UTFANET and others initiated by APAARI, such as the Asia-Pacific Agricultural Research Information System (APARIS). The activities of these networks are mainly related to sharing of scientific knowledge, exchange of information and material, research collaboration and technology transfer. However, a need is being felt for more effective coordination mechanism among participating NARS in order to achieve the desired goals.

APAARI has provided the need-based facilitation role to these networks in order to address most important problems of NARS, identify priorities and develop action oriented A/R collaborative programmes. It also aims at strengthening collaboration between NARS and IARCs, and also between NARS and the private sector. It has focused concern on common issues such as on benefit sharing and IPRs, and on policy advocacy needs. It has also taken into consideration the gap analysis based on regional priority setting exercises undertaken earlier.

APAARI looks ahead to strengthen networks further keeping in view the suggestions that have emerged from dialogue among stakeholders, such as:

i) Lead NARS to work more towards networks hub-role;

ii) Involve NARS in the development and not only research partnerships;

iii) Vitalize sick networks or close the non-performing networks;

iv) Identify and initiate new networks, such as: a) IWMI’s Challenge Programme on Food and Water; b) The Asia-Pacific Consortium on Agricultural Biotechnology (APCoAB), and c) The Inter-Regional Network on Cotton involving AARINENA, APAARI and CAC-RF.

In retrospect, APAARI has laid the required emphasis on networking mode for A/RD so that developing countries in the region could benefit by increasing their food production and productivity to mitigate hunger, poverty and malnutrition, while ensuring environmental sustainability.

Editors

CONTENTS

- Report of the Seventh General Assembly of APAARI and Expert Consultation on Strengthening of Research Partnerships through Networks and Consortia 2
- ICT Expert Consultation on the Development of Second Phase of APARIS 6
- Updates on South East Asian Forum on Agricultural Research (SEAFAR) 8
- Sixth Annual Meeting of CORRA 9
- ICRISAT’s 30th Anniversary Celebrations 10
- Indonesian Agency for Agricultural Research and Development (IAARD) - A Profile 12
- Japan International Research Centre for Agricultural Sciences (IAARD) - Recent Activities 16
- Third Meeting of the Asia-Pacific Group of Fisheries and Aquatic Research (GoFAR) 18
- PCARRD: Recent Activities 19
REPORT OF THE SEVENTH GENERAL ASSEMBLY OF APAARI AND EXPERT CONSULTATION ON STRENGTHENING OF RESEARCH PARTNERSHIPS THROUGH NETWORKS AND CONSORTIA

2-4 December 2002, Penang, Malaysia

The Seventh General Assembly of APAARI and Expert Consultation on Strengthening of Research Partnerships through Networks and Consortia were organized with support of World Fish Centre (formerly ICLARM) at Penang, Malaysia from 2-4 December 2002.

There were about 60 participants representing member NARS, associate members, ARIs, Private Sector, supporting organizations such as FAO, GFAR and special invitees. The Expert Consultation had five Technical sessions and Plenary session. The Consultation was followed by 7th General Assembly of APAARI on 4 December 2002. At the end of the meetings, the participants visited World Fish Centre, Penang.

The Inaugural session was chaired by Dr R.P. Sapkota, Chairperson, APAARI. A formal welcome address was delivered by Dr M.V. Gupta, Director, International Relations, World Fish Centre, Penang. Dr R.S. Paroda, Executive Secretary, APAARI extended a warm welcome to all the participants and apprised them about the objectives of the Expert Consultation. He conveyed his gratitude to Hon’ble Minister of Agriculture, Malaysia who sent his message of good wishes for the success of the meeting. He expressed happiness for choosing Malaysia as the venue for the meeting. He desired that issues such as integrated use of resources, sharing of NARS experiences, implications of IPRs, need to be understood and efforts be made to enhance livelihood opportunities for sustainable development.

TECHNICAL SESSIONS

In the first Technical session a Keynote Address on ‘Importance of ARD Networks for Strengthening Agricultural Research’ was delivered by Prof. E. Javier, Chairman, iSC of CGIAR. He strongly emphasized the need to have research networks in the region. Prof. Javier outlined the characteristics of successful network as clearly defined problems/objectives, strong self-interest of members, an effective coordination, members committing own resources and sustained external funding, but at the same time he expressed his concerns about network proliferation, sustainability and accountability. A sunset clause was proposed for the networks that had outlived their utility or relevance. Dr R.S. Paroda, Executive Secretary, APAARI delivered a talk on APAARI Initiatives from Priority Setting to Research Networking. He referred to gap analysis, implications for existing regional networks and regional collaborative programmes, development of new proposals for...
regional and/or global partnerships, funding strategy/guidelines for developing new proposals, biotechnology, PHT and IPM as important issues for consideration in the Expert Consultation. He also made a presentation on the Gap Analysis of Research Networks in South and West Asia. Gap Analysis of Networks in the Pacific Region was presented by Dr. R.D. Ghodake from NARI, PNG.

In the following sessions reports on important regional networks such as CLAN, CORRA/INGER, RWC, TAMNET, GoFAr, PGR, COGENT and BAPNET were presented by respective network coordinators/representatives. The collaborative research activities involving the private sector were presented by APSA and Monsanto. An exclusive session was held on ICT networks. The speakers represented GFAR-EGFAR, CAB, ASTI, ISNAR and APAARI. In the plenary session, chaired by Dr. Stein Bie, DG, ISNAR, the report of technical sessions were presented and the recommendations were endorsed.

Concerns on Networks: Coordination and Management

Overall, the presentations were able to provide a good account of the current status, accomplishments and future plans of various networks in Asia-Pacific region. Many networks were initiated by the CG Centres, but are now led by NARS under APAARI umbrella. Others are now seeking APAARI umbrella for better regional integration and partnerships. Sustainability is a major issue for some networks, while others are doing well. It was evident that NARS financial support and active involvement are critical for networks to be effective and sustainable. There is need also to develop partnerships with the private sector (e.g., APSA, Monsanto etc.), civil society organizations and development institutions.

TAMNET (Tropical Asian Maize Network), the maize research network was discussed at length. It was mentioned that TAMNET was initiated to share the hybrids and parental lines among members, and some partner countries have benefited but the TAMNET activities were suspended after CIMMYT withdrew its support. After a substantial discussion, a common view emerged on revival of TAMNET activities. A group comprising of representatives from APAARI, CIMMYT, FAO and APSA was tasked to discuss the modalities. Several suggestions to improve the functioning and increasing the scope of work of TAMNET include alternative facilitation unit in DOA, need assessment and interest of private sector, APSA to release TAMNET funds and trials to start from next cropping season-2003. The FAO and APAARI will provide need-based support. Similarly suggestions to improve UTFANET (Underutilized Tropical Fruit Asia Network) are that the facilitation unit should continue to be housed at PCARRD, Philippines, the network be reviewed, possibilities be explored to link network programme with German Govt./IPGRI initiative and APAARI extend partial support. For CLAN (Cereal and Legume Asia Network), it was agreed that a small expert group needs to revisit the mandate and consider including more legumes, particularly mungbean, lentil and soybean. The involvement of ICA RDA, AVRDC, RDA, COA and JIRCAS was felt desirable and APAARI will continue to provide need-based support.

New Proposals for Collaborative Research

The new proposals for collaborative research were deliberated upon. These included the WMI Challenge Programme on Water and Food designed to catalyze effective and efficient improvements of water productivity in food production in a way that is pro poor, gender equitable and environmentally sustainable. Dr. Chris Scott, Regional Director, IWMI indicated that as the CP was adopting Consortium approach, the experience of APAARI will be helpful. Explicit tie-up will be explored on institutional level, which will be taken up with the CP coordinator. IWMI needs to consider effective involvement of APAARI. Role of other CG Centres operating in dry areas (ICRISAT, ICA RDA, CIMMYT etc.) may be defined and an active involvement of NARS for research partnership was suggested. A report was presented by Dr. A.K. Bawa on the outcome of the FAO-APAARI Expert Consultation on the Status of Biotechnology in Agriculture in the Asia-Pacific Region, held in Bangkok on 21-23 March 2002, which identified a strong need for developing an Asia-Pacific Consortium on Agricultural Biotechnology (APCoAB). The Consortium will facilitate/catalyze to promote application of agricultural biotechnologies in the region. A concept paper on the proposed consortium was also presented and discussed. It was suggested that the activities need to be focused on issues relating to capacity building, policy advocacy, IPRs and training.

Dr. R.S. Paroda presented a new research network proposal regarding establishment of an Inter-Regional Research Network on Sustainable Cotton Production
The network aims to address issues of water management and increasing water use efficiency, development of early maturing varieties tolerant to drought, salinity and biotic stresses, integrated pest management and decreasing pesticides applications, cotton quality and technology, and weed management. The network partners would be AARINENA–APAARI–CAC–GFAR–ICARDA–AREO with Facilitation and Coordination Unit at Cotton Research Institute, AREO, Iran. The meeting greatly appreciated the initiative and the fact that one of the participating NARS was going to serve as the hub for the network. For 2003, APAARI committed to contribute US$ 5000 for this important initiative. There was strong endorsement of the proposal and the Meeting recommended that APAARI should take further steps in moving forward this proposal.

**Seventh General Assembly of APAARI**

The Seventh General Assembly of APAARI was held on December 4, 2002 under the Chairmanship of Dr R.P. Sapkota. In the opening remarks he gave an overview of the APAARI activities and achievements during 2001-02.

Dr R.S. Paroda presented a detailed account of activities undertaken and the progress made during the period. Dr Paroda extended a warm welcome to all the participants, specially, the new members from IAC–New Caledonia, ICBA–Dubai, IFPRI–USA, CGPRT–Indonesia and APSA. He mentioned that APAARI, as a regional forum is receiving global appreciation and is one of the few regional fora to have become self sustaining. He thanked all the members for their continued cooperation and support for this achievement. It was informed that the APAARI membership now consisted of 19 NARS, 14 CG centres/IARCs, and 4 ARD fora as reciprocal members. The CAAS–China, IAARD–Indonesia and New Zealand are likely to join APAARI. To further enhance the membership, efforts will be made to encourage participation from Cambodia, Laos, Myanmar and other smaller NARS in the region.

It was further informed that during 2001-02 APAARI had organized four expert consultations, namely on A.R.D priority setting, Status of Agricultural Biotechnology in Asia-Pacific region, APARIS, and the Networks and Consortia. Two Executive Committee meetings were also convened. APAARI brought out eight publications and a CD with all the APAARI Success Stories. These have been widely distributed.

The participants were informed about the update of APAARI constitution based on the inputs received from the members, and their feedback on the functioning of APAARI with the aim to further improve the working of APAARI. Some specific suggestions called for enhanced policy advocacy role of APAARI to influence the national governments for increasing investments in A.R.D and also the donors to focus on Asian region that houses the largest number of poor and the malnourished; fostering of new collaborative research among members and speedy sharing of information. On the improvement side, the responses highlighted the need to evolve a mechanism for efficient follow up action on the decisions taken during the Expert Consultations; ensuring timeliness of publications and broadening the scope of information and links on website.

The APAARI agricultural research information system, APARIS, launched in the year 2000 has successfully completed the pilot phase. As agreed in the first APARIS Expert Consultation, a Steering Committee has been constituted to provide guidance and directions to APARIS programme. APAARI has also entered into a MOU with ASTI (IFPRI and ISNAR) initiative to undertake survey in the Asia-Pacific region.

In view of the gradual increase in the activities of APAARI, efforts are being made to strengthen the APAARI secretariat. A new Assistant Executive Secretary with a sound background of agriculture and ICT has been recruited and is likely to join by February 2003.

The members appreciated the representation of APAARI in the meetings/conferences etc. organized by other regional fora/organizations. APAARI has also extended financial support to facilitate
participation of representatives from developing country NARS in these events.

The financial position of APAARI was explained. It was mentioned that in spite of increasing activities and costs, the reserve funds with APAARI had touched US$ 700 thousand. The budget proposal for the biennium 2003-04 was approved.

Another important agenda of this General Assembly was Election of APAARI’s Executive Committee. Dr Paroda explained the underlying considerations in proposing the membership of the Executive Committee. He said that an effort is made to balance the representation from the South and West Asia, Southeast Asia and the Pacific sub-regions. A new Executive Committee of APAARI for the period 2003-2004 was unanimously elected. Its constitution is given in the box.

The status of Post-Harvest Technologies in the Asia-Pacific was identified as the theme for the next Expert Consultation to be organized along with the 7th Executive Committee of APAARI meeting in 2003. Dr James Lee, DDG, International Relations, COA, Taiwan, extended an invitation to host the 8th General Assembly in 2004.

Finally Dr Sapkota, Chairman of the outgoing Executive Committee, thanked all members and

---

NEW CHAIRMAN AND VICE-CHAIRMAN, APAARI : 2003-2004

Dr Takahiro Inoue, President, Japan International Centre for Agricultural Sciences (JIRCAS), is a reputed scientist, having worked earlier in several senior research and managerial positions. While working with Agricultural Research Institute of Japanese Agriculture, Forestry and Fisheries Research Council (AFFRC), he focused his research on the development of management technologies for soil fertility as a basis of sustainable agricultural production. From 1980 to 1984, he was in Thailand as a senior scientist at Tropical Agricultural Research Centre and worked with counterpart researchers from the Department of Agriculture to study upland soil fertility in Southeast Asia and revealed the very acute importance of organic matter in tropical soils. Thereafter, he served as a research counsellor AFFRC to establish a new national research programme, and as an executive member of some research institutes including Director of Research Planning and Coordination Division, JIRCAS.

Dr Inoue has been a consistent member of Japanese Society for Tropical Agriculture for more than 30 years and at present serves as its vice-president.

Dr Md. Nurul Alam, Executive Chairman of Bangladesh Agricultural Research Council (BARC) is a distinguished agricultural scientist. He has held a number of important positions, which include Member Director of Planning and Evaluation and Administration and Finance of BARC and Project Director of Agricultural Research Management Project (ARMP). Dr Alam has been instrumental in the improvement of Research Planning and review systems in National Agricultural Research System (NARS), and helped in the research and development of Contract Research Programmes in NARS. He worked with multicultural teams and produced reports of donor-supported projects/programmes particularly of USAID/ADB/World Bank. Besides he had been actively associated with management and implementation, monitoring, reporting and reviewing of the several donor support projects in the NARS.

He is Fellow of the Zoological Society of Bangladesh and holds memberships of many professional societies. He is currently the Chairman of the Governing Board of SAARC Agricultural Information Centre (SAIC).
ICT Expert Consultation on the Development of Second Phase of APARIS

24-25 October 2002, Bangkok, Thailand

A n ICT Expert Consultation on the Development of Second Phase of APARIS and Meeting of APARIS Steering Committee was held during 24-25 October 2002 at Bangkok, Thailand. There were 32 participants representing member NARS, Associate members, supporting organizations such as ACIAR, CABI, FAO and GFAR. Mrs Prapaisri Pitakpaiwan, Deputy Director General, Department of Agriculture, Thailand was the chief guest and inaugurated the Expert Consultation. The deliberations of the Expert Consultation were conducted in five Technical and a Plenary session.

Dr R.S. Paroda, Executive Secretary, APAARI in the opening session extended a warm welcome and also apprised the participants about the objectives of the meeting. He highlighted the achievements of APARIS in a short span of two years and attributed these to the close cooperation among the regional NARS and generous support, technical and financial, from organizations such as ACIAR, FAO, CABI, AIT, GFAR and ISNAR. Dr Jean F Giovannetti, Executive Secretary, GFAR and Dr Johannes Keizer, Information Systems Officer, FAO in their introductory remarks pointed out as to how their respective organizations were working towards promotion of ICT applications to improve agriculture and sustainable food security at regional and global level. Mrs Prapaisri Pitakpaiwan, DDG, DOA, Thailand and the chief guest, in the inaugural address appreciated the role of APARIS towards building research partnerships, sharing information on technological developments in agriculture through expert consultations and publications, in the region. Mrs Pitakpaiwan desired that a comprehensive plan of action should be prepared keeping in view the needs and priorities of the member NARS and rapid development of regional agriculture, enhancing use of ICTs and establishment of information networks. Dr R.P. Sapkota, Chairman APAARI emphasized on the technological empowerment of poor farmers through the use of ICTs and urged the national governments to step up investments in ICT in the agriculture sector.

Technical/Scientific Deliberations

The first technical session "Way Forward for APARIS" included two presentations. Dr R.S. Paroda, Executive Secretary, APAARI dwelt on the phased developments in APARIS and its steady growth and that APARIS was formally launched in 2000. The main functions identified for APARIS included review of existing status of ICT at national level, information requirements, issues and challenges in ICM and encouragement of partnerships among diverse stakeholders. The participants were informed about the proposed constitution of a steering committee for APARIS that will provide directives, policy support, sourcing external funds, strategic planning and also to monitor and evaluate APARIS.

Dr Sahdev Singh, in his presentation ‘Initial Phase of APARIS and Issues for Further Development’ dealt with various components developed in the initial phase of APARIS, and for future considerations, highlighted issues such as involvement of NARS, role of NINPs, capacity building, portal to NARS institutions, access to publications, thematic forums by APAARI, intelligent Gateway/portal facility – CABI, support from GFAR, ACIAR and other sources of support. The presentation concluded with a visit to APAARI website.

The discussions brought out the need to address IPR obligations relating to ICTs. Exchange of information on technological developments, digital or documented to facilitate technology dissemination was emphasized. Mutual sharing of information, even on bilateral basis, was also mentioned in order to avoid duplication of efforts and to support those NARS that lack adequate infrastructure. Creation of extension networks was found wanting and it was suggested that APAARI should establish links with sub-regional organizations such as SAARC Agricultural Information Centre (SAIC). The participants agreed for collective efforts to bridge the digital divide.

In the next session on ‘Other ARI Systems’ presentations were made by participants from CABI, FAO, GFAR, ISNAR, APAFRI and NACA. Phase II also included advanced features, such as sophisticated metadata design, metadata harvesting...
from other gateways, and superior user interfaces. He also highlighted the investment needs, skills and expertise required to manage this system. Dr Johannes Keizer from FAO focused on distributed ownership of data, distributed data entry in to APARIS databases, standard and quality of metadata to be stored in APARIS databases, and capacity requirements and building at various NINPs of APAARI. Ms Fulvia Bonaiuti presented the ICT initiative of the GFAR salient features including e-discussion fora, information search engine, and back office system for content management, and links of the reconstructed EGFAR site were demonstrated. Dr Ajit Maru of ISNAR described ISNAR’s Agricultural Research on the Web (AROW), which provides information on agricultural research institutes, Inform and its variants, which are used in more than 26 countries to manage agricultural research management information, the large amounts of information particularly aimed for the APARIS clientele on the ISNAR website and some of the CD-ROMs that ISNAR has developed. Linking of APARIS with ISNAR’s databases was also mentioned as a future possibility. ISNAR also has significant experience in capacity building especially in the area of management of systems and intellectual property rights’ issues. Dr Sim-Hoek Choh, Executive Director APAFRI talked about APAFRI Tree link Information System (ATIS), a gateway to Asia-Pacific. ATIS was described as a unique web-based information exchange system having links with libraries, databases, networks and other information sources on forestry research throughout Asia-Pacific. An important facility under ATIS will be on-line regional language translation to remove the language barrier in sharing the research findings. Mr Simon Wilkinson described the e-NACA programme and NACA’s collaboration with a Thailand’s information technology agency NECTEC. The objective of the e-NACA programme is to develop a participatory knowledge-sharing network that will support sustainable aquaculture development and aquatic resource management in the Asian region.

At the end of the session, the session chair, Prof. Gajendra Singh, informed the participants on AIT’s many training programmes in the area of ICT and offered to help further reinforcement of APAARI- AIT relationship, particularly in the area of human resource development and training.

The session on ‘Partnerships with International Organizations: Possible links with APARIS’ involved brief presentations from representatives of FAO, GFAR, CABI, and ISNAR on partnerships and possible links that APAARI can develop with these international organizations to add value to APARIS. The presentations in the session identified Collaborative Programmes in ICT, Capacity Strengthening, Financial Support, and Standardization.

The ‘Group Discussion on Development of Second Phase of APARIS’ focused on issues of access vs. ownership, centrality vs. decentrality, changing role of regional and international systems and standardization of procedures for database structures and information exchange. The major action points/issues that emerged from the discussions are summed up as follows:

- APAARI needs to catalyze Asia-Pacific NARS leaders in recognizing the importance of ICT in A R D. NINPs to promote APARIS activities in their respective NARS. It is expected that such an attitude will generate support and popularize the APARIS.
- Need-assessment exercise is considered as an important primary requisite. Simultaneously it was felt as necessary to define the responsibilities of the NINPs. APAARI secretariat and ISNAR could possibly undertake this need assessment. ISNAR was expected to provide the technical backstopping to APAARI secretariat.
- APAARI gateway function to be made operational with the help of CABI.
- GFAR has extended support under RAIS and in view of the progress being made by APAARI more support could be forthcoming.
Some activities identified for APARIS were:

- Establish link with CG websites;
- Establish ICT links with sub-regional fora such as SAARC;
- Building of Web pages;
- Access and disseminate information to the end users; NINPs to help in building mailing list including e-mail;
- Develop an updated list of NARS institutions; Identifying suitable success stories including ICT use in ARD, and identify topics for e-discussion;
- Initiate e-discussion on IPM technologies for cotton since more than half of the insecticide consumption is for protection of this crop; APARIS should develop standards for information exchange among NARS and APAARI should explore training possibilities at AIT.

In the Plenary Session, the participants agreed that APARIS should be taken to second phase and the following actions/activities were endorsed:

- Work in close cooperation with the other regional fora to establish information links/networks
- Undertake an exercise on assessment of needs with major initiative coming from ISNAR
- Organize a Technical workshop with AIT. The technical content and financial support would be extended by GFAR
- Seek help of CABI to develop A PA RIS gateway
- Collaborate with ASTI for its survey in Asia and extend support and inputs
- NINPs will make available list of the ARD institutions under their respective NARS for updating the APAARI mailing list.

Also, the constitution of the first Steering Committee of APARIS as proposed by Dr Paroda was unanimously agreed to by all the participants.

The Steering Committee will have the following membership:

Dr Heather Briggs, ACIAR Chair
Dr Anwar Ali Chaudhry, PARC Co-Chair
Ms Delia P.A. Delfino, PCARRD Member

It was also agreed to include one representative from the APARIS support group viz. AIT, CABI, FAO, GFAR, ISNAR.

The Steering Committee will: (i) Provide policy support; (ii) Undertake strategic planning; (iii) Provide technical guidance; (iv) Generate external funds for the APARIS, and (v) Develop the work plan and report the progress to APAARI Executive Committee. The Committee will have a term of two years and will be reconstituted from the NINPs with representation of each organization of the Support Group.

### Updates on South East Asian Forum on Agricultural Research (SEAFAR)

During the last Senior Officers’ Meeting of the Association of South East Asian Nations (ASEAN) Ministers of Agriculture and Forestry (SOMAMAF) held on 8 October 2002 in Lao PDR, the 10-member nations agreed to establish the South East Asian Forum on Agricultural Research (SEAFAR) under the auspices of ASEAN and linked with the ASEAN Centre for Agricultural Research Databases (CARD).

SEAFAR aims to facilitate knowledge flow and exchange on agricultural research for development in the Southeast Asian sub-region under the ASEAN framework of mutual cooperation and to serve as a venue for discussing common agricultural research needs in Southeast Asia. Specifically, SEAFAR will endeavour to assist in coordinating subregional agricultural R&D; ensure successful partnerships among stakeholders of agricultural research; promote human resource development; facilitate institutional and electronic fora, and knowledge exchange systems.

Under ASEAN procedures, SEAFAR will follow ASEAN protocols and procedures, of which the immediate task is to form a Technical Working Group to be chaired and hosted by one of the ASEAN countries. Discussion on this is going on. Meanwhile, the SEAMEO Regional Centre for Graduate Studies and Research in Agriculture (SEARCA) has formed the Interim Secretariat of SEAFAR with the SEARCA Director and Deputy Director for Research in Graduate Studies serving in a concurrent capacity as SEAFAR Director and Executive Secretary, respectively. Several activities in the pipeline include FAO AGRIS-SEARCA Knowledge Management on-going discussion on introducing AGRIS metadata system in Southeast Asia through the SEAFAR CARD Knowledge Network; involvement of Sun Microsystems in providing assistance to SEAFAR CARD in developing the knowledge network’s infrastructure design; and CAB International offering manpower assistance to SEAFAR CARD through a Memorandum of Agreement (MOA), among others. It is hoped that the SEAFAR CARD Knowledge Network will become a subsystem of APARIS and, hence, EGFAR.

[GFAR Newsletter, December 2002]
The Council for Partnerships on Rice Research in Asia (CORRA) held its sixth annual meeting from 14-15 September 2002 in Beijing, the People's Republic of China (PRC) co-hosted by the Chinese Academy of Agricultural Sciences (CAAS) and the International Rice Research Institute (IRRI). Participants from the National Agricultural Research and Extension Systems (NARES) of 15 rice producing nations, 10 IRRI staff and observers from the China National Rice Research Institute, the Rice Research Institute of Thailand, the National Crop Experiment Station of the Rural Development Administration of South Korea, and CAAS, attended the meeting. Prof. Zhai Hu Qu, President CAAS and Chairman CORRA, welcomed the participants. Mr Li Zhengdong, the Deputy Director General of the International Cooperation Department, Chinese Ministry of Agriculture and Dr Ronald P. Cantrell, Director General IRRI, also gave the opening remarks.

DELIBERATIONS OF THE MEETING
These dealt with the recent work of the International Network on the Genetic Evaluation of Rice (INGER), presentations on the future of rice in Asia and country reports on rice research and development. Dr Mahabub Hossain, Head, Social Sciences Division, IRRI and Mr Vichai Sriprasert, the President of Riceland International Ltd., Thailand, also discussed the status of rice supply and demand and current trends in the international rice trade, respectively. Dr Cantrell discussed the implications and challenges for public sector agricultural research, while Dr Mark Bell, Head, International Programmes Management Office and Training Centre, IRRI gave a presentation on the opportunities for improving rice productivity and profitability in Asia. The participants were then divided into groups and engaged in a discussion to enable them to share and come up with recommendations regarding the constraints and future directions in rice research based on their country reports. The recommendations were later presented in a plenary session. Several recommendations on INGER were agreed upon. These included: (i) Developing a proposal to institute a charging scheme for parties requesting large amounts of seeds per variety, extra sets of nurseries, and those from the private sector; (ii) Developing a project to facilitate the exchange of information; (iii) Developing a concept proposal on the integration of germplasm databases; (iv) Identifying a national focal point to enhance the coordination and exchange of information and germplasm; (v) Identifying priorities for the exchange and testing of germplasm by national programmes; (vi) Identifying a main nursery for each country; (vii) Pursuing the review and harmonization of rice technical guidelines (RTG); (viii) Defining a work plan of activities for 2003 within budgetary requirements and based on priority activities; (ix) Identifying training needs in relation to intellectual property concerns and (x) Implementing Material Transfer Agreements (MTAs).

The country reports highlighted the main constraints affecting rice production. These include: seed and varietal selection; water shortages; resource-use efficiency; mechanization; changes in the labour force brought about by age, gender and migration; declining farm area due to urbanization, and technology transfer and training. The participants identified training and capacity development – especially in the field of new sciences, as one of the main areas for future focus. In addition, they also identified the sharing of technology, information and germplasm exchange, strengthening international cooperation and partnerships, post production technologies and mechanization; trading and market issues, and agro-ecoregional approaches to research.

Finally, there was an interesting discussion on the role of CORRA in strengthening collaboration and partnerships among its members and with other networks and in enhancing the role of rice research in the region. The CORRA participants resolved to encourage public/private partnerships in rice research, specifically in identifying areas of mutual interest and technologies with commercial potential.

At the business meeting, IRRI reiterated its commitment to fund CORRA despite a reduction in its core funds. However, IRRI also sought the support of the member-countries to shoulder in-country costs for future meetings and activities. The next CORRA meeting will be held in November 2003 in Malaysia and will be co-hosted by the Malaysian Agricultural Research and Development Institute (MARDI).

[Ramon Oliveros, International Rice Research Institute, Los Baños, Metro Manila, Philippines]
On 13 December 2002, ICRISAT was honoured by a visit from two dignitaries, His Excellency Dr A P J Abdul Kalam, President of India, and His Excellency Dr C. Rangarajan, Governor of Andhra Pradesh.

Dr William D. Dar, Director General welcomed the President to the campus, saying ‘Sir, we are doubly graced by this visit – not only are you the Head of State of this great country, you are also one of us – a scientist! We at ICRISAT share and support your dream of a food-secure India’. After short addresses by Dr Dar and Ms Martha Stone, Governor Rangarajan presented a dazzling array of statistics on agricultural production, and recommended the use of technological innovations to increase crop yields in the drylands of India.

President Kalam, in his keynote address, urged India to double its agricultural output by applying scientific methods to ensure soil fertility. He said that integrated soil nutrient management and water management are focal issues in drylands. Dr Kalam said that in areas where poor people live, more often than not, there is a water shortage, and it costs a lot of energy and money to bring water for specialized agriculture to these dry areas. He said ICRISAT should address possible agricultural technologies and water conservation technologies in such areas. Solutions to these problems may be beyond the scope of only agriculture and may need to extend to animal husbandry, poultry and agroprocessing, and other related activities. Dr Kalam also stressed the importance of educating the country’s youth. After his speech, he launched a distance learning computer-based module for villagers.

The President was given a tour of the SatVenture. He showed keen interest in ICRISAT’s genetic resources collection. President Kalam also witnessed the launch of ICRISAT’s Technical Innovation Centre and received the first copy of the brand new history book, *ICRISAT at 30: The Historic Journey to the Semi-Arid Tropics*, which was distributed to the various VIPs in attendance.

Dr Dar said that despite numerous successes over the past three decades, many challenges remain. One of the biggest is finding ways to improve conditions for the world’s poorest people. Turning adversities into opportunities is the heart of a movement spearheaded by ICRISAT – the Grey to Green Revolution, guided by Science with a Human Face.

**ICRISAT and ICARDA Win The King Baudouin Award for Chickpea Improvement**

In a special session on 30th October devoted to the announcement of the CGIAR awards, the CGIAR Chair, Dr Ian Johnson announced that ICRISAT and ICARDA had jointly won the King Baudouin Award of the CGIAR for 2002 for chickpea improvement. The joint submission by the two centres was titled “Changing Lives in Marginal Environments – a Winning Partnership in Chickpea Research.” The award, given for innovation in science that helps to improve the welfare of resource-poor farmers and low income people promotes partnerships and has an impact on sustainable production systems, carries a testimonial signed by the CGIAR Chair and a US$ 10,000 prize. Prof. Dr Adel El Bettagy, DG, ICARDA, Dr William D. Dar, DG, ICRISAT, and Dr Jagdish Kumar, Principal Chickpea Breeder, ICRISAT received the award from the CGIAR Chair.

**ICRISAT and ICARDA share the world mandate for chickpea improvement.**

While ICRISAT focuses on desi (local) types in the tropical latitudes of South Asia and Sub-Saharan Africa, ICARDA takes the lead in Kabuli chickpea improvement in the arid temperate zones of Central and West Asia and North Africa (CWANA).

Source: The Week at ICARDA
RAJENDRA S. PARODA GENE BANK

The ICRISAT Genebank contains nearly 114,000 accessions from 130 countries. It serves as a repository for the genetic resources of sorghum, pearl millet, small millets, chickpea, pigeonpea and groundnut, for present as well as future use. A S Director of India’s National Bureau of Plant Genetic Resources, Dr R.S. Paroda was a principal partner in establishing this important resource. The ICRISAT Genebank is one of the largest and most sophisticated facilities of its kind in the world. The cooperation and support received from the Indian Council of Agricultural Research (ICAR), India, especially under the outstanding stewardship of Dr Paroda, has been invaluable. Naming this facility the Rajendra S. Paroda Genebank is a singularly appropriate way of recognizing his outstanding contributions.

[Contributed by: Dr C.L.L. Gowda, Global Theme Leader – Crop Contributions.

By G. Venkataramani
CHENNAI, JAN. 3. Holding the priceless resource of plant genetic material in public trust and managing them for the well-being of the future generations is a noble task, and the gene banks of international agricultural research centres come in for special praise for they are the custodians of the precious genetic resources.

“Genetic variation, once considered unlimited, is fast eroding as modern varieties over large areas, and natural habitats are destroyed. Therefore, there is an urgent need to conserve the nature’s genetic diversity, created in farmer’s fields over millennia, complemented by the diversity present in wild relatives of crops,” says William Dar, Director-General of the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Hyderabad.

Dr Dar says that genetic variation must be conserved, both to combat new pests and diseases that emerge from time to time, and to produce better-adapted varieties in changing environments. The ICRISAT is a pioneer in genetic conservation, and its well-established genebank now serves as a world repository for the collection of germplasm of its five mandate crops: sorghum, pearl millet, chickpea, pigeonpea, groundnut, and six small millets.

With over 114,000 germplasm accessions, assembled from 130 countries, through donations and expeditions, the ICRISAT genebank is the largest and the most sophisticated among the international gene banks, according to Dr Dar.

Collecting germplasm also provides rich opportunities for cooperation between the ICRISAT and national programmes. Collection is always done jointly with national programme scientists and often with international organisations.

The samples are initially characterized and regenerated in the source country and useful germplasm is acquired under Material Acquisition Agreements.

All germplasm that finds their way into the ICRISAT genebank are examined by the Indian national plant quarantine system before they are released.

Safety measures
The ICRISAT genebank is designed to withstand natural disasters. For further safety, long-term conservation collection is duplicated in other genebanks.

For example, the entire pigeonpea germplasm is now being prepared for long-term base conservation in the genebank of the National Bureau of Plant Genetic Resources (NBPGR) of the Indian Council of Agricultural Research (ICAR), New Delhi.

Similarly, duplicates of large portions of chickpea germplasm are conserved at the International Centre for Agricultural Research in the Dry Areas (ICARDA), Aleppo, Syria, and about 56 per cent of the sorghum germplasm is duplicated at the National Seed Storage Laboratory, Fort Collins, Colorado, the US.

This unique, state-of-the-art facility was recently named “Rajendra S. Paroda Genebank” when the ICRISAT was celebrating its 30th anniversary.

“It is a singularly appropriate way to recognizing the outstanding contributions of Dr R.S. Paroda, former Director-General of the ICAR. As director of the NBPGR, Dr Paroda was a principal partner in establishing this important resource.

Later, as Director-General of the ICAR, Dr Paroda played a crucial role in strengthening this advanced facility,” says Dr Dar.

Dr Paroda, an accomplished geneticist and plant breeder, has made significant contributions in the fields of genetic resources conservation, including training, policy planning and networking at the national, regional and global level.

He is the architect of the Indian National genebank, one of the largest and most modern national facilities for ex situ conservation, currently holding about 0.2 million accessions.

His active role in conserving the genetic resources in the Asia-Pacific region is well recognized, and he is actively engaged in promoting genetic resources centres and plant genetic resource programme in Central Asia and Caucasus, Dr Dar says.
The Agency for Agricultural Research and Development (IAARD), located at Jakarta, Indonesia has the national mandate to conduct and implement agricultural research and development in overall perspective. A profile of the organization is presented.

FUNCTIONS

IAARD’s primary focus is on:

- Development of R&D strategic plan: to identify the direction of research and strategic issues, with due consideration of constraints, challenges, and available resources, and to establish a unified perception among policy makers, managers and researchers on the R&D programme and priorities.
- Formulation of R&D programme and setting up R&D priorities.
- Implementation of agricultural R&D for food crops, horticulture, estate crops, animal husbandry, agricultural engineering, soil and agroclimate and socio-economics.
- Research result dissemination to users and stakeholders.
- Technical and administrative services.

VISION AND MISSION

The vision of IAARD is:

- To become an agricultural research and development agency that is proactive and participatory in creating, engineering, and developing science and technology, that is geared towards creating a competitive, community-based, sustainable and decentralized agribusiness system.

Its aim/mission is:

- To create, engineer, and develop new innovations needed to foster an agribusiness system that supports the agricultural sector to become a reliable sector in national development.

MAIN RESEARCH AND DEVELOPMENT PROGRAMMES

The research programmes broadly fall under the following major R&D institutions (see organogram), focusing on commodity potential/improvement, biotechnology, agricultural resources, socioeconomic policy issues, location specific technology, information communication developing technology and institutional development.

2. Improvement of Commodity Potential Research: Research on Potential of Genetic Resources; Research on Production Techniques on Commodity Processing and Agricultural Machineries Development.
3. Biotechnology Research: Molecular Biology and Diagnostic Research and Molecular Aided Selection for Plant Breeding; Microbiology and Bioprocess Research; Growth Development Techniques and Genetic Engineering; Institutionalization of Biotechnology Development.
4. Socio-Economic and Policy Research: Resource Management and Sustainable Agribusiness System; Pricing and Identification of Superior Commodities; Policies on Production Incentives, Investment and Trade; Agricultural and Rural Institutions and Organizations; Agricultural Diversification, Sectoral Flow Dynamics and Regional Development.
5. Assessment and Development of Location-Specific Technology: Characterization and Analysis of Agro-ecological Zones; Adaptive and Location-Specific Commodity Research; Commodity-Based Agribusiness Engineering Research; Community-Based Agribusiness System Research; Socio-economy and Cultures of Rural Communities; Dissemination of Agricultural Innovations.
6. Communication of Research Findings: Research Communication and Technology Information; Dissemination of Research Findings; Publication of Research Findings, Promotion and Commercialization of Technology and Research Findings.

7. Institutional Development: Organizational Improvement; Human Resource Development; Facility Development and Guidance; Research Networks Development.

Major commodities for R&D can be grouped as under:

- **Food Crops:** rice, maize, soybean, cassava, sweet potato, green beans, and ground beans.
- **Horticulture:** chilli pepper, tomato, red onion, string bean, potato (vegetables); banana, mango, orange, mangosteen, melon, papaya, durian (fruits), and ornamental plants, such as roses, orchids, gladiolus, chrysanthemum, carnations, lilies, and anthurium.
- **Estate Crops:** oil palm, rubber, coffee, cocoa, tea, sugarcane, coconut, pepper, cashewnut, clove, tobacco, cotton, essential oils, fibres and ginger.
- **Animal husbandry:** beef cattle, goat, sheep, native chicken, duck and dairy cattle.

**R&D INFRASTRUCTURE/ NATIONAL NETWORKING**

The R&D infrastructure is widespread and governed by several institutes/stations/centres etc. The major set-up with facilities is as follows:

**IAARD Implementing Units vis-à-vis R&D Achievements**

**The Secretariat**

The secretariat is responsible for furnishing technical and administrative services to all of the agency's organizational units as well as providing direct support to the Director General of IAARD to coordinate planning programme and financial administration for the IAARD units, managing matters pertaining to personnel, and perform general administration duties such as revising and monitoring the agency's regulations and managing research collaboration on behalf of IAARD.

**Indonesian Centre for Food Crops Research and Development (ICFORD)**

ICFORD is charged with conducting research on the country's primary staple food crops including rice, maize, legumes, and root crops. The range of research is broad, including plant breeding, agronomic studies, pest and disease management, and biotechnology. The scope of ICFORD’s work is influenced by the diverse growing conditions found in Indonesia. The Centre also coordinates the work of three specialized research institutes of food crops on rice, legumes and tuber crops, cereals and research station on tungro disease.

To anticipate drought ICFORD has developed some technologies in managing water resources. A application of post harvest technologies has increased value addition. Products and technologies developed in recent years are: high yielding varieties for rice, maize and cassava; efficient rice fertilizing; irrigation technique for drought anticipation; application of rice index planting 300 (three times planting in a year); Integrated Crop Management (ICM); farming system technique development for soybean, maize, sorghum; environment-based production sustainability; biotechnology products; and some agricultural machinery prototypes.

**Indonesian Centre for Horticulture Research and Development (ICHORD)**

ICHORD is responsible for research and development in horticulture, and coordinates the work of three research institutes – for Fruits in Solok (West Sumatra), for vegetables in Lembang (West Java), and for Ornamental Plants in Jakarta and Citrus and Subtropical Horticulture Research Station. Research in horticulture covers breeding including germplasm conservation and utilization, plant-pest and disease management, post-harvest technology and agro-economics.

ICHORD has developed High Yielding Varieties of fruits, vegetables, and ornamental crops; and tissue culture techniques. Some of these are Pomelo Raja.
and Pomelo Ratu (citrus); Sari Rona and Sari Gading (hybrid papaya); Raja Siem (banana); Takade 02 (durian); Tanjung 1 and Tanjung 2 (chilli); Granola (potato); application of tissue culture to produce high quality ornamental crops; new varieties of rose through in vitro and gamma irradiation techniques; pest control using bio-pesticide; and dried processing of flowers.

**Indonesian Centre for Estate Crops Research and Development (ICERD)**

ICERD is responsible for implementing and coordinating research at three institutes for spices and medicinal crops, tobacco and fibre crops, and coconut and other palms. Besides these, a research station specifically deals with intercrops in plantation. Improved varieties, plant protection, and farming systems are developed as are new processing technologies. The needs and requirements of small farmers are given particular attention in developing research agendas.

Estate crops contribute in creating job opportunity, and generating farmers income. Some products produced are design for integrated coconut processing unit for small scale; new cropping pattern for coconut: 5x16 m triangle, 6x16 rectangular and (5x3) x 16 m saw system; new cotton clone resistant to S. biguttula; and new jute variety.

**Indonesian Centre for Animal Science Research and Development (ICARD)**

ICARD coordinates livestock research and development activities to produce livestock products such as meat, milk and eggs, and other products. Livestock products are becoming more and more important as national per capita income increases and as awareness regarding the role of animal protein in human nutrition increases. The centre is supported by two research institutes that conduct studies aimed at increasing livestock production (Animal Production Research Institute) and for combating animal diseases (Veterinary Research Institute). Both research institutes are located in Bogor. Also, there are two research stations each on beef cattle and goats. Research activities include animal breeding, production management, post-harvest handling, feeds and forages, biotechnology, livestock farming systems, veterinary science, pharmacology, and conservation and utilization of genetic resources.

Livestock is one of the sub-sectors that contributes in generating farmers' income, both from poultry and ruminant. The Centre has produced some current livestock products such as: layers duck, ND active vaccine, local hybrid lamb, probiotic feeding, diarrhoea control vaccine for cow and swine; and crop livestock production system.

**Indonesian Centre for Soil and Agroclimate Research and Development (ICASARD)**

The Centre conducts research on a wide range of topics related to land use, soil and climate variables affecting productivity and sustainable agriculture. Its other vital role is to produce maps in appropriate scales for development and land use planning at the national, regional, and ecosystem levels. The work is coordinated with three institutes under it specifically dealing with wetlands, soil, agro-climate and hydrology, and research station for environmental preservation.

Current information and technologies resulting from this centre are: inoculant in paddy area; climate anomaly forecasting model; paddy area identification and production estimation through digital analysis; agricultural area extension; rainfall harvesting and runoff; soil testing programme; map of water resources exploration 1:1,000,000 scale.

**Indonesian Centre for Agricultural Socio-Economic Research and Development (ICASERD)**

The Centre implements agro-socioeconomic research and activities are oriented towards agricultural development policy analyses, resource management and agribusiness, and agricultural and rural institutional studies. Following establishment of the AIATs, it also has a mandate to coordinate the assessment of agricultural technologies in all provinces. The existence of the AIATs at the regional level is expected to provide locally specific technologies to optimize the region's resource utilization, and to increase the speed of technology transfer from researchers to users.

**Indonesian Centre for Agriculture, Library and Technology Dissemination (ICALTD)**

ICALTD is responsible for expediting scientific communication through its own resources, its international information network, and also by providing technical assistance and developing information networking to the library, information and communication units of IAARD. The Centre is home to the national library for agricultural sciences and provides library, reference, and retrieval services to a range of clients. It publishes several scientific publications and connects researchers to the national and international information centres and databases through online access or by using other channels, such as the Current Agricultural Research Information Systems (CARIIS), the International Information of Agricultural Science and Technology (AGRIS), and AGRIS Network.
Indonesian Centre for Agricultural Engineering Research and Development (ICAERD)

The main task of this Centre is to design and develop prototypes of appropriate mechanization technologies for land preparation, cultivation, and post-harvest application. The Centre prepares standardization, certification, control for agricultural machinery and agricultural machinery design activities.

Designs and prototypes developed are: vacuum frying pan for fruits; tunnel frying; feed processing; soybean post-harvest and harvest (soybean dryer and harvester); planting and fertilizing machine for soybean and maize; vanilla dryer machine; bio-pesticide; cashew sheller; and tobacco miner.

Indonesian Research Institute for Estate Crops (IRIEC)

This institute coordinates research carried out on oil palm, rubber, cinchona, tea, coffee and cocoa, and sugarcane, under the five specific commodity institutes.

Other Institutes

Also for R&D emphasis, collaborative/inter-institutional focus in important areas of research exists through three institutes, namely on biotechnology and genetic resources, post-harvest research, and agricultural technology assessment and development.

Research Collaboration

IAARD maintains linkages with international and regional, as well as national organizations for strengthening its research and development initiatives. Some major links/collaborators are:

- **Bilateral:** Japan - JICA, JIRCAS; Austrailia - A C I A R, A usAID; France - C IRAD; USA - USAID; Netherlands - C P R O - D L O
- **Multilateral:** C GIAR - I RRI, C IP, I S N A R, I CRISAT, I PGRI, C I M M Y T, I I T A, and I L R I; FAO; ADB; and the World Bank
- **Regional:** A SEA N, A P EC, I B S R A M, and S E A R C A

[Contributed by: Dr Djoko Said Damardjati, Secretary, IAARD, Ministry of Agriculture, Indonesian Agency for Agricultural Research and Development, Jl. Ragunan No. 29, Pasarminggu, Jakarta 12540, Indonesia]

**APAARI wishes all its members and readers a very Happy New Year - 2003!**
Water is becoming a serious limiting factor for food production in many agricultural regions of the world. In particular, the Asian region consumed 2.1 trillion m$^3$, 60% of the world's consumption in 1995; however, its per capita water resource is the lowest available in the world.

The Japan International Research Centre for Agricultural Sciences (JIRCAS) held an international symposium entitled “Water for Sustainable Agriculture in Developing Regions – More Crop for Every Scarce Drop” from 27-28 November 2001, attended by more than 200 participants including those from foreign institutes. The participants agreed that a more harmonized and strengthened approach to the collaboration for water research by various disciplines should be implemented.

As one of the outcomes of the symposium, on April 2002, JIRCAS launched a new 7-year comprehensive international collaborative research project entitled “Increasing Economic Options in Rainfed Agriculture in Indo-China through Efficient Use of Water Resources.” The overall objective of this project is to develop technologies capable of efficient water use and combine them into high value-added production systems. The new project focuses on the lowland-upland boundary zone of the central part of Indochina peninsula including Northeast Thailand and Laos, where small-scale mixed farming is predominant. Three institutions from Japan, six from Thailand and two from Laos joined the project. Furthermore, Centro Internacional de Agricultura Tropical (CIAT) and International Rice Research Institute (IRRI) collaborated. The project focuses on development of component technologies for the catchments, storage and distribution of water, together with efficient crop production and utilization technologies. These component technologies are also examined in farmers’ fields, and it is expected that an integrated farm management model will be established by combining them and considering biophysical and socio-economic conditions surrounding individual farming units in the project site. The project consists of three main themes as illustrated in Fig. 1.

Very recently, JIRCAS water research has further progressed: it joined a new international consortium “Challenge Programme on Water and Food” established by 18 members and authorized by CGIAR. The programme’s interlocking goals are to allow more food to be produced with the same amount of water that is used in agriculture today, as populations expand over the coming 20 years, and to do this in a way that decreases malnourishment and rural poverty, improves people’s health and maintains environmental sustainability.

Value-Addition to Agricultural Products
JIRCAS held the 9th International Symposium on “Value-Addition to Agricultural Products – Towards Increase of Farmers’ Income and Vitalization of Rural Economy” in cooperation with Japanese national institutes, and PhAction from 16-17 October 2002. A total of 209 scientists, administrators and technical experts of both public and private sectors from 40 countries participated and exchanged views on the issues addressed by 2 keynote speakers, 18 oral and 49 poster presenters.

In the light of the United Nations’ prediction that the world population would reach 8 billion in 2030, for food production, the major role of farmers in rural areas will increase in importance. However, farmers in many countries are suffering from low incomes due to low price of their products. Value-addition to agricultural products holds the potential for increasing farmers’ income and generating off-farm employment in rural areas, and eventually vitalizing rural economy. The present symposium focused on these issues and directions to be pursued by various disciplines.

In the keynote speech, Dr Mrema of FAO pointed out the impact on post-harvest sector of urbanization, trade liberalization, commodity chains integration, biotechnology development and food safety and quality concerns of consumers, and stressed the potential contribution of value-addition to agricultural development and rural economic growth. Dr Poulter of University of Greenwich, chair of PhAction, presented the forum’s initiative “Linking Farmers to Markets.”

Following the presentations and short discussions held in 3 sessions, the general discussion chaired by
Dr Mrema, and Dr Hayashi, JIRCAS, emphasized on the importance of socio-scientific approaches including institutional considerations, market and supply chains analysis, in addition to technological approaches. Dr Kainuma, former President of JIRCAS, suggested that collaborative work with international forums will be essential in future dissemination of the results obtained in the present symposium, and, in this context, he also added that he valued the cooperative work of PhAction with JIRCAS in organizing the present symposium and diffusing the outcomes of the symposium.

Furthermore, the chairs emphasized three directions inevitable for future post-harvest research; re-evaluation of traditional foods (functionalities, safety etc.), survey of diets including indigenous plants and minor crops, and non-food use of agricultural products.

**JIRCAS Scientists Joined Johannesburg Summit**

Two JIRCAS scientists, Dr Ryoichi Ikeda, Director and Dr Hiroshi Tsunematsu, Rice Geneticists of Biological Resources Division, joined the World Summit for Sustainable Development held in Johannesburg from 26 August to 4 September 2002. Dr Ikeda gave a presentation on Collaborative Research with West Africa Rice Development Association (WARDA) for Developing NERICA (New Rice for Africa). Also, two varieties of NERICA were served to participants for tasting in Japan Pavilion.

At present, JIRCAS has dispatched two scientists to WARDA, and they are conducting studies on varietal improvement, and the socio-economics of rice production in West Africa.

All JIRCAS members feel that we are on new and consistent waves of aggressive efforts to solve basic human being's problems by various disciplines in international arenas and hope to play a significant role in this movement.

[Contributed by: Mr Satoru Miyata, Development Research Coordinator, Development Research Division, JIRCAS, Japan]
The third GoFAR meeting was held in Penang, Malaysia on 3-5 November 2002 in conjunction with the Summit to launch the Fish For All initiative and World Fish Centre Day, with funding support from Asia-Pacific Association of Agricultural Research Institutions (APAARI), the Australian Agency for International Development (AusAID) and World Fish Centre.

The meeting was attended by 36 research scientists/managers from 16 countries (Cambodia, China, Fiji, India, Indonesia, Iran, Laos, Malaysia, Nepal, Pakistan, Philippines, Papua New Guinea, Samoa, Sri Lanka, Thailand and Vietnam) and representatives of regional (NACA, SEADEC, ASEAN Sub-Committee on Marine Sciences and Technology and Secretariat of the Pacific Community – SPC) and international organizations (FAO, Support Unit for International Fisheries and Aquatic Research – SIFR and World Fish Centre).

Dr Modadugu Gupta in his welcoming remarks provided the rationale of the meeting – to review the activities of existing networks/organizations in the region and define the role and directions for GoFAR. Dr Meryl Williams in her opening address thanked APAARI and AusAID for providing partial funding support and indicated that World Fish Centre places high importance to networking and partnerships.

**Deliberations of the Meeting**

The meeting reviewed the work of regional networks/initiatives in the Asia-Pacific region (FAO, SEADEC, ASEAN Sub-Committee on Marine Sciences and Technology, International Network on Genetics in Aquaculture-INGA and regional projects of World Fish Centre). A clear need for networking among various institutions and initiatives in the region was recognized. Concern was expressed that there is no network to deal with social and economic issues. It was also felt that improvement in research management is crucial to ensure maximizing benefits from available resources (human and financial). While several projects have been completed, follow-up action by the national institutions was not commensurate with the need.

**Role of GoFAR**

Discussions were held as to how GoFAR could complement the initiatives of different networks/organizations in the region. To strengthen collaboration among networks/organizations, the meeting realized the need for defining the organizational structure of GoFAR and the efforts needed to sustain this. After thorough deliberations, the group reached a consensus on the role of GoFAR to: (i) provide a voice for fisheries and aquatic research in regional/global fora; (ii) facilitate collaboration among various networks/regional programmes, and (iii) promote greater communication among countries in the region and with regional/international organizations.

A Working Group was formed to draft objectives, working mechanisms and procedures and the institutionalization of GoFAR with representatives from different sub-regions: South Asia (N. Akhtar, Pakistan) – Coordinator; West Asia (S Rezvani, Iran); Southeast Asia (R. Guerrero, Philippines); East Asia (Li Yingren, China/Jin Yeong Kim, Korea); Pacific Islands (S. Nandial, Fiji); Regional/international organizations (Pedro Bueno, NACA); World Fish Centre (Modadugu Gupta).

At the request of the participants, World Fish Centre has agreed to host the Secretariat with Dr Modadugu V Gupta, Director of International Relations as the focal point. It was agreed that the Chair of GoFAR will be elected during the annual meetings for a period of two years and will represent GoFAR at the APAARI meetings along with the World Fish Centre. The meeting suggested holding annual meetings of GoFAR (subject to availability of funding) prior to the APAARI annual meeting and organizing studies and workshops on identified regional priority areas.

[Contributed by: Drs Modadugu V. Gupta and Belen O Acosta, World Fish Centre, Jalan Batu Maung, 11960 Bayan Lepas, Penang, Malaysia]
PCARRD: Recent Activities

PCARRD Executive Director: Agriculture Alumnus Awardee

The University of the Philippines Los Baños (UPLB), College of Agriculture Alumni Association awarded Dr. Patricio S. Faylon, Executive Director of the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD), 2002 Distinguished Alumnus in research, development and extension management. The award was given during the UPLB Loyalty Day Celebration on 13 October 2002. Dr. Faylon was recognized for his dynamic and effective leadership in the commercialization of livestock production technologies to further strengthen the National R&D Network for Livestock and Poultry, and for formulating policy guidelines in genetic improvement of farm animals. As Head of PCARRD, he spearheaded the formulation of a well-focused and comprehensive national R&D programmes, thereby establishing linkages with national and international funding sources, and facilitating information flow from the science and technology sector to end-user.

PCARRD-RDA Agreement Renewed

PCARRD and the Rural Development Administration (RDA) of Korea renewed their partnership agreement in R&D for the year 2002-2003. The Memorandum of Understanding (MOU) between these parties was signed on 30 September 2002 with the involvement of the Philippines Agriculture and Resources Research Foundation, Incorporated (PARRFI). Signatories to the MOU include: Dr. Patricio S. Faylon, Executive Director, PCARRD; Dr. Moo-Nam Chung, Administrator, RDA, and Dr. Ramon V. Valmayor, President, PARRFI. PCARRD and RDA agreed to collaborate in the following fields: (i) Exchange of scientific and technical information and publications; (ii) Implementation of agricultural R&D joint projects and extension related activities; (iii) Conduct of seminars, workshops, and conferences on mutual areas of interests; (iv) Provision of technical consultancy services, and (v) Other collaborative activities.

Global R&D Meeting Held in the Philippines

This year’s Annual General Meeting (AGM) of the CGIAR was held in the Philippines from 28 October to 1 November 2002. The opening ceremony programme on 28 October tagged as “Philippine Day” was held at the University of the Philippines Los Baños (UPLB). PCARRD together with the Los Baños Science Community (LBSC) ushered more than 400 participants. Delegates of this CGIAR Research Centres, donor agencies, international agricultural organizations, local diplomatic corps, scientists and experts in various fields.

Highlighted during the opening programme were the addresses of the guest speakers: Secretary Leonardo Q. Montemayor, Department of Agriculture (DA); and Mrs. Angeline Kamba, Chairman, Board of Trustees, International Rice Research Institute (IRRI). Exhibits on various R&D projects by the different international and local organizations and agencies including that of PCARRD were showcased at UPLB Makiling Botanical Gardens and the Institute of Plant Breeding (IPB). As part of the programme for CGIAR AGM participants, they participated in the Philippines-IRRI Day celebration on 29 October at IRRI. The rest of the schedule until 1 November focused on the conduct of the AGM proper at the Shangri-la Hotel in Manila. AGM primarily aimed to consolidate accomplishments of CGIAR through its member agencies worldwide, and map out strategies to further improve its R&D collaborative works for better impacts addressing the CGIAR objectives of poverty alleviation, hunger, and sustainable development.

Asia-Pacific Meeting on Banana in PCARRD

PCARRD co-hosted the First Steering Committee Meeting of the Relaunched Banana Asia-Pacific Network (BAPNET) from 7-10 October 2002, organized by INIBAP in collaboration with the Department of Agriculture-Bureau of Agricultural Research (DA-BAR). The participants were the banana experts from 12 countries such as Australia, Bangladesh, Cambodia, China, India, Indonesia, Malaysia, Papua New Guinea, Philippines, Sri Lanka, Thailand and Vietnam, and the representatives from two BAPNET member institutions, namely, the Taiwan Banana Research Institute (TBRI), and the Secretariat of the Pacific Community (SPC). The meeting aimed to primarily invigorate the banana industry in the Asia-Pacific region. Major speakers at the opening programme included: Dr. Estrella F. Alabastro, S&T Secretary; Leonardo Q. Montemayor, Agriculture Secretary and Dr. Patricio S. Faylon, PCARRD Executive Director.

[Contributed by: Dr. Patricio S. Faylon, Executive Director, PCARRD, Los Baños, Laguna, Philippines]
APAARI PUBLICATIONS

SUCCESS STORIES

- Baby Corn Production in Thailand (1994/1) by Dr Chaiyaphum Chulathaworn and Dr S.R. Paroda
- Tilapia Farming in the Philippines (1994/2) by Dr Rafael D. Guerrero III
- Hybrid Rice in China (1994/3) by Mu Lou Xi Zhi and Dr C.X. Mao
- Dairying in India (1994/4) by Dr R.P. Anjila
- Hybrid Cotton in India (1995/1) by Dr A.K. Basu and Dr R.S. Paroda
- Palm Oil Industry in Malaysia (1995/2) by Dr Y.B. Basiron
- Transformation in Korean Farming – A Success Story of Effective Linkages (1996/1) by Dr Chae Yun Cho
- Cotton Production in Pakistan (1996/2) by Dr Badaruddin Soomro and Dr Parvez Khaliq
- Orchids in Thailand (1997/1) by Dr Kanchit Thammasiri
- Wheat Production in Iran (1997/2) by Dr Abbas Keshavaz and Dr M.J. Mirhadi
- Agro-Tourism in Australia (1997/3) by Dr Tom Connors
- Direct Seeded Rice in Malaysia (1998/1) by Dr Cheong Ah Wah
- Groundnut in China (1998/2) by Dr Duan Shufen, Dr Hu Wenguang and Dr Sui Qingwei
- Oilseeds in India (1999/1) by Dr Mangala Rai
- Integrated Pest Management in Rice in Indonesia (1999/2) by Dr Soejito
- Bivalve Mariculture in India (2000/1) by Dr V.N. Pillai et al.
- Farming of Carrageenophytes in the Philippines (2001/1) by Dr Rafael D. Guerrero III

OTHER PUBLICATIONS

- APAARI – A Decade of Progress, reprinted in 2001.
- Proceedings – Expert Consultation on Regional Priority Setting for Agricultural Research for Development in the Asia-Pacific Region and Sixth Executive Committee Meeting of APAARI, 12-14 November 2001, Bangkok, Thailand.
- FAO-APAARI Expert Consultation on the Status of Biotechnology in Agriculture in Asia and the Pacific, 21-23 March 2002
- Agricultural Research Priorities for Asia and the Pacific – A Synthesis
- ICT Expert Consultation on Development of Second Phase of APARIS, 24-25 October 2002

FUTURE CONFERENCES

Title: International Conference on Gender Issues in Biodiversity Conservation
Venue: Bogor, Indonesia
Period: 5-8 February 2003
Contact: Southeast Asian Regional Centre for Tropical Biology (SEAMEO BIFETROP) Jl. Raya Tajur Km. 6 Bogor, Indonesia
E-mail: biotrop.org/Conference

Title: ECOSUD 2003: Fourth International Conference on Ecosystems and Sustainable Development
Venue: Siena, Italy
Period: 4-6 June 2003
Contact: Mr Stacey Hobbs, Wessex Institute of Technology, Ashurst Lodge, Ashurst, Southampton SO406AA, UK
E-mail: shobbs@wessex.ac.uk
Website: wessex.ac.uk/conferences/2003/ecosud03/index.html

Title: 7th International Symposium on ‘Productivity, Public Goods and Public Policy: Agricultural Biotechnology Potentials’
Venue: Ravello, Italy
Period: 29 June-3 July 2003
Contact: Prof. Vittario Santaniello, Department of Economics and Institutions, University of Rome ‘Tor Veegata’ via Columbia, 2, 00133, Rome, Italy
E-mail: icabr@economia.uniroma2.it
Fax: ++7-3272-29255

Title: 15th International Plant Protection Congress (IPPC)
Venue: Beijing, China
Period: 8-11 July 2003
Contact: Ms Wan Liping, Secretariat 15th IPPC c/o CIMMYT P.O. Box 374, Almaty 480000, Kazakhstan
E-mail: ipc2003@ipmchinanet
Fax: ++86 20 5000
Website: economia.uniroma2.it/conference/ipc2003

Title: Bio Thailand 2003: Technology for Life
Venue: Queen Sirikit, National Convention Centre, Bangkok, Thailand
Period: 17-20 July 2003
Contact: Dr Monokrit Tanticharoen, Director, BIOTEC & Chairman Organizing Committee, National Centre for Genetic Engineering and Biotechnology, 113, Paholyothin Road, Klong 1, Klong Luang, Pathumthani 12120, Thailand
E-mail: biothailand2003@biotech.or.th
Fax: ++66 25 64 6701 to 05
Website: biothailand2003@biotec.or.th

All queries relating to APAARI Newsletter be addressed to:
APAARI Secretariat, FAO Office in India, 55, Max Mueller Marg, New Delhi 110 003, India
Phone: +91-11-24628877; Fax: +91-11-24620115; E-mail: apaarind@field.fao.org
APAARI Homepage: http://www.apaari.org
A PA A R I Homepage: http://www.apaari.org

Designed and Printed at Angkor Publishers (P) Ltd., New Delhi, India. Phone: 9868177845  E-mail: kushmani@rediffmail.com