



APAARI

Newsletter

Asia-Pacific Association of Agricultural Research Institutions

Vol. 20, No. 2 December 2011

Editorial

In South Asia, the green revolution technologies centered on rice-wheat system have remained the corner stone of the regional strategies for food security, poverty alleviation, natural resource conservation, human health and rural development. This has resulted in impressive gains in food grain production. But, in recent years, depleting water resources, vulnerability of soil to degradation, indiscriminate use of external inputs and changing climates have posed serious challenges for food security and also led to lower farm profits, making farming unattractive and unsustainable. South Asia accounts for less than 2% of the world's total land area but contributes 14% acreage of the global agricultural land. However, about 94% of the agriculturally suitable area is already under cultivation with almost no scope for any horizontal expansion for the cultivation of crops. This brings to fore the need for fresh infusion of new technologies to tap new sources of productivity growth and puts major thrust on "Innovations for greater impacts on small-holder farmers".

Conservation Agriculture (CA) can bring a paradigm shift in agriculture through innovative techniques and pathways to address the emerging NRM challenges and has a vast scope for its farm level impact in the region. Therefore, CA is considered as an important component of the regional strategy for food security, poverty alleviation, conservation of natural resources, adapting and mitigating climate change effects and environmental sustainability and is thus seen as an important vehicle to address effectively the millennium development goals (MDGs). CA has steadily increased worldwide to cover about 7% of the world arable land (108 m ha). However, CA was introduced in South Asia in mid 1990s by regional NARS to grow no-till wheat in rice-wheat system and later, the efforts were intensified under Rice-Wheat Consortium (RWC) for the Indo-Gangetic Plains which led to a steady rise in the acreage of CA based resource conserving technologies in India, Pakistan, and Nepal and to some extent in Bangladesh with nearly 3 m ha by 2007 benefiting hundreds of farmers directly to the extent of nearly US\$ 150 million. By 2010, the regional partners in South Asia successfully developed the package of practices for direct seeded rice for large scale adoption by the farmers. In spite of impressive gains experienced by farmers practicing rice-wheat cropping system, there has not been further expansion in area under CA due to climate change and other adverse factors, whereas almost 10 m ha potential area under rice-wheat exists in the Indo-Gangetic Plains. Also, in spite a double no-till system developed for rice and wheat; the acreage under this systems is invariably not increasing in South Asia. This is mainly due to lack of proper understanding and some policy mismatch as well as on prioritization of investments.

Hence, a need was felt to critically analyze the diverse factors responsible for slow adoption of CA innovations and develop suitable strategies for up-scaling of new CA based technologies by resource poor small holder farmers. Considering this, a Regional Dialogue on Conservation Agriculture was jointly organized by APAARI, International Maize and Wheat Improvement Center (CIMMYT) on 1-2 November, 2011 at New Delhi. It is our hope that the important recommendations of regional dialogue on CA reported in this issue will help researchers, policy makers, farmers and other stakeholders for up-scaling CA innovation for enhanced income of the farmers in South Asia.

Editors

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Executive Committee

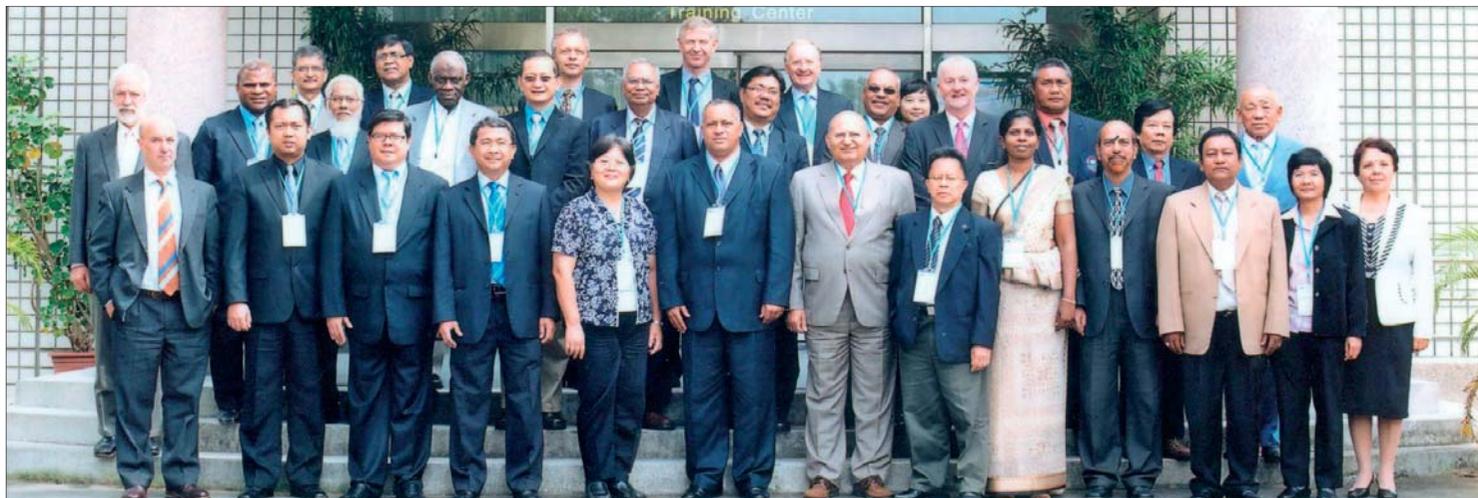
Chairman	: Dr. S. Ayyappan
Vice-Chairman	: Mr. Mason Smith
Members	: Dr. Abd. Shukor Abd. Rahman Dr. Simon Hearn Ms. Su-San Chang Dr. Tashi Samdup Dr. Colin Chartres Dr. Mark Holderness
Executive Secretary	: Dr. Raj Paroda

Editorial Committee

- | | |
|---------------|------------------|
| • R.S. Paroda | • R.D. Ghodake |
| • P.S. Faylon | • J.L. Karihaloo |



APAARI Executive Committee Meeting



Participants of Executive Committee Meeting

The second meeting of APAARI Executive Committee in 2011 was held at Taiwan Agricultural Research Institute, Taichung under the chairmanship of Mr. Mason Smith, Vice-Chair, APAARI since the Chairman, Dr. S. Ayyappan could not attend due to some important official engagements. The meeting was attended by 32 persons, including almost all Executive Committee members, special invitees and observers.

Dr. Raj Paroda, Executive Secretary, while welcoming the participants expressed special appreciation of Dr. Su-San Chang, Dr. Abd. Shukor Abd. Rahman, Dr. Raghunath Ghodake, Dr. Simon Hearn, and Dr. Patricio Faylon for constantly guiding and supporting APAARI programs. Dr. Paroda thanked the leaders of international centers, Dr. Collin Chartres, Dr. Thomas Lumpkin, Dr. Dyno Keatinge, and other members attending the meeting for participating in all APAARI activities. He also conveyed his appreciation to the staff members of Council of Agriculture (COA) and Taiwan Agricultural Research Institute (TARI) for the excellent arrangements and hospitality.

Mr. Mason Smith in his Chairman's address recalled the importance of agriculture in the Asia-Pacific region and the challenges posed on account of reducing productivity, increasing poverty and under-nourishment prevailing in the region. He noted with satisfaction that APAARI programs are being expanded and vigorously pursued and strong inter-regional partnerships are being established making it a very coherent and dynamic AR4D Platform in the Asia-Pacific region.

Dr. Paroda presented the action taken report on the recommendations of the previous Executive Committee Meeting and the progress made during the period under report. He also made a presentation on Global Forum for Agricultural Research (GFAR) and Global Consultation on Agricultural Research for Development (GCARD) program in which APAARI is one of the important stakeholders. This was followed by videoconferencing with Dr. Mark Holderness, Executive Secretary, GFAR who elaborated further on the role of regional organizations and their participation in GCARD.

The audited accounts for the period January-December 2010 and January-September 2011, and work plan for 2012 were approved unanimously. The committee was pleased to note that two new members, viz., CSK Himachal Pradesh Krishi Vishwavidyalaya, Palampur (Himachal Pradesh), India and University of Nottingham, Malaysia Campus, Kuala Lumpur, Malaysia have joined APAARI.

The total number of APAARI members now stands at 56 (Regular members-20, Associate members-17, Affiliate members-11, and Reciprocal members-8).

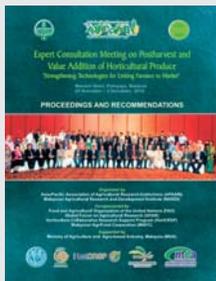
During the discussion that followed the presentations, the members made following suggestions/comments for action:

- Impact Assessment of investment in AR4D
 - a) Dr. Simon Hearn emphasized the need for policy advocacy to enhance national investments in agricultural R&D. He also suggested to have a slot in GCARD 2012 for a well researched presentation on impact assessment and returns on investment in agricultural research. The impacts should be evaluated in terms of enhanced production, poverty alleviation and nutritional enhancement.
 - b) Dr. Ghodake while reemphasizing this issue, apprised about the success of policy advocacy efforts in Papua New Guinea.
 - c) Dr. Thomas Lumpkin suggested APAARI along with GFAR to approach the Ministry of Agriculture, Mexico for a slot in G20 meeting to be held in Mexico for championing investments in agricultural R&D.
 - d) Dr. Khalilur Rahman, Dr. Tashi Samdup, Dr. Abdul Halim, Dr. Leocadio Sebastian and Dr. Dinesh Pariyar agreed with the need for impact assessment and suggested the involvement of national partners in the evaluation process and development of common evaluation templates.
 - e) Dr. Paroda sought guidance of the members in organizing and funding a high level meeting with policy makers to promote investments in AR4D.
 - f) It was resolved that:
 - i) The national partners would address the need for policy dialogue on AR4D within their systems.
 - ii) APAARI will spearhead the development of methodology for impact assessment and evaluation, organize training of trainers and seek a slot at GCARD2 to present a case on impact of agricultural research for development in the Asia-Pacific region.
 - iii) The national partners will request APAARI to spearhead the execution of the impact assessment activity.

- Dr. Dinesh Pariyar suggested to bring out success stories on livestock and meat production, processing and export.
- Dr. Colin Chartres emphasized upon the need for APAARI's attention to natural resource management (NRM) issues, especially water and micro-irrigation, and produce documents on ground water and land management issues in collaboration with national agricultural research systems (NARS) and International Water Management Institute (IWMI).
- Dr. Khalilur Rahman appreciated the organization of meeting on women in agriculture. He suggested the meeting to cover the role of women in agricultural research as well as in agricultural development.
- Dr. Ravi Khetarpal suggested organization of expert consultation on management of alien invasive species and establishment of plant clinics in the Asia-Pacific region. On behalf of CABI, Dr. Khetarpal offered to co-organize an expert consultation on this subject as and when planned.
- Dr. Paroda informed about the follow-up on Suwon Declaration and requested ACIAR to support project on crops for the future especially for the Pacific being developed under APAARI umbrella.
- The need for APAARI to make its presence felt as a coherent and visible regional organization at the international fora was expressed by Dr. Dyno Keatinge.
- A number of suggestions were made regarding representation of Farmers' Organizations, CSOs and private sector in the APAARI Executive Committee. These included: inviting them to specific events, establish legitimacy for membership to examine if they can become Affiliate Members, and the number of such representatives be less than three and rotated annually. In view of its importance and complexity, it was decided to defer the issue for further discussion and consideration by the Executive Committee.
- Members were requested to give their input to the GCARD Medium Term Plan within the stipulated deadline (15 November, 2011) and with specific suggestions for action and NARS participation.

In his concluding remarks, the Chairman summarized the major discussion points and decisions taken in the meeting. He reiterated the need to implement the decisions expeditiously by the member organizations and APAARI secretariat. He also suggested to examine the issue of APAARI's legal status. On behalf of APAARI, he thanked Dr. Su-San Chang for hosting this meeting. The Executive Secretary proposed a vote of thanks to the Chair, Vice-Chair and members.

New Publications of APAARI

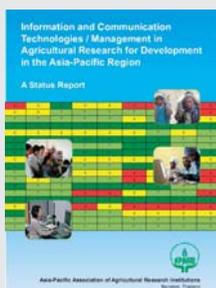
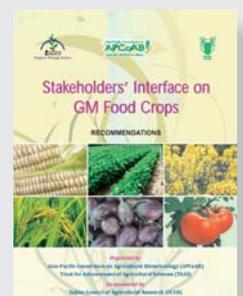


- *Expert Consultation Meeting on Postharvest and Value Addition of Horticultural Produce – Strengthening Technologies for Linking Farmers to Market: Proceedings and Recommendations*

This publication reports the proceedings of expert consultation meeting held by APAARI in collaboration with Malaysian Agricultural Research and Development Institute (MARDI) in Malaysia on 29 November -2 December 2010. It includes details of presentations and discussion in five technical sessions, and recommendations. Strategies and action plans proposed to address key policy, technical and management issues on postharvest and value addition of fruits, vegetables, ornamentals, herbs and medicinal plants with special reference to strengthening linkages of farmers to markets in the Asia-Pacific region are also included. Published by APCoAB. Available at: www.apaari.org; www.apcoab.org

- *Stakeholders' Interface on GM Food Crops: Recommendations*

This publication reports the proceedings and recommendations of the "Stakeholders' Interface on GM Food Crops" organized jointly by APCoAB and Trust for Advancement of Agricultural Sciences (TAAS) with the support of ICAR, on 19 May 2011 New Delhi, India. It stresses on the need for: use of GM technologies for quality and good nutrition; mission mode approach to adopt appropriate GM technologies by strengthening public research system and enabling environment for private sector investments; developing protocols and IPR regimes for better partnerships; need for a national mission on GM food crops; clearance of Biotechnology Regulatory Authority of India (BRAI) Bill; transparent biosafety regulatory system for safe application of biotechnology; post-release monitoring mechanism; use of effective communication tools and extension to rise right awareness on GM technologies; capacity building in the areas of biosafety, regulatory systems, IPR issues etc., and focus on agribusiness and agri-biotechnology in the 12th Five Year Plan. Published by APCoAB. Available at: www.apaari.org; www.apcoab.org



- *Information and Communication Technologies / Management in Agricultural Research for Development in the Asia-Pacific Region: A Status Report*

This report assessed the status of use and application of ICT/ICM in AR4D at national level agricultural research and innovation systems in 19 countries in the Asia-Pacific region. The report is based on data gathered through a survey of ICM managers of NARS in the region in addition to the country status reports presented by them in different ICT/ICM workshops organized by APAARI in 2010-11. It provides detailed assessment of key indicators, viz, ICT infrastructure; information systems; policy and strategies; contents; ICT applications; information and communication services. The report stresses need for mainstreaming ICT/ICM in AR4D at different levels; increased political commitment; increased, improved and targeted investment; capacity development; improving governance; and enabling greater sharing of data, information and knowledge at all levels. The report is available at: www.apaari.org

Regional Dialogue on Conservation Agriculture in South Asia

A Regional Dialogue on Conservation Agriculture was jointly organized by the Asia-Pacific Association of Agricultural Research Institutions (APAARI), International Maize and Wheat Improvement Center (CIMMYT) and the Indian Council of Agricultural Research (ICAR) on 1-2 November, 2011 at National Agricultural Science Center (NASC), Pusa, New Delhi, India. The dialogue focused on Conservation Agricultural Research for Development (CAR4D) through innovations for greater impacts on small-holder farmers in the region and 64 participants including the policy makers, R&D managers, researchers, private sector representatives, NGOs, CGIAR institutions, CSOs and farmers attended.

Objectives

The major objectives of the dialogue were: i) to provide a common neutral platform to assess local/national and regional needs, exchange information, and define priorities for the deployment of conservation agriculture (CA) with a focus on small holder resource poor farmers, ii) to help develop common strategies for resolving the common problems in the region, iii) to develop mechanisms for facilitating the exchange of knowledge and products and learn from each other's successes and failures, and iv) to evolve future Road Map for CA in South Asia. The dialogue was structured in four Technical Sessions on i) Status of Conservation Agriculture, ii) Initiatives of CG Centers on CA in South Asia, iii) Focused discussion through break-out groups on a) out-scaling for impact, b) partnerships for regional cooperation, and c) capacity building, and iv) research and development needs on CA in South Asia. All presentations were followed by in-depth discussions.

Recommendations

The important recommendations that emerged from the regional dialogue are given below:

- There is a great need to establish long-term basic and strategic research in different production systems and ecologies for monitoring of effects (in terms of resource/input use efficiency, pest dynamics, soil health, sequestration etc., and link them with participatory adaptive research modules for out-scaling of potential technologies as per their recommendation domains.
- The component technologies that suite the basic elements of CA under different situations and production environments need to be developed and deployed.
- Efforts should be made to initiate breeding programs on CA platforms and in cropping systems perspective to tailor varieties suited to system needs for realizing potential benefits.
- There is large potential for CA in the region and with suitable policy support and good human resources available on the ground; concerted efforts need to be made for easy access to region-specific technologies so as to expand CA adoption to over 20 million ha area in South Asia.
- Greater adoption and impact of CA will have to come from non rice-wheat systems and rainfed ecologies which are untapped yet in the region. Hence, intensified efforts are needed in this direction for faster adoption of new CA technologies.



Dr Raj Paroda delivering speech in the inaugural session

- Large investments are being made by the national systems for example in India National Food Security Mission (NFSM), *Rashtriya Krishi Vikas Yojana* (RKVY), National Agriculture Innovation Project (NAIP), National Initiative on Climate Resilient Agriculture (NICRA), ICAR Platform on Water, etc. but there is no visible impact. Hence, there is a need for integration and complementary approaches for implementing such schemes with appropriate monitoring and evaluation (M&E) for mid-course correction so as to achieve greater impact at the ground.
- Efforts need to be made to develop appropriate mechanisms for capacity building on CA for different target groups e.g. inclusion of CA in course curriculum at graduate and post graduate level at all the State Agricultural Universities, deploy M. Sc. and Ph.D. students in long-term CA trials, train service providers and machinery operators, etc.
- For large scale acceleration of CA, a mechanism of 'Single Window Services' needs to be established. Efforts should be made to capture farmer innovations on CA and align them with science principles.
- A mechanism should be developed for tracking and documentation of CA database in the region enabling researchers and policy planners to peruse the existing technologies and plan for further initiatives.

There is a need to develop analytic and communication tools to help policy makers understand economic, social and political implications of CA based technologies vis-à-vis existing farmers' practices. Also, the use of ICTs for access of information on location specific technologies/inputs, services and farm advisory need to be encouraged.
- In order to have faster adoption of new and innovative CA technologies, there should be an appropriate mechanism in place for providing suitable incentives to CA adopters including carbon credits.
- An appropriate mechanism needs to be established for ensuring the minimum quality standards of CA machinery with all spare parts, after-sale services and the operational manuals which are lacking at present.
- CA comprises relatively knowledge intensive systems and hence multi-disciplinary and multi-stakeholder partnerships should be developed and strengthened for better delivery of the benefits to the farmers.

Continued on Page 18.....

Expert Consultation on Agricultural Biotechnology, Biosafety and Biosecurity

An expert consultation on “Agricultural Biotechnology, Biosafety and Biosecurity” was held by APAARI in collaboration with Taiwan Agricultural Research Institute (TARI), Chinese Taipei on 27-28 October 2011 at Taichung. The event was organized as an activity under APAARI-Council of Agriculture, Chinese Taipei (COA) collaborative project on agricultural biotechnology and executed by APCoAB and COA institutions.

The need for organizing the meeting was expressed by APCoAB Steering Committee in view of the prevailing slowdown in agricultural productivity leading to spiraling food prices in most countries. On the other hand, perceived adverse environmental and health impacts of GM technology have adversely influenced public opinion and decision making, thus delaying the adoption of promising technologies that could address agricultural productivity and sustainability issues. In addition, detection and control of alien agricultural diseases and pests is assuming urgency due to increasing international trade in agricultural commodities and fears of deliberate spread of diseases and pests with the purpose of compromising food security of nations.

The meeting was attended by 73 participants from 22 countries representing Asia, Australia, the Pacific, Africa and North America. The participants included international experts and leaders from APAARI member NARS and CG Centers, representatives of industry, civil society organizations and farmer groups, and local participants from government agencies, farmer cooperatives and private sector. The program comprised presentation of status reports on biotechnology, biosafety and biosecurity R&D in Asia-Pacific countries, followed by regional status reports (Africa, Asia and the Pacific), expert lectures on advances in biotechnology and biosecurity for food security, and group discussions.

The expert consultation recognized that agricultural biosecurity is essential for food security, food safety, protection of human health and biodiversity, and market access. Promoting adoption of biotechnological tools, facilitating biosafety systems and developing integrated legislative framework and capacity for addressing diverse agricultural biosecurity threats were recommended during group discussions. The major recommendations are given below:

I. Promoting Biotechnology for Food Security

- Build capacity particularly for “omics”, biopesticides and biofertilizers, and GMOs.
- Enhance funding, provide policy support and build partnerships.
- Stimulate entrepreneurs for production and marketing of products.
- Remove bottlenecks of infrastructure, regulatory uncertainty and low public awareness especially for GM promotion in least developed countries.
- Demonstrate impact, particularly on smallholder farmers’ income and environment.



Participants of the Expert Consultation at TARI, Taichung

II. Facilitating Biosafety Adoption

- Create a dynamic database on national biosafety systems, transgenic events, import/export, labeling and other regulatory norms.
- Promote awareness and confidence in regulatory system.
- Exchange information on best practices, cost-benefit analysis and organize workshops involving different stakeholders.
- Build capacity in communication tools and methodologies, regulatory framework, and stewardship on product development and deployment.
- Strengthen regional institutional and public-private partnership for biosafety adoption, technology transfer and translational work.

III. Building Biosecurity Systems

- Frame enabling legislations addressing complete food chain.
- Adopt integrated biosecurity systems approach.
- Develop capacity (infrastructure and human resources) on biosecurity management (diagnostics, detection, disinfestation, risk analysis, survey and surveillance).
- Develop biosecurity related SOPs, procedures and protocols.
- Develop operational linkages across implementing organizations.
- Strengthen communication systems and outreach for awareness.
- Enhance supportive research on diagnostics, disinfestation treatments, quarantine and tools for pest identification.

(Source: Dr. J.L.Karihaloo, APCoAB Coordinator, j.karihaloo@cgiar.org)



**APAARI Family Wishes
You A Very Happy and
Prosperous
New Year 2012**

Regional Workshop for Implementation of Suwon Agrobiodiversity Framework

Following-up on the Suwon Agrobiodiversity Framework for Asia-Pacific region, APAARI and Bioversity International jointly organized a regional workshop on 4-6 November 2011 at Kuala Lumpur, Malaysia. The workshop was supported by APAARI, Global Forum on Agricultural Research (GFAR), Food and Agriculture Organization of the United Nations (FAO), Asian Development Bank (ADB) and Bioversity International. A total of 44 representatives and experts from various NARS (Malaysia, India, Indonesia, the Philippines, Vietnam, Cambodia and China), non-government organizations (Local Initiatives for Biodiversity, Research and Development (LI-BIRD) and Asian NGO Coalition (ANGOC), and international organizations (FAO, International Rice Research Institute-IRRI, Bioversity, World Agroforestry Center-ICARAF, ICRISAT, Crops for the Future-CFF) actively participated in the workshop.

The Malaysian Agricultural Research and Development Institute (MARDI) hosted the first day session. Dr. Abd. Shukor Abd. Rahman, Director General, MARDI, who was the Chief Guest in the Inaugural Session, provided a comprehensive overview on the status of plant genetic resources (PGR) activities being carried out in Malaysia. He praised APAARI for its efforts to mainstream regional agrobiodiversity related activities for improved income and food security while reiterating Malaysia's commitment towards developing a national action plan for agrobiodiversity conservation and management. Dr. Kwesi Atta-Krah, Deputy Director General, Bioversity International, briefed the participants on agrobiodiversity in the CGIAR agenda. Dr. Bhag Mal, Consultant who represented APAARI on behalf of Dr. Raj Paroda, Executive Secretary, highlighted the role of APAARI in addressing the AR4D agenda in the region. He also emphasized on the need to have in-depth discussions and make appropriate action plans to move forward the Suwon Agrobiodiversity Framework. The Inaugural Session was followed by Technical Session on thematic presentations which was chaired by Dr. Bhag Mal and co-chaired by Dr. Md Norowi Bin Hamid, Director, Strategic Resource Research Center, MARDI. These presentations set the scene for the discussions and guided the participants on the important issues and concepts in the different thematic areas.

This was followed by discussions in three working groups, facilitated by Dr. Prem Mathur, Bioversity International, Dr. Ram Rana, LI-BIRD, Nepal and Ms. Riina Jalonen. The working group discussions resulted in identification of five areas for developing concept notes. Priority areas included germplasm utilization, crop wild relatives,

enhancing the use of underutilized species, increased availability to agrobiodiversity and understanding and managing changes in diversity – all leading to the greater call of addressing issues related to gender, poverty, minorities, sustainable agriculture and climate change. These concept notes will be strategically targeted towards specific funding opportunities.

The Suwon Agrobiodiversity Framework (see Box1) was adopted in 2010 during the 'International Symposium on Sustainable Agricultural Development and Use of Agrobiodiversity' held at Suwon, Republic of Korea. It provides a holistic guideline, encompassing the concerns and needs of stakeholders across Asia-Pacific. Reflecting the recognition from the national agricultural research extension systems (NARES) and regional and international organizations on the importance of collective efforts towards the conservation through use of the rapidly declining agricultural biodiversity in the region, the Suwon Agrobiodiversity Framework provides a strategic approach towards the sustainable management and use of agrobiodiversity. It also identifies the areas of research and development and regional collaboration that will help maximise resources and opportunities for more agile response to new and unforeseen developments in understanding diversity and promoting research, conservation, evaluation and documentation through use.

Box1. Suwon Agrobiodiversity Framework

The Suwon Agrobiodiversity Framework aims to provide a strategic approach, towards both management and use through regional collaboration and partnerships among stakeholders. International and regional agencies, civil societies, private sector, and regional networks have a crucial role to play in strengthening agrobiodiversity conservation and use.

Focus of Research and Development

1. Studies to enhance use of genetic resources through sub-set approach
2. Pre-breeding and participatory breeding work to enhance utilization of genetic resources in crop improvement programs
3. Strategies and technologies to enhance *in situ* and *ex situ* conservation through use
4. Assessment of the agrobiodiversity richness and the status relative to economic, social and cultural (traditional knowledge) factors
5. Interdisciplinary studies on the invaluable ecosystem services for agriculture that agricultural landscapes, forests and other mainly wild ecosystems provide (following Convention on Biological Diversity (CBD) COP5 Ecosystems Approach)
6. Conference of Parties Information systems and tools for data exchange. with the aim to develop or adopt an information facility for online access to a wide range of datasets on genetic resources
7. Supportive policies, laws and strategies to enable enhanced exchange and use of genetic resources



Participants of the workshop at Kuala Lumpur, Malaysia

Areas of Regional Cooperation

1. Developing national agrobiodiversity plans and integrating them into regional and global collaborative frameworks
2. Increasing R&D collaboration on agrobiodiversity conservation and use in the region
3. Increased sharing of information and data on genebank collections
4. Strengthening agrobiodiversity capacity, education and public awareness
5. Enhancing exchange and use of genetic resources
6. Role of stakeholders in strengthening agro-biodiversity conservation and use

(Detailed version of the Framework is available at: www.apaari.org)

With the region's resources largely swirling around agrobiodiversity, the workshop was highly successful in breaking new grounds for major regional initiatives. This also provided an opportunity to forge new alliances and potential collaboration to discuss, advocate and agree on pertinent issues. Out of five areas identified, three were elected for developing concept notes. These included i) acquisitions and accessing of crop wild relatives and accessing novel alleles for enhanced use, ii) enhancing use of underutilized species for improved livelihoods and diversified diets, and iii) increase availability and accessibility to the rich agrobiodiversity for conservation and improvement of livelihoods of farmers in the Asia-Pacific region. These concepts will be further refined and submitted to potential donors and full project proposals for successful ones will be developed for funding.

(Source: Dr. Bhag Mal, Consultant, APAARI; b.mal@apaari.org)

APCoAB Training Programs

International Symposium on Genetics and Reproductive Management for Animal Production

APCoAB in collaboration with Council of Agriculture, Chinese Taipei organized "International Symposium on Genetics and Reproductive Management for Animal Production" at Livestock Research Institute, Tainan on 21-24 November 2011. The symposium was attended by 33 participants from eight countries, five of whom, from Vietnam, Iran and Philippines, were sponsored by APCoAB. The program comprised presentations on genetics and reproductive management of cattle, deer, poultry, pigs and rabbit; quarantine systems of different countries; and advances in use of farm animals for biomedical research. APCoAB Coordinator made a presentation on "Role of biotechnology in improving agricultural productivity and poverty alleviation in the Asia-Pacific region". During the field trip organized on 24 November, the participants visited a goat milk cooperative and a country chicken production and packaging center.



Participants of the International Symposium at Tainan

The participants were unanimous in appreciating the relevance of the topic for AR4D in Asia-Pacific countries and the high quality of presentations. During the group discussions, several participants expressed the desire to establish bi- and multilateral national collaborations for infrastructure and human resource development, and exchange of high quality breeds in livestock and poultry.

International Training Course on *In Vitro* and Cryopreservation Techniques for Conservation of Plant Genetic Resources

APCoAB in collaboration with Indian Council of Agricultural Research (ICAR) and Bioversity International organized "International training course on *in vitro* and cryopreservation techniques for conservation of plant genetic resources: Current methods and techniques" at National Bureau of Plant Genetic Resources, New Delhi on 14-26 November, 2011. Three trainees from Iran, Chinese Taipei and Sri Lanka were sponsored by APCoAB out of a total of 12 from eight countries.



Participants of the International Training Program at New Delhi

The 13 day training program opened with introductory lectures on management of plant genetic resources (PGR), and details of national and international organizations involved in PGR collection and conservation. Lectures on principles and methods of *in vitro* conservation and cryopreservation, genetic stability testing and transboundary movement of vegetative germplasm were delivered by national and international experts. A significant portion of the training period was devoted to hands-on laboratory training on biotechnological techniques of conservation and molecular characterization of germplasm. The trainees were also provided opportunity to present their ongoing research programs and seek suggestions of experts on specific technical issues.

The training was rated as very high quality and quite useful by the participants during the course evaluation session.

(Source: Dr J.L.Karihaloo, APCoAB Coordinator; j.karihaloo@cgiar.org)

Workshop on Information and Communications Management for Agricultural Innovation in Southeast Asia

A three-day “Workshop on Information and Communications Management for Agricultural Innovation in Southeast Asia” was organized jointly by APAARI, FAO, GFAR and Asian Institute of Technology (AIT) on 27-29 September, 2011 at AIT Campus, Bangkok. A total of 44 participants attended the workshop which included 18 senior information and communication managers of national agricultural research systems of Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, Philippines, Thailand and Vietnam; 3 information experts from CG Centers, viz, Center for International Forestry Research (CIFOR), International Rice Research Institute (IRRI) and WorldFish and a representative of Central Asia and the Caucasus Association of Agricultural Research Institutions (CACCARI) besides 12 resource persons from APAARI, ACIAR, GFAR, FAO RAP, AIT and Kasetsart University.



Participants of the Workshop at Bangkok

The objectives of the workshop were to: consider new dimensions in ICM for contributing to rapid agricultural innovation for market and export oriented agriculture that is fast emerging in Southeast Asia; take stock of the current status of ICM in national systems of agricultural research and innovation and identify what technological, institutional and community participation related gaps need to be filled for improving availability, access, applicability and effective use of information for agricultural innovation; and promote greater involvement and participation of national systems and organizations in the CIARD movement.

The workshop was inaugurated by the Chief Guest Mr. Hiroyuki Konuma, Assistant Director General and Regional Representative for Asia and the Pacific, FAO RAP in a function chaired by Dr. Simon Hearn, Chairman, APARIS and Principal Adviser, ACIAR. In the inaugural session, Dr. Raj Paroda, Executive Secretary, APAARI welcomed the participants and highlighted the efforts of APAARI in strengthening agricultural information and knowledge exchange in the region. He pointed out that ICTs should help empower small holder farmers. Dr. Malcolm Hazelman, Senior Extension, Education and Communications Officer, FAO RAP emphasized need for knowledge sharing for inclusive growth. Dr. Ajit Maru, Senior Knowledge Officer, GFAR Secretariat stated that access to information and its use would address new challenges in agriculture and it requires new skills for handling information management for AR4D. The Guest of Honour Professor Said Irandoust, President, AIT in his address mentioned that ICT offers immense opportunities that transform agricultural research, extension and innovations in markets and stressed the need for pro-poor innovations and creation of enabling environment related to policies, systems and institutional change.

Mr. Hiroyuki Konuma in his inaugural address expressed concern about population explosion and food security. He pointed that farm productivity is still constrained by gaps in information and skills in new technologies besides lack of access to technology, inputs, services and credit, etc. He said that after achieving significant progress in improving agricultural productivity, the Southeast Asian countries now have the challenge of further making agriculture and farming more market oriented and integrated in their economies. He emphasized that ICTs help foster agricultural innovation systems in the Southeast Asian countries by improving access to information and knowledge and bringing openness in sharing information which is essential for rapid innovation in market and export oriented agriculture. Dr. Simon Hearn in his concluding remarks opined that ICTs bring challenges as well opportunities for agricultural development. He stated that the role and relevance of traditional communication methods for strengthening research and extension systems is important in securing access to information and knowledge. Mr. Gerard Sylvester, Knowledge & Information Management Officer, FAO RAP shared that right information to right users at right time help improve impact of agricultural research. Dr. S. Attaluri, APARIS Coordinator proposed the vote of thanks.

The program was organized under seven Technical Sessions, viz., (i). New Dimensions in ICM for Agricultural Innovations, (ii). ICM for Innovation through the Consortium Research Projects and Regional Fora, (iii). Opening Agricultural Research Information to All, (iv). Identifying and Bridging Gaps in ICM for Agricultural Innovation, (v). CIARD, (vi). The Way Forward and (vii). Plenary Session. APAARI, ACIAR, GFAR, CG Centers, and CACAARI shared their experiences which were well received. Nine country reports were presented on ICT/ICM use and applications that promote agricultural innovations followed by open discussions after each presentation. The country presentations revealed that there has been significant progress reported in the use and application of ICT/ICM for AR4D at national levels. The participants were divided into three groups to identify gaps and solutions related to technological issues, institutional issues and community participation in use and application of ICM for agricultural innovation and share the outputs in the plenary as recommendations of the workshop (see Box 2). Emphasis was made to explain and the CIARD concepts, framework and its use in data and information sharing at different levels followed by

Box2. ICM Workshop Recommendations

- **Technologies Issues:** Use of smart phones, mobile technologies and videoconferencing, establishment of community e-Centers, promoting linked open data and standards in agricultural information management.
- **Institutional Transformation Issues:** Developing leadership, policies, strategies, success stories / policy briefs, capacity building; increasing investment in ICT/ICM in agriculture and undertaking research in ICT/ICM.
- **Community Participation-** Involvement of local Governments / private sector, local experts / farmer scientists; campaigning through internet buses; preparation of success stories; use of mass media (radio and television) for rising awareness; creation of content in local language; information on traditional knowledge and value added services; establishing ICT Centers / ICT training centres; technology literacy; free Internet access and software tools to community

CIARD RING application to improve access to information for farmers through demonstration of Thai Agricultural Research Repository (Thai CIARD) by Kesetsart University, which was well received.

Enough time was devoted for open discussion to brainstorm on the workshop recommendations, guided by inputs from expert resource persons, to further identify critical issues and way forward to strengthen agricultural information exchange and sharing at national, regional and global levels. It was felt necessary to prioritize ICT/ICM for end-users for adopting suitable technologies, and there is need for creation of content for end-user devices to reach messages to field to address the needs of intermediaries, extension workers and farmers. It was identified that the role of APAARI is important in creation of enabling institutional environment for use of ICT/ICM at the national agricultural research systems. It was noticed that the governments will play a key role to ensure participation of community and private sector and bring in synergies at the local level. Development of farmers' leaders,

building capacity of farmers in use of ICTs and information, catalyzing policies through success stories and linking farmers' organizations to markets through use of ICT/ICM initiatives are some of the important steps to be considered for improving ICM for agricultural innovations.

The workshop ended with the plenary session which reinforced the need for a neutral platform like APAARI to strengthen cooperation in promoting ICT/ICM at different levels in the region through promoting outscaling of innovation in ICT/ICM for AR4D; catalyze policies through success stories; create tool boxes to increase greater collaboration and sharing of ICT/ICM expertise; and develop capacity of master trainers in ICT/ICM. The program ended with concluding remarks by Dr. Malcolm Hazelman, Dr. Ajit Maru, Dr. Fazle Karim, Head, IT, AIT Extension, Dr. Raj Paroda and Dr. Simon Hearn. In the valedictory, the dignitaries gave away certificates to participants.

(Source: Dr S.Attaluri, APARIS Coordinator; attaluri@apaari.org)

APARIS Steering Committee Meeting

The X Meeting of the APARIS Steering Committee was held on 29 September, 2011 at the Asian Institute of Technology, Bangkok under the chairmanship of Dr. Simon Hearn, Chairman APARIS and Principal Adviser, Australian Centre for International Agricultural Research (ACIAR). Six members of the committee and special invitee Dr. Fazle Karim, Head, IT, AIT extension attended the meeting. Mrs. Rosna Amir, Director, Information Resource Management Division, Malaysian Agricultural Research and Development Institute (MARDI) represented Dr. Abd Shukor, Director-General, MARDI and Mr. Ricaredo V. Manzanilla, Supervising Science Research Specialist, Management Information Services Division (MISD), Philippine Council for Agriculture, Aquatic, and Natural Resources Research and Development (PCAARRD) attended on behalf of Dr. Patricio S. Faylon, Executive Director, PCAARRD.

Dr. Raj Paroda, Executive Secretary, APAARI in his address welcomed all the members and appreciated the support by ACIAR, GFAR and FAO to the APARIS program for improving agricultural information and knowledge sharing in the region. He expressed that the expectations of stakeholders are ever increasing due to challenges and opportunities. He also thanked AIT for collaborating and hosting APARIS related programs at its campus.

Dr. Simon Hearn, Chairman welcomed all the members of the APARIS Steering Committee and appreciated their contributions in taking forward the APARIS activities to strengthen agricultural information and knowledge sharing in the region. He envisaged that ICT/ICM offers immense opportunities as well as challenges in rapidly changing situations. He stated that a combination of traditional and modern communication methods are highly relevant for strengthening research and extension systems in securing access to information and knowledge by small and resource poor farmers. He stressed the need for continuation of success stories to reach the message to policy makers for priority setting, return to the investments and improving public-private partnerships in ICT/ICM initiatives. He pointed that the role of APARIS is crucial in improving regional coherence in information and knowledge sharing to address regional aspects such as climate change, water management and multi-national and inter-regional research collaborations. He appreciated the progress made by APARIS program and congratulated the APAARI headquarters for their efforts. Dr Ajit Maru, Senior Knowledge Manager, GFAR and Co-Chair, APARIS Steering Committee welcomed the members on



Members of the X Meeting of the APARIS Steering Committee

behalf of GFAR and appreciated the achievements made by APARIS program. Since the term of the current Steering Committee will end by 2011, a new committee was constituted as follows for 2012-2013:

Chairman	: Dr. Simon Hearn, ACIAR
Co-Chair	: Dr. Ajit Maru, GFAR
Members	: Dr. Malcolm Hazelman, FAO RAP
	: Dr. Raj Paroda, APAARI
	: Dr. Jonathan Shaw, AIT
	: Member from Thailand
Member Secretary	: Dr. S. Attaluri, APARIS Coordinator

Dr. Malcolm Hazelman, Senior Extension, Education and Communications Officer, FAO RAP expressed his appreciation for the progress made in APARIS activities in collaboration with FAO and assured support of FAO in future programs. Dr. Fazle Karim also appreciated the role of APARIS in dissemination of agricultural innovations in the region through success stories and expressed keen interest to associate with future programs. Dr. S.Attaluri, APARIS Coordinator presented the Action Taken Report on the decisions taken in the Ninth Meeting of the APARIS Steering Committee held on 16 September, 2010 at Bangkok. The Committee appreciated the progress made in the different programs and approved both the minutes and the action taken report.

APARIS Work Plan 2012

The following work plan for 2012 along with budget was approved:

- Success Stories on Agricultural Information and Learning Systems
- Regional Workshop on ICM for Agricultural Development in collaboration with FAO, GFAR and other partners
- Collaboration with regional / sub-regional fora (SAARC, SEARCA, SPC etc.).

Continued on Page 12.....

APAARI Session on “Openness in Agricultural Information and Knowledge Sharing”

APAARI organized a special session on “Openness in Agricultural Information and Knowledge Sharing” on 10 November, 2011 at NASC Complex, Pusa, New Delhi, India in the “International Conference on Innovative Approaches for Agricultural Knowledge Management: Global Extension Approaches” jointly organized by International Society of Extension Education, India and the Indian Council of Agricultural Research (ICAR) with the partnership of APAARI, GFAR, FAO, TAAS, MSEE, NAAS, Alcorn State University, Iowa State University and other partners on 9-12 November, 2011.



Plenary Session in progress

The session was focused on the core issue of “Openness” of agricultural information and knowledge in the context of the emerging paradigm of agricultural innovation should mean that a large part of relevant and useful information generated by and through the public sector or investment, should be available and also accessible as a public good with equity to all its users. Market-linked agriculture require new forms of knowledge, skills and technologies which can only come through information chains linked appropriately to innovation. ICTs are realized as tools for improving efficiency and effectiveness of information flows in market chains. More than 400 participants from the fields of agricultural research, extension, information and communication technologies attended the conference.

The Chairman of the inaugural session Dr. Raj Paroda, Executive Secretary, APAARI in his welcome remarks highlighted immense opportunities offered by ICTs for effective and efficient sharing of knowledge in the areas of conservation agriculture, biotechnologies, hybrid varieties, genetic materials, integrated pest management, etc., and dissemination of innovations through success stories for better adaption of agricultural technologies.

Dr. Ajit Maru, Senior Knowledge Officer, GFAR Secretariat made presentation on “Ushering Openness in Agricultural Information and Knowledge for All: Global Challenges and Solutions” emphasizing that complex information chains for market linked agriculture cannot operate effectively and in a sustainable manner if they are “closed” and limited in some way to other intermediary actors. He remarked that the outputs of public funded research, especially data and information should be “public goods” in the sense that they should not be excluded from the public which has funded the research. Developing institutions, organizational structures that enable and support open sharing and exchange of agriculture related information and improving the governance of agricultural information flows globally through greater inclusiveness in formulation of policies, regulations,

rules, standards and norms related to information management and communications are necessary, he said. Dr. S. Attaluri, APARIS Coordinator explained the “Regional Agricultural Information System (RAIS) for Knowledge Sharing” and the role of APAARI in improving openness in agricultural information and knowledge sharing. Co-Chair of the session Dr. K.D.Kokate, DDG (Agri. Extension), ICAR and Chairman, Organizing Committee proposed the vote of thanks and felicitated Dr Raj Paroda and speakers.

The technical sessions were organized in three groups, under important themes, viz., 1: Technical Issues to Usher Openness (Group Convener: Dr. Paolo Ficarelli - ILRI) 2. Institutional Issues to Usher Openness (Group Convener: Dr. Ajit Maru - GFAR) and 3. Community Issues to Usher Openness (Group Convener: Mr. Rikin Gandhi - Digital Green) in concurrent sessions. A total of 12 papers were presented by experts relevant to the themes in these sessions followed by discussions. The conveners of each group shared the outcome in the plenary session chaired by Dr. S.Ayyappan, Secretary, DARE and Director General, ICAR. The plenary session provided an opportunity for open discussion on the group findings and issues related to openness in agricultural information and exchange.

Lively discussions occurred in the plenary session with active involvement of participants in question and answer mode which affirmed need to empower farmers through ICT-enabled services, develop capacities in ICTs, create and update content, validate information, provide incentives for open initiatives, use end-user ICT tools and devices, increase investment, etc. Dr. Raj Paroda in his remarks reiterated that openness in information and knowledge

Box. 3 Recommendations of the APAARI Session

Technology Issues

- Encouraging access and use of information through ICTs at farmers level
- Convergence of media and information from agriculture and other areas
- Collaboration among all actors in ICT/ICM
- Validation of information, need-based information and its updation
- Capacity development in use of ICTs and information
- Strengthening of KVKs, rural communities and farmers' organizations at local levels

Institutional Issues

- Increased and targeted investment in ICT/ICM in agriculture
- New institutional arrangements – change in work processes
- Developing policies, strategies, rules, norms, regulations
- Recognition, rewarding and awarding systems
- Building institutional capacity

Community Issues

- Creation of community-based organizations: Farmers' Clubs, etc.
- Involving community in assessment of information use
- Convergence of information related to agriculture and non-agriculture issues
- Capacity building of community on use of ICT tools and information

sharing should empower resource poor smallholder farmers with better knowledge to link them to markets to improve their incomes and livelihoods. Dr. Ajit Maru remarked that new ICTs are influencing the change of the roles of the States and Governments, organizations and communities and stressed that 'openness' in agricultural information and knowledge sharing is necessary at national, regional and global levels.

Dr. S. Ayyappan in his concluding remarks considered that we need better 'environment' to make the flowers of ICT innovations bloom in the fields of farmers. In order to cultivate such environment, he pointed that specific steps need to be taken to increase investments in ICT/ICM; develop policy support from top and assessment from bottom; create quality contents and its updation; collaborate and converge ICM for agricultural innovation, mobilize communities;

develop commodity-based and location-specific information and using farmers' innovations, etc. He also proposed to take up studies on impact of information in improving agricultural productivity in India lead by ICAR and status of ICT projects for agricultural research and development in the Asia-Pacific Region lead by APAARI which can be used as advocacy tools for sensitization and increasing investments in ICT/ICM in agriculture.

Dr. S. Attaluri presented the recommendations (see Box 3) of the APAARI session in the Valedictory Session on 11 November, 2011 chaired by Dr. A.G. Sawant, Former Member, ASRB and President, INSEE with Chief Guest Shri Harish Rawat, Hon'ble Union Minister of State for Agriculture and Food Processing Industries, India and Guest of Honour Dr. Gurbachan Singh, Chairman, ASRB.

(Source: Dr. S. Attaluri, APARIS Coordinator; attaluri@apaari.org)

Workshop on Moving Beyond Strategy to Improve Information and Knowledge Management for Agricultural Development in the Pacific Islands Countries and Territories

A four-day workshop on "Moving Beyond Strategy to Improve Information and Knowledge Management for Agricultural Development in the Pacific Islands Countries and Territories" was organized jointly by APAARI, FAO, GFAR, ACIAR and Secretariat of the Pacific Community (SPC) at Nadi, Fiji Islands on 21-24 November, 2011. The workshop was attended by 35 experts in the fields of agricultural research, extension, information and communication technologies which included 16 senior officers from Cooks Island, Fiji, FSM, Kiribati, Marshall Islands, Palau, Papua New Guinea, Samoa, Sol Islands, Tonga, Tuvalu and Vanuatu besides resource persons from APAARI, ACIAR, GFAR, FAO, SPC and CTA.

The workshop objectives included promotion of: new information and knowledge management (IKM) for making efficient and effective use of information resources by the Pacific Island countries and territories (PICTs); greater involvement and participation of organizations and institutions in CIARD and CIARD RING initiatives; openness in agricultural information and knowledge sharing and use of Web 2.0 and Social Media for agricultural information management in the region.

Inaugural Session

The workshop was inaugurated by Chief Guest Colonel Mason Smith, Permanent Secretary, Ministry of Primary Industries, Fiji and Vice-Chairman, APAARI Executive Committee in the session chaired by Dr. Malcolm Hazelman, Senior Extension, Education and Communications Officer, FAO RAP and Co-Chaired by Dr. Ajit Maru, Senior Knowledge Manager, GFAR Secretariat. In his welcome address, Mr. Inoke Ratukalou, Acting Director, Land Resource Division, SPC said that the Pacific needs to explore new ICTs and opportunities to disseminate timely, accurate and up-to-date information on agricultural production, pest management and marketing to farmers and communities, supplementing existing agricultural extension strategies and networks. Dr. Malcolm Hazelman observed that a combination of both traditional and modern ICTs would be appropriate to address information and knowledge sharing challenges existing among and between countries in the region. Dr. S. Attaluri, APARIS Coordinator remarked that today's agricultural innovations are becoming increasingly market-linked and will require new knowledge and tools.



Participants of the workshop at Nadi, Fiji Islands

The Chief Guest in his inaugural address stated that agriculture in the region is facing challenges due to small farm sizes, remote and scattered nature of our farms, infrastructural limitations, increased global competitiveness, climate change, and the loss of agricultural biodiversity, etc., in addition to limited resources for research and innovation. He observed that ICTs and global connectivity would offer a number of potential solutions to these challenges. He suggested that participants need to share experiences to foster stronger partnerships in the area of information and communication for agricultural development in the region and really move beyond strategies by implementing the recommendations of the workshop. Mr. Gerard Sylvester, Knowledge & Information Management Officer, FAO RAP explained the workshop objectives. Dr. Ajit Maru, Co-Chair of the session in his concluding remarks highlighted the role of GFAR to transform agricultural research for development globally and emphasized need to make public agricultural research information available, accessible, applicable and adaptable to all.

Technical Sessions

The program was organized in six technical sessions with enough room for open discussions, group activities and talk shows etc., which motivated all delegates to participate actively in the deliberations. The sessions included: (i) New Dimensions in ICM for Agricultural Development in the Pacific Islands and Territories, (ii) Information and Knowledge Management for AR4D in the Pacific Region – Country Experiences, (iii) CIARD, (iv) Identifying and Bridging Gaps in Knowledge Management for Agricultural Development in the Pacific, (v) New Approaches to Agricultural Information dissemination and (vi) The Way Forward. The resource persons from APAARI, GFAR,

FAO, SPC and CTA shared their experiences and provided inputs in the technical session to explain concepts like challenges to ICM, global perspectives, CIARD initiative, CIARD RING, overview of Web 2.0 and social media in agriculture. Nine country papers were presented on ICT/ICM initiatives for agricultural development by the participants. They were very insightful to understand varied nature of complex issues that each country is facing and different approaches to ICT/ICM use in the Pacific region.

To identify and bridge gaps in knowledge management for agricultural development, the participants were asked to work in groups on issues related to three important themes, viz., challenges with technology; institutional obstacles; and community participation. Later the results of the group works were shared in the plenary followed by open discussion to further consolidate approaches to implement strategies. Special focus was given to orient and provide hands-on experience on Web 2.0 and social media tools for agricultural information sharing. Mr Rodger Obubo of CTA highlighted the use of these new media in agricultural research, extension and reaching out to farmers.

On the last day, an on-line interactive session was organized on Twitter channel to share and discuss issues related to ICT/ICM in agriculture in the Pacific region. This provided opportunity for participants to use social media on their own to interact with professionals from different organizations including FAO headquarters. In the plenary session, Dr. S. Attaluri presented the recommendations of the workshop which provided steps to be taken to address constraints with regard to institutional issues; technological challenges and community participation around 7Cs (see Box 4).

The workshop ended with valedictory session in which Dr. Malcolm Hazelman, Dr. Ajit Maru and Dr. S. Attaluri thanked participants and all the partners of the workshop, especially the cooperation of SPC and its staff to make the program a success. Mr. Emil Adams, SPC proposed the vote of thanks. A field visit was organized where participants had an opportunity to understand use and application of information and communications in the projects implemented by Foundation for Rural Integrated Enterprises & Development (FRIEND) in Lautoka (near Nadi).

Box 4. Workshop Recommendations

Capital

- Advocacy for investment – increased, improved and targeted success stories, etc., public-private-community partnerships
- Innovative business models, cost sharing, partnerships with government departments, creation of consortium
- Support from micro-finance and self-help groups

Content

- Use of low cost camera; smart phones; participatory GIS, community information repositories
- Development of communication strategy and its implementation by institutions
- Integrating traditional knowledge, policies for IPR issues, and creation of local contents in local language

Connectivity

- Investment in infrastructure to establish better connectivity
- Connectivity through CD/DVDs/ flash drives, mobile, community e-centers, multi-modal delivery to reach the community

- Encouraging use of off-line delivery medium, community centers, mixed media at the community level.

Collaboration

- Use of emerging media – Web 2.0 / social media to facilitate collaboration; use of collaborative tools – participatory video, community centers, community Geographic Information System (GIS)
- Networking with internal and external ICT initiatives
- Involving NGOs and existing networks- women groups, church groups, youth groups, teachers/schools, etc., in ICT initiatives.

Capacity

- Capacity building at different levels in organizations through sensitization, awareness, training / workshops and success stories to improve use and application of ICT/ICM in agriculture
- Initiating distance learning programs, e-learning to educate on ICT/ICM
- Raising awareness at community level through training, field visit, cultural events and documentation.

Community Participation

- Involving establishments like local Councils, NGOs, church groups, women groups, youth groups, schools etc.
- Involving priests, teachers, students, chiefs, extension officers, farmer leaders
- Advocacy to increase awareness on the benefits and use of ICT/IKM.

Culture of Organization

- Introduction of reward system and accountability in organisations
- Change in institutional work processes, procedures, rules and regulations, norms
- Awareness on the role and importance of community in ICT/IKM initiatives.

(Source: Dr. S. Attaluri, APARIS Coordinator; attaluri@apaari.org)

From Page 9..... APARIS Steering Committee Meeting

- Implementation of APAARI Communication Strategy, maintenance of APARIS web space and databases, APAARI on CD-2012
- Success stories on innovations in agricultural research and extension systems
- Assessment of regional investments and capacity in AR4D in collaboration with ASTI/IFPRI
- APARIS Steering Committee Meeting in 2012

Dr. Raj Paroda highlighted that the role of Regional Fora is vital to ensure inclusiveness of NGOs, CSOs and other stakeholders in the process of agricultural research for development and to improve exchange of information and knowledge at the national, regional and global levels. He thanked all the members and especially for AIT the cooperation extended for hosting APAARI programs over the last few years. Dr. Simon Hearn in his concluding remarks reiterated that APARIS has an important role to play in the changing agricultural environment to empower all groups of stakeholders with knowledge and information sharing and assured the support of ACIAR to APAARI programs and thanked all the members for their valuable contributions to strengthen APARIS activities in the region.

(Source: Dr. S. Attaluri, APARIS Coordinator; attaluri@apaari.org)



Global Conference on Women in Agriculture

13-15 March, 2012, New Delhi, India

Women farmers represent more than a quarter of the world's population. Women comprise, on average, 43 per cent of the agricultural work force in developing countries, ranging from 20 per cent in Latin America to 50 per cent in Eastern Asia and Sub-Saharan Africa. But women have less access than men to agriculture-related assets, inputs, and services. Had they enjoyed the same access to productive resources as men, women could boost yields by 20-30 per cent, raising the overall agricultural output in developing countries by two and a half to four per cent. This gain in production could lessen the number of hungry people in the world by 12-17 per cent, besides increasing women's income (FAO, 2011). Not surprisingly, the neglect of women farmers has increasingly become an important subject for consideration of policy makers.

Today, there is a growing realization and commitment of the global community to achieve more sustainable and broad-based agricultural growth by addressing gender related issues in agriculture through national, regional and global initiatives and partnerships. There is also greater convergence of initiatives undertaken by international institutions such as FAO, GFAR, CGIAR, regional fora and many National Agricultural Research Systems (NARS). The GCARD Road Map too has called for a radical reorientation of the agricultural research agenda to overcome the existing gaps and to face the emerging challenges of sustainable development and livelihood of resource poor small holder farmers, especially the women farmers. Urgent efforts are, therefore, needed to overcome the gender gap by empowering women in agriculture.

Against this backdrop, APAARI along with Indian Council of Agriculture (ICAR), Global Forum on Agricultural Research (GFAR), FAO, Trust for Advancement of Agricultural Sciences (TAAS), Research Association for Gender in Agriculture (RAGA) and International Development Research Centre (IDRC), Canada is organizing a Global Conference on Women in Agriculture on 13-15 March, 2012 at New Delhi, India.

Goal

Empowering Women for Inclusive Growth in Agriculture

Objectives

- To discuss and deliberate the prevailing and emerging gender issues in agriculture and food systems and the lessons learned for future sustainable development;
- To take stock of evidence on experiences in enhancing role of women in agriculture;
- To understand the mechanisms and approaches adopted by the international organizations, regional fora, countries, and civil societies for empowering women and addressing gender issues in agriculture, and;
- To collate lessons on strategies for strengthening gender research in agriculture to make technology generation and dissemination, agricultural planning and policy making gender sensitive and disseminate them through an edited book and develop a Framework for Action.

Conference Themes

1. Assessing Women's Empowerment in Agriculture

2. Agricultural Innovations for Reducing Drudgery
3. Linking Women to Markets
4. Role of Women in Household Food and Nutrition Security
5. Access to Assets, Resources and Knowledge: Policies and Services
6. Impact and Responses to Climate Change Related Risks and Uncertainties

In addition, three Working Groups will discuss issues in (i) R&D, (ii) Capacity Building and (iii) Partnerships, to have a Framework of Action on Engendering Agricultural Research, Education and Extension.

Expected Outcomes

- New knowledge and experiences shared from cross-country programs as well as inter-regional/global successes concerning the role of women in agriculture
- Strategies developed for addressing gender issues in agriculture at the local, national, regional and global level
- Technological and institutional innovations better meet the needs of farm women developed.
- Gaps and needs for research, education and extension in issues related to women's role in agriculture identified
- A Framework for Action developed to integrate and empower women for inclusive growth and development through agriculture.

Participants

The participants will include researchers, academicians, gender experts, representatives of UN organizations, CGIAR centres, officials from Ministries of Agriculture, Rural Development, Women and Child Development, Science and Technology, Human Resource Development, Women Ministers of Governments and Chief Executive Officers (CEOs) of business corporate houses, NGOs and farm women innovators. About 300 participants including 100 from abroad are expected to attend the conference.

Call for Papers

The participants are encouraged to contribute papers relevant to one or more themes of the Conference. All such contributory papers will be evaluated by a Committee of Experts and the selected ones will be included in the poster session only. Oral presentations will be made only by the invited speakers in different Technical Sessions.

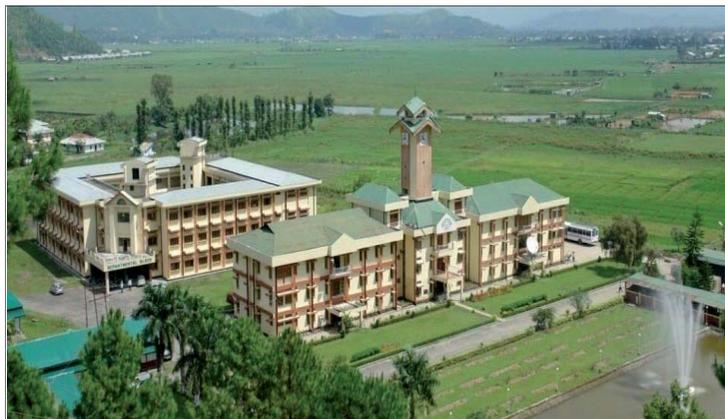
Registration

The participants are requested to register in advance either by submitting the duly filled in registration form (on-line or by e-mail) to the Organizing Secretary. For details on registration, contribution of papers etc., please contact: Dr. (Ms.) Krishna Srinath, DRWA, Organizing Secretary, Global Conference on Women in Agriculture (GCWA), Secretariat, C/o Trust for Advancement of Agricultural Sciences (TAAS), Avenue-II, Indian Agricultural Research Institute, Pusa Campus, New Delhi 110012, India. Phone: +91-11-25843243 Mob. +91 9437011808, Telefax +91 11-25843243, e-mail: gcwa2012@rediffmail.com; website: www.gcwa.in



Central Agricultural University, Imphal, India

The Central Agricultural University (CAU) was established on 26 January, 1993 with its headquarters at Imphal, the capital city of Manipur under the Central Agricultural University Act, 1992 of the Parliament (Act No. 40 of 1992). The Central Agricultural University is an Affiliate Member of APAARI.



Central Agricultural University Campus, Imphal, Manipur

This University has unique distinction of having jurisdiction over six States of North East Hill region, viz, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Sikkim and Tripura. The University has established constituent colleges, one each in the faculties of Agriculture (Iroisemba, Imphal, Manipur), Fisheries (Lembucherra, Agartala, Tripura), Home Science (Tura, Meghalaya), Horticulture & Forestry (Pasighat, Arunachal Pradesh), Veterinary Sciences & Animal Husbandry (Selesih, Aizawl, Mizoram), Agricultural Engineering and Post Harvest Technology (Ranipool, Gangtok, Sikkim) and Post Graduate Studies (Barapani, Meghalaya).

Like other Agricultural Universities, the Central Agricultural University, Imphal also has integrated programs of teaching, research and extension education.

Mandate

- To impart education in different branches of agriculture and allied sciences;
- To further the advancement of learning and conducting of research in agriculture and allied sciences;
- To undertake extension education program in the states under its jurisdiction.

Goals

- To produce globally competitive graduates and postgraduates in agriculture and allied sciences;
- To develop sustainable and profitable farming systems for improving productivity, production and profitability in agriculture and allied sectors;
- To educate extension functionaries for effective dissemination of agro-technologies to farmers, entrepreneurs and agro-industries; and
- To be an important link in the chain for converting agriculture and allied vocations into profitable enterprises and for providing food and nutritional security to the people of Northeast India, and the world.

Educational System

The University follows semester system of education with 10-point scale of grading. It has internal-cum-external system of examination and evaluation. The University has adopted model academic regulations and syllabi as proposed by the Indian Council of Agricultural Research/Veterinary Council of India (VCI), with some minor changes to suit regional requirements.

Quota has been fixed for undergraduate programs based on the population of each constituent state and the admission is given to candidates sponsored by the respective states based on the common entrance test. In addition to the states' quota, 15% seats for undergraduate programs are filled up by the ICAR/VCI based on all-India entrance examination.

Postgraduate seats to the extent of 75% are filled by the University based on the merit in qualifying degree, and 25% seats are earmarked for the ICAR, which are filled on the basis of the all-India entrance test.

Education for Excellence

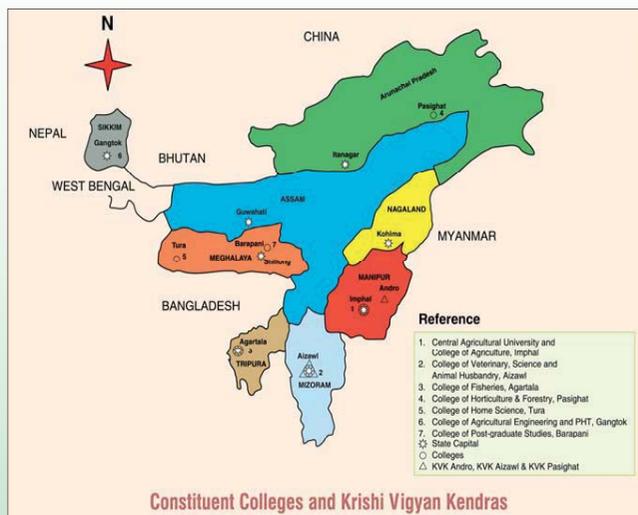
In spite of remoteness and other location related disadvantages, the University has maintained academic environment at its campuses conducive for the professional success of the students. 21 students from different constituent colleges of the Central Agricultural University have secured Junior Research Fellowship on the basis of All-India Combined Examination for ICAR JRF for the Academic Session 2009-10 ranking sixth in the country.

More than 68 students have secured admission to postgraduate courses in different agricultural universities of the country and 26 have been admitted to National Institutes, viz., IARI, IVRI, NDRI, IASRI and CIFE.

Research

The University has a separate Directorate of Research for monitoring on-going intramural and externally funded research projects. The scientists from various disciplines of agriculture and allied sciences working in different constituent colleges are actively engaged in location-specific research.

The University has more than 60 intramural research projects under operation at different colleges. About 70 research projects are funded by external agencies at different colleges, and there are also 22 centers of AICRPs financed by the ICAR in different colleges of CAU Mega Seed Project on Agricultural Crops (Field Crops) has



been implemented mainly for seed production of rice (va. CAU-RI- Tamphaphou) and other crops at CAU Research Farm at Andro, Imphal.

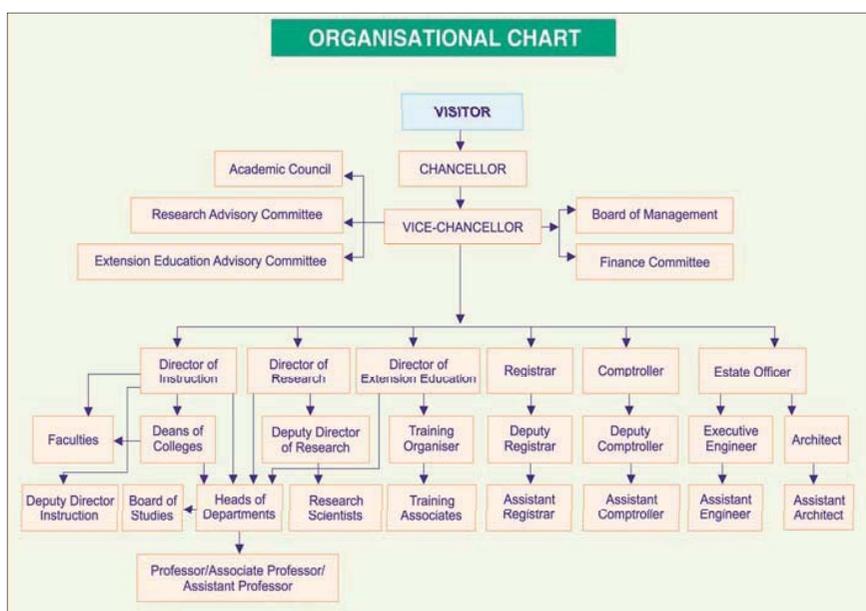
The University developed a blast resistant variety of rice CAU-RI and released it for the State of Manipur. The packaging technology for orchids to enhance its shelf life for more than 21 days has been developed by the College of Agricultural Engineering & P.H. Technology, Ranipool. A package of practices for successful rearing of quails in Mizoram has been demonstrated by the College of Veterinary Sciences & Animal Husbandry. The efforts are being made to improve locally available Mizo pig, viz., Zovack by selection method for higher meat quantity of better quality. Biopesticide based effective management of ginger soft rot has been worked out at the College of Horticulture, Pasighat Arunachal Pradesh. new model based on rain water harvesting for fisheries in the hill areas is being developed at the College of Fisheries.

Thrust Areas for Future Research

Over a vast area in Manipur, only rice is grown and land remains fallow from November to June. There is possibility of growing pulses and oilseed crops during *rabi* season. Short duration varieties of oilseeds and pulses with minimum water requirement as a protective irrigation from rain harvested stored water could be better option. Soils in the North Eastern Region are acidic in nature. In many areas, toxicity of aluminum iron is a serious problems. Efforts have been initiated to breed crop varieties tolerant to acidity, aluminum iron toxicity.

Khasi mandarin is the important fruit crop for most of the states in North Eastern Region. To rejuvenate old *Khasi mandarin* orchards and supply of virus-free grafted material of *khasi* mandarin need to be taken up on priority. Considering the possibility of introducing red-palm in the region, package of practices suitable for the NEH Region and processing of oil palm are important. Pineapple is cultivated on large areas but its transportation is difficult. Processing of pineapple into dry powder is important. technology for conversion of pineapple juice to dry powder by maintaining original aroma is necessary. Considering the declining production of large cardamom in Sikkim, detailed programme for large cardamom cultivation has been worked out in collaboration of the Department of Bio technology, Government of India for effective management of wilt. Indigenous Manipuri cattle and famous Manipur pony are declining in population. There is a need to conserve both these animal in the region. Considering the international porous border acting as important vehicle for introduction of new animal diseases, efforts will be needed to identify and characterize the new diseases.

Although a large area in the region is under forest, grazing area for the animals is limited because of topography. Maize is important base material for cattle, poultry and fish feed. Research on specific maize variety and expansion in area are important for the development of cattle feed required for cattle, poultry and fish. Paddy straw is available in ample quantity, but its utilization for cattle feed is low. It is necessary to produce cattle feed by making use of paddy straw blended with locally available green materials.



Extension Education

The University educates functionaries of the line departments of the concerned State Governments, who disseminate information to farmers. Besides, the University takes up limited extension activities directly with farmers, and acts as the role model to the state-extension agencies. The Constituent colleges and *Krishi Vigyan Kendras* (KVKs) under the administrative control of the University conduct on-farm trials, frontline demonstrations, on-campus and off-campus farmer's training programs, extension camps, agriculture fairs, animal health and vaccination camps. The University disseminates information through newspapers, radio talks, TV presentations and organizing fruit shows and agri fairs, etc. There are three Farms Science Centers-KVKs (*Krishi Vigyan Kendras*) under the jurisdiction of the University, viz., KVK Andro, Imphal, Manipur; KVK at Selesih, Aizawl, Mizoram and KVK at Pasighat, Arunachal Pradesh.

(Source: Dr. S.N. Puri, Vice Chancellor, CAU, Imphal snpuri04@yahoo.com)

APAARI Participation in other Fora

Dr Raj Paroda participated in:

- Organising Committee (GFAR) Meeting as Chairman on 21-22 July, 2011 at Rome to discuss and finalise the GCARD 2 program.
- 4th Global South-South Development Expo 2011 at Rome on 5-9 December, 2011.

Dr J.L.Karihaloo, APCoAB Coordinator participated in:

- Workshop on "Understanding BCH as an Effective Tool for Global Information on LMOs/GMOs", 13 Sept. 2011, New Delhi.
- Consultative Workshop to discuss "Second National Report on the implementation of the Cartagena protocol of Biosafety", 8 Dec. 2011, New Delhi.

Dr. Raj Paroda, Dr. Bhag Mal and Dr. J.L. Karihaloo participated in:

- The Regional Dialogue on "Conservation Agriculture in South Asia" on 1-2 Nov. 2011, New Delhi.

Dr Bhag Mal, Consultant, APAARI participated in:

- Meeting of the Regional Forum on Strengthening Rural Advisory Services in Asia-Pacific Islands (APIRAS), 14-15 Sept., 2011 at SEARCA, Laguna, Philippines.

Philippines

Two Science Councils Consolidated to Provide Better Service: Genesis of PCAARRD

Two Science Councils of the Department of Science and Technology, the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD) and the Philippine Council for Aquatic and Marine Resources Research and Development (PCAMRD), were consolidated to provide better service in the agriculture, aquatic, and natural resources sectors.

The consolidation of these two councils gave birth to a new organization - the Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD). The former Executive Director of PCARRD, Dr. Patricio S. Faylon, heads the new Council.

With PCAARRD in place, it is expected that research plans and programs in the areas of agriculture, forestry, aquatic and natural resources sectors will be given the much needed boost with the complementation of the two former councils' human and physical resources. Further, the consolidation is seen to expand the coordination and linkages with local and international institutions.

The consolidation of the Councils has been done for PCARRD and PCAMRD to PCAARRD is already the second time in DOST. The first one was the consolidation of the Philippine Council for Industry and Energy Research and Development (PCIERD) and the Philippine Council for Advanced Science and Technology Research and Development (PCASTRD). These councils were renamed to Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD).

Originally, DOST had five Councils, but with the Department's recent moves for merging the two Councils, there are now only three: PCAARRD, PCIEERD, and the Philippine Council for Health Research and Development (PCHRD).

(Source: Evelyn Q. Carpio, S&T Media Service, PCAARRD)

Sri Lanka

National Awards for Excellence in Agricultural Research by SLCARP

The National Awards for Excellence in Agricultural Research is an award scheme which the Sri Lanka Council for Agricultural Research Policy (SLCARP) initiated for recognizing outstanding achievements in agricultural research. The objective of the scheme is to encourage and motivate agricultural scientists towards achieving high standards of scientific research, improve their career prospects and bestow recognition on outstanding contributions made towards advancement in national agricultural development.

Under this award scheme, the researches undertaken in Sri Lanka by Sri Lankan scientists or by local institutions or where overseas research institutions are involved, major part of the research work should have been conducted in a Sri Lankan institution, to qualify for these awards.

An appropriate reward system in any organization serves as an important driving force of enhanced performance, job satisfaction and fulfils the expectations of a person to be valued and appreciated by others.



Mr. D.M. Jayaratne, Hon. Prime Minister of the Peoples Socialist Democratic Republic of Sri Lanka presenting the first award to Dr. Sarath B. Abeyasinghe, Director, Tea Research Institute, Sri Lanka

The recipients who were presented with the awards at the Ceremony held on August 25, 2011 at the Bandaranaike Memorial International Conference Hall have to be congratulated for their outstanding contributions to this country. The award winning team selected for the first place was for their outstanding contribution to the tea sector for understanding the flavonoid biosynthetic pathway in the tea plant and defence response to blister blight. The award winners selected for the second place were in recognition of their remarkable research performance on the development and application of virological research to enhance the agricultural productivity. The team of scientists selected for the third place was in recognition of their contribution on the development of a soil database for sustainable land management of intermediate zone of Sri Lanka.

SLCARP will ensure that due recognition and timely awarding of the certificates to the selected scientists takes place on a regular basis as a means of appreciating and valuing the contributions to the agriculture sector by the deserving scientists under this awards scheme.

(Source: Dr. Shanika Jayasekera, Senior Scientist and Coordinator, Organizing Committee Ceremony on the National Awards for Excellence in Agricultural Research, SLCARP)

New Appointment



Dr. Iftikhar Ahmad has joined as the Chairman of the Pakistan Agricultural Research Council (PARC) on 10 August, 2011. He holds Ph.D in Plant Biology from University College of North Wales, Bangor, UK. He has served on senior positions in PARC for about 27 years in the capacity of DG, DDG, CSO, PSO and

has vast experience of handling large research establishments/working groups. In recognition of his expertise and excellence in agricultural sciences, he was conferred the Best Scientist of the Year Award in 1999 by PARC. He was also conferred the Pakistan Academy of Sciences Gold Medal 1999 for his outstanding contribution in agricultural research.

AVRDC - The World Vegetable Center APAARI Members Visit AVRDC

Nine members of the Asia-Pacific Association of Agricultural Research Institutions (APAARI) stopped for a visit at AVRDC headquarters on 25 October 2011, en route to Expert Consultation on "Agricultural Biotechnology, Biosafety and Biosecurity" on 27-28 October, 2011 at the Taiwan Agricultural Research Institute (TARI), Taichung, Chinese Taipei.



APAARI Members visiting AVRDC

The group included Raj Paroda, APAARI Executive Secretary; Mason Smith, APAARI Vice-Chairman; Abd. Shukor Abd. Rahman, former APAARI Chairman; Raghunath Ghodake, Member, APAARI Editorial Committee; Simon Hearn, Principal Advisor, Australian Centre for International Agricultural Research; Pauliasi Tuilau, Principal Economic Planning Officer, Fiji; Colin Chartres, Director General, International Water Management Institute; Misa Konelio, Chief Executive Officer, Ministry of Agriculture, Forests, Fishery and Meteorology, West Samoa; and Dzhamin Akimaliev, Director General, Research Institute of Crop Husbandry, Kyrgyzstan.



AVRDC Director General Dr. Dyno Keatinge explains seed packaging and storage procedures to APAARI delegates.

The visiting team met Dyno Keatinge, AVRDC Director General; Jackie Hughes, Deputy Director General (Research); Yin-fu Chang, Deputy Director General (Administration & Services); Nagaraj Inukonda, Director of Human Resources; Warwick Easdown, Regional Director for South Asia; Jaw-Fen Wang, Plant Pathologist; Ravza Mavlyanova, Coordinator for Central Asia and the Caucasus; and Suzanne Neave, Project Coordinator, Solomon Islands, to discuss the opportunities for collaboration with AVRDC.

Savoring Soybeans

A vegetable crop can be sown, grown, harvested and marketed but if people are unfamiliar with the produce or uncertain about how to use it, there is no guarantee that it will actually be consumed. Taste is one sense that must be satisfied if a vegetable is to gain wide acceptance. Recent taste-testings on new vegetable soybean lines by AVRDC – The World Vegetable Center South Asia confirmed the growing popularity of the crop in India among both rural and urban consumers.

Soybean is India's most commonly grown legume, but vegetable soybeans are virtually unknown, and provide a whole new market opportunity for soybean growers. Run by AVRDC World Food Prize intern Izzy Esler, the taste testing organized in the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) canteen in Patancheru, put five new lines of the crop before the discerning palates of local staff. Lines with the new *basmati* rice flavor proved particularly popular.



Experts examining the taste of new soybean varieties

Vegetable soybeans have much larger and sweeter seeds than commodity soybeans. They are commonly consumed green as a snack food, and are particularly high in protein and vitamins A and C. China and Japan have been the main global markets for the crop in the past. Taiwan has been a major supplier of frozen pods to the Japanese market, where it is known as 'Edamame' and trades for around five times the price of commodity soybeans.

Only one variety introduced from AVRDC has been released in India, and farmers in the northeast are eagerly adopting it. In the state of Jharkhand, 3,400 farmers grew the crop last year, and this year 50,000 farmers want to grow it, but demand far outstrips the available seed supply.

Indian farmers also are finding new ways to use the crop. In addition to harvesting it green and shelling pods like green peas, the crop is also being allowed to dry and seed is then cooked as *dhal* like other legumes, a traditional legume porridge. Previous introductions of vegetable soybean into India met with less enthusiastic response, but a combination of high legume prices increasing demand, and testing in diverse communities has shown that vegetable soybean has a bright future.

Tomato: the Main Alternative to Rice Cultivation

The average weekly vegetable consumption in impoverished tribal areas of Jharkhand in northeast India is about 400 g – equal to about two cupfuls of tomato, reports Warwick Easdown, Regional Director,

AVRDC – The World Vegetable Center South Asia. This vegetable is one of the only additions to a bland and unhealthy diet that consists almost entirely of rice.

In the village of Maipaddih, 24 km south of the city of Ranchi in northeast India, a tenth of its 250 tribal farmers are now growing tomatoes for home use and sale. Mr. Mahadev Munda, a farmer, is growing an improved variety for the second time. His small 200 m² fenced patch lies isolated in overgrazed upland sandy pastureland, surrounded by low lying rice paddies and remnant trees in a deforested landscape.



Farmer growing improved variety of tomato at Maipaddih, India

Staked in neat rows separated by water-scoured channels from recent heavy rains, the crop will perform well this season, but many others were wiped out in the same storms. Its survival depended on staking, good drainage and improved disease-resistant varieties – innovations introduced as part of a management package by AVRDC in cooperation with Art of Living, Local non-governmental organization. This has increased average tomato yields five-fold and increased returns by 675%.

Tomatoes are usually grown in the cooler winter or *rabi* season, but over the last decade, production has gradually expanded into the more risky hot, wet *kharif* season when disease and waterlogging kill many crops, but prices are 2-3 times higher. Marketing takes a lot of effort as the only transport available is bicycle to cover 10-15 km distance to nearby villages or further to the largest market on the city outskirts. Other farmers are now exploring the production of healthy seedlings in trays. Transplanted earlier than field-grown seedlings, they also produce crops that mature faster with substantially higher yields, and the trays can be reused 2-3 times.

While there are still many challenges to overcome, the success of tomato production in tribal communities so far has shown that there are viable sources of improved incomes and nutrition from vegetables that can help transform one of the most marginalized communities in India.

(Source: Maureen Mecozzi, Head, Communication and Information, AVRDC; maureen.mecozzi@worldveg.org)

IFPRI IFPRI's Policy Research and Strategy Support Program in Bangladesh

With the highest population density in the world, little arable land, and frequent natural disasters, Bangladesh has often struggled to feed its population. Although rice production has tripled in the past three decades, 60 million out of 160 million Bangladeshis still suffer from hunger and malnutrition. How can the country bring that number down and improve the overall well-being of its people is a big challenge. In a place where food security is tenuous at best and food itself is closely tied to economic and political stability, the way to reduce hunger, poverty, and malnutrition is to create sound food and agriculture policies founded on evidence-based research. The Policy Research and Strategy Support Program (PRSSP), led by the International Food Policy Research Institute (IFPRI) and funded by the United States Agency for International Development (USAID), was launched in October 2010 with a mission to help facilitate

this policy making process. One year later, on October 4–5, 2011, a policy workshop was held in Dhaka and attended by nearly 300 key stakeholders including high-level government officials, leading researchers, and representatives of development organizations to assess the program's progress toward achieving that goal.

In evaluating the work of the Policy Research and Strategy Support Program (PRSSP) during its first year, the workshop highlighted ways to combine investments in agricultural research, new technologies, and effective extension services to achieve food security and fight poverty. Dr. Akhter Ahmed, the program's chief and a Senior Research Fellow at IFPRI, focused on the importance of social safety nets in his presentation on the PRSSP evaluation of Bangladesh's Employment Generation Program for the Poorest (EGPP). As the country's largest social safety net, this employment program offers provisions for poor people to work in 40-day slots during the two lean periods of the year. The PRSSP's extensive field-based performance study found that EGPP has been highly successful with a very low level of fund leakage. The Minister of Food and Disaster Management, Dr. Muhammad Abdur Razzaque, who inaugurated the workshop, explained that the Government of Bangladesh will use the results from this evaluation to help shape existing and future social protection programs.

The PRSSP in Bangladesh is conducting numerous other studies and activities that are similarly demand-driven, specifically in support of the Country Investment Plan. This includes the development of a policy analysis unit within the Ministry of Agriculture, which provides direct support to policy makers by giving them information in advance, for example, the likely size of the next rice crop so that it can be put to best use. Researchers also developed the most comprehensive nationally representative household survey ever carried out in the country, which used an integrated data platform to find answers to a variety of research questions.

While the evidence discovered in these studies has the power to shape Bangladesh's food policies and thereby make potentially life-saving changes for millions of people, research on its own is not enough to influence policy. It must also be appropriately communicated and rigorously assessed. Thus, the PRSSP builds on IFPRI's strong reputation for strategic research communication. Since its findings cover a broad range of topics, the program uses customized forms of outreach and innovative communication techniques to deliver its messages to the intended audiences. Additionally, to avoid becoming just another research project, the PRSSP maintains a relentless focus on impact. An independent organization monitors its performance, assesses changes in policy makers' actions as they relate to specific evidence, and estimates the value of these changes.

(Source: Stansbury Gwendolyn Head of Publications G.Stansbury@cgiar.org, IFPRI)

From Page 4..... *Regional Dialogue on Conservation Agriculture in South Asia*

- RWC needs to be revived and strengthened in order to provide a common neutral platform for policy makers, R&D managers, researchers, private sector representatives, NGOs, CGIAR institutions, CSOs and the farmers to assess local/national and regional needs, exchange information, and accordingly define priorities for the deployment of CA with a focus on small holder resource poor farmers.

(Source: Dr. M.L. Jat, CIMMYT; m.jat@cgiar.org)

Meeting of Regional Forum on Strengthening Rural Advisory Services in Asia-Pacific Islands

A meeting of the Regional Forum on Strengthening Rural Advisory Services in Asia-Pacific Islands (APIRAS) at SEARCA, UPLB College, Laguna, Philippines was held on 14-15 September, 2011. Prof. Mario Lopez was the Master of Ceremony who facilitated the deliberations throughout the meeting. The meeting was inaugurated by the Vice Chancellor, UPLB and the opening session was chaired by Dr. Virginia Cárdenas, Vice Chancellor for Community Affairs, UPLB. The remarks were given by Dr. Kristin Davis, Executive Secretary, GFRAS, Dr. Malcolm Hazelman, FAO Bangkok, and Director, SEARCA. A total of 35 participants from different organizations attended the meeting.

After the opening ceremony, the programme schedule was structured in two workshops. The first workshop had in-depth discussions on vision, mission, goals, structure and governance, while the second workshop discussed on issues and challenges in providing rural advisory services in the area of capacity building, policy advocacy, networking and monitoring & evaluation, the strategies, and problems/constraints. For each workshop, the participants were divided into 3 random groups for brainstorming. The results of discussions in each group were presented and discussed in the plenary for each of the two workshops. There was a general agreement on vision, mission, goals, structure, and governance, and strategies but the wordings are to be fine-tuned to finalize these.

Two presentations were also made on specific topics. The first presentation was made on "Guide to Extension Evaluation – A New Tool to Support More Efficient Extension" by Dr Sanne Clupata of Global Forum on Rural Advisory Services (GFRAS). She dealt with the importance and purpose of evaluation, challenges, design of extension evaluation and the choice of methodologies. The other paper on "Advisory Services World Wide" was presented by Dr. Andria Bohn, Project Manager, MEAS & WWES, University of Illinois giving examples and case studies on advisory services and their advantages in different regions of the world. These two presentations gave the needed background and proved to be very helpful to the participants in understanding the subject background better.

In the closing ceremony, the summary of accomplishments and recommendations were presented by Prof. Mario Lopez. This was followed by the brief remarks and statements of commitment of support by the representatives of 14 different organizations, namely, FAO, APAARI, IRRI, SEARCA, FFTC, CRISP, BIOTROP, PIEN, APEN, TES Center, FLIFLY, Zanzan University, East-West Seed Co., and DA-ATI & PEN. Dr Bhag Mal, Consultant, APAARI briefly highlighted the achievements and strategic thrusts of APPARI and also the possible areas of collaboration such as policy advocacy, training and capacity building, technology transfer and information dissemination, etc. He also emphasized on the scope of collaboration between APAARI and APIRAS and also that APAARI fully supports the establishment of APIRAS. He also suggested that APIRAS should become a reciprocal member of APAARI which will provide opportunity to take part in the meetings organized by APAARI.

A Committee was also constituted with Dr. Virginia Cardenas as Chair and the representatives identified from South Asia, Southeast Asia, West Asia and Pacific Islands to discuss and decide about the future course of action in order to further streamline the operational aspects.



Participants of APIRAS meeting at Los Banos, Philippines

The sub-regional representatives will have consultations in their respective sub-regions and give input to the Committee. The closing remarks were given by Dr. Kristin Davis, Executive Secretary, GFRAS and Dr. Virginia Cardenas, Vice Chancellor for Community Affairs, UPLB. The meeting ended with a vote of thanks by Dr. Cardenas.

(Source: Dr. Bhag Mal, Consultant, APAARI; b.mal@apaari.org)

Second GFRAS Annual Meeting held at Nairobi

The second Annual Meeting of Global Forum For Rural Advisory Services (GFRAS) was held in Nairobi, Kenya, on 13-14 November, 2011. A total of 120 people from all over the world participated and shared ideas and experiences on rural advisory services (RAS). A special emphasis was given to the topics of networking, capacity strengthening, and evaluation. The main objectives were:

- (i) To develop participants' capacity for strengthening regional networks;
- (ii) To provide a platform for regional networks to share lessons learnt on networking and reflect on ways to commit members on sub-regional and national level as a way to ensure impact;
- (iii) To facilitate GRFAS affiliates to hold discussions on needs for inter regional networking and identify actions to improve it;
- (iv) To share with participants the ongoing activities in GRFAS (evaluation, advocacy, capacity strengthening in RAS) and develop ways to contribute to them, and;
- (v) To elaborate on the recommendations for the International Conference on Extension.

The meeting also issued resolutions that were fed into the International Conference (<http://extensionconference2011.cta.int/>) on Innovations in Extension and Advisory Services that took place also in Nairobi after the GFRAS meeting. More details are available on GFRAS' website: www.g-fras.org

(Source: Global Forum for Rural Advisory Services GFRAS info@g-fras.org)

Forthcoming Events

APAARI Meetings / Workshops

- **ASTI-APAARI Workshop on Agricultural R&D in the Asia-Pacific region: The need to Monitor Investments, Capacities, and Institutional Changes**, will be held on 16-17, February, 2012 Bangkok, Thailand.
- **APAARI Executive Committee Meeting** will be held on 12 March, 2012 at NASC Complex, Pusa, New Delhi, India.
- **APCoAB Steering Committee** will be held on 12 March, 2012 at NASC Complex, Pusa, New Delhi.
- **Global Conference on Women in Agriculture** will be held on 13-15 March, 2012 at NASC, Complex, Pusa, New Delhi – 110012, India

APAARI and ICAR with support from GFAR will be organizing a Global Conference on Women in Agriculture. The event is also being supported by FAO, IDRC, TAAS & RAGA. The goal of this conference is Empowering Women for Inclusive Growth in Agriculture. The objectives of the conference are i) to discuss and deliberate the prevailing and emerging gender issues in agriculture and food systems and the lessons learned for future sustainable development, ii) to take stock of evidence on experiences in enhancing role of women in agriculture, iii) to understand the mechanisms and approaches adopted by the international organizations, regional fora, countries, and civil society for empowering women and addressing gender issues in agriculture, and iv) to collate lessons on strategies for strengthening gender research in agriculture to make technology generation and dissemination, agricultural planning and policy making gender sensitive and disseminate them through an edited book and develop a Framework for Action.

Contact: Dr (Ms) Krishna Srinath, DRWA, Organizing Secretary, Global Conference on Women in Agriculture (GCWA), Secretariat, C/o Trust for Advancement of Agricultural Sciences (TAAS), Avenue-II, Indian Agricultural Research Institute, Pusa Campus, New Delhi 110012, India. Phone: +91-11-25843243 Mob. +91 9437011808, Telefax +91 11-25843243, e-mail: gcwa2012@rediffmail.com; website: www.gcwa.in

- **Regional Workshop on Prioritizing Adaptation and Mitigation Strategies for Agriculture in South and Southeast Asia in collaboration with CCAFS** will be held on 9-10, April 2012 at Bangkok, Thailand.
- **Regional Consultation on Improving Wheat Productivity in Asia** in collaboration with FAO is scheduled to be held at Bangkok in April 2012
- **Policy Dialogues for Prioritization of Demand Driven Agricultural Research for Development in South Asia** in collaboration with IFPRI –will to be held in Bangladesh, India and Nepal in April/ May 2012.
- **Global Consultation on Agrobiodiversity in collaboration with Bioversity International and ICAR** will be held in September/October, 2012, at New Delhi, India.

Other Important Meetings / Workshops

- **International Conference on Multifunctional Agriculture and Urban-Rural Relations**, 1 - 4 April, 2012, The Netherlands

By 2050, the urban population will be approximately twice the size

of the rural population. Cities will continue to need resources such as food, fibre, clean water, nature, biodiversity and recreational space, as well as the people and communities that produce and provide these products and services. Hence, key questions for the coming decades are how, where and by whom these products and services for the urban area will be produced and provided, and if and how this can be done in manner that is considered to be socially, economically and ecologically sustainable and ethically sound.

This conference aims to advance the scientific state of the art in research on multifunctional agriculture and urban-rural relations by bringing together scholars from a wide range of disciplines from many parts of the world. Contact: Daniël de Jong, Researcher Rural Innovation at Applied Plant Research - Wageningen UR ; P.O. Box 430, 8200 AK Lelystad, The Netherlands; e-mail: daniel.dejong@wur.nl; Tel: 31 320 291 236. Website: <http://www.agricultureinurbanizingsociety.com/>

- **Improving Agricultural Productivity and Net Returns among Smallholder Farmers through Efficient Use of Nutrients and Water**, 6-10 May, 2012, Tel Aviv, Israel

Contact: IFDC Training and Coordination Unit, P.O. Box 2040, Muscle Shoals, Alabama 35662, U.S.A., Tel: +1 (256) 381-6600; Fax: +1 (256) 381-7408; E-Mail: training@ifdc.org; Web Site: www.ifdc.org

- **2nd International Conference on Asia Agriculture and Animal (ICAAA 2012)**, July 23-24, 2012, Singapore.

Asia-Pacific Chemical, Biological & Environmental Engineering Society (APCBEEES) (<http://www.cbeyes.org>) is organizing the Conference in collaboration with partners. The aim of the ICAAA conference series is to provide a forum for laying the foundations of a new principled approach to Asia Agriculture and Animal. To this end, the meeting aims to attract participants with different backgrounds, to foster cross-pollination between different research fields, and to expose and discuss innovative theories, frameworks, methodologies, tools, and applications. For more details, visit: <http://www.icaaa.org/index.htm>

- **Biodiversity Asia 2012: 2nd Asia Regional Conference of the Society for Conservation Biology - Asia Section**, 7-10 August, 2012, JN Tata Auditorium, IISc Campus, Bengaluru (Bangalore), India.

The conference will be co-organized by Society for Conservation Biology-Asia Section, (SCB-Asia), Ashoka Trust for Research in Ecology and the Environment (ATREE), Indian Institute of Science (IISc), and several other institutions. Contact: Secretary, Biodiversity Asia 2012, Ashoka Trust for Research in Ecology and the Environment (ATREE), Royal Enclave, Srirampura, Jakkur PO, Bangalore 560064, India. Email: SCBasiasecretariat@atree.org; Phone: +91-80-23635555; Website: <http://www.scbasia2012.org/>

- **The Second Global Conference on Agricultural Research for Development (GCARD 2)** will be held on 29 October–1 November 2012 at Punta del Este, Uruguay. For more information, please visit site: <http://www.egfar.org/egfar> or contact the organizers at GFAR-Secretariat@fao.org

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