

### Editorial

The ever increasing number of people to feed, especially in the developing countries of Asia-Pacific, means increasing stress on food production and delivery systems. Field management, post-harvest handling, storage, processing and distribution are the points at which food can become contaminated with insect-pests and pathogens putting the health of people at risk. During recent past, outbreaks of cholera, anthrax, salmonella, streptococcus and norovirus were reported from India, Japan, Malaysia, Myanmar, Pakistan and Vietnam.

Adoption of intensive crop and animal production practices including the use of pesticides, antibiotics and animal growth promoting hormones has increased the potential health risks from food. New challenges are being posed by recent practices like organic agriculture, genetically modified foods, nanotechnology in food and agriculture, food additives and even food adulteration. Market globalization leading to larger international trade in raw and processed food items has increased the chances of spread of food-borne diseases and, hence, the challenges to food safety authorities.

Food safety is defined by the FAO/WHO as the assurance that food will not cause harm to the consumers when it is prepared and/or eaten according to its intended use. Such measures are aimed to prevent exposure to unacceptable levels of food-borne hazards along the entire food chain. The Codex Alimentarius Commission, established by the Food and Agricultural Organization of the United Nations (FAO) and the World Health Organization (WHO) coordinates establishment of food standards at the international level. Standards, guidelines and codes of practices developed by Codex are universally accepted for food standardization practices. The Sanitary and Phytosanitary Measures (SPS) agreement of the World Trade Organization (WTO), requires its member countries to harmonize their regulations with the Codex standards. The agreement also requires members to participate actively in Codex deliberations and adopt uniform safety standards for both the domestic and international trade.

In keeping with their national and international obligations, a number of Asia-Pacific countries have taken legislative and operational food safety measures. However, in several other countries specific food safety policies either do not exist or are inadequate. Lack of resources, infrastructure and technical expertise for effective implementation of food safety guidelines and standard operating procedures have been noted as some of the impediments. Regional and subregional cooperation to increase collaboration among national food safety authorities, exchange of food safety information and capacity development has also been suggested.

To focus attention of stakeholders and develop appropriate policies and programs on contemporary issues, the Asia-Pacific Association of Agricultural Research Institutions (APAARI) and its program on biotechnology, the Asia-Pacific Consortium on Agricultural Biotechnology (APCoAB), have been organizing expert consultations, high level policy dialogues and brainstorming sessions on a diverse range of agricultural R&D related topics. In this continuing series, "Expert consultation on Assuring Food Safety in Asia-Pacific" is planned to be organized in collaboration with Japan International Research Center for Agricultural Science (JIRCAS) at Tsukuba on 4-5 August 2014. The two day program of the meeting shall comprise presentation of keynote lectures and national status reports on research, technology development and regulation of food safety; and group discussion on regional R&D priorities for assuring food safety. It is hoped that the recommendations of this meeting will help the NARS to strengthen national policies and programs, and enhance regional and sub-regional cooperation to assure food security and safety for the people of Asia-Pacific.

Editors

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### Executive Committee

Chairman	: Dr. Simon Hearn
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Members	: Dr. S. Ayyappan Dr. Iftikhar Ahmad Dr. Sae-Jung Suh Mr. Misa Koneilo Dr. Mark Holderness Dr. Thomas Lumpkin Ms. Esther Penunia Dr. Mahabub Hossain
Executive Secretary	: Dr. Raj Paroda

### Editorial Committee

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



## APAARI Executive Committee Meeting



*Participants of Executive Committee Meeting*

The APAARI Executive Committee Meeting was held at Royal Princess Hotel, Bangkok on 22 April, 2014 under the chairmanship of Dr. Simon Hearn, Chairman, APAARI. The meeting was attended by 15 participants comprising APAARI members or their representatives and some special invitees. In his welcome address, Dr. Raj Paroda, Executive Secretary, APAARI expressed his appreciation to all the members for attending the meeting despite their busy schedule. He welcomed the Chairman, Dr. Simon Hearn and Vice Chairman, Dr. Masa Iwanaga and thanked them for their excellent support to APAARI. He also welcomed the new member Ms. Esther Penunia representing Asian Farmers' Association, as well other representatives and special invitees.

In his opening remarks, Dr. Simon Hearn welcomed all the participants. He remarked that APAARI had completed another successful year of achievements during which varied and rather relevant activities were carried out. Dr. Hearn complimented Dr. Paroda for his efforts in organizing and executing many activities to cover thematic areas. He opined that agricultural development faces many challenges, for which APAARI and other regional/global organizations need to put in long-term efforts. There is an obvious need to outscale appropriate technologies and demonstrate their impact on development, being main message of the GFAR Steering Committee meeting held recently in Montpellier. CGIAR has made considerable progress through its reform process, but some NARS do not seem to have benefitted. These NARS need to approach CGIAR more proactively and benefit from its various programs, especially the CRPs.

Dr. Raj Paroda presented the report on action taken and the progress made during 2013. Highlights of the same are given below:

- APAARI Executive Committee Meeting was held in Islamabad, Pakistan on 24 October, 2013. Important recommendations of the meeting were: i) Organizing next General Assembly Meeting and Expert Consultation on Maize in Hanoi, Vietnam (27-29 October 2014); ii) Reserve funds be maintained to sustain APAARI activities, iii) Explore possible options regarding legal status of APAARI, iv) Audited accounts for Jan-August, 2013 unanimously approved, v) Ensure harmony between APAARI biennium work plan and GFAR MTP, vi) Consider creation of one additional seat for Private Sector.
- Eight Conferences / Expert consultations / Dialogues were organized during the period under report. Eight publications including the proceedings of conferences / expert consultation / training programs and success stories were brought out.
- APAARI website has been updated with information on new publications, databases and other activities carried out by the organization. Also, links have been provided to other sources on important global and Asia-Pacific agricultural developments.
- APAARI has made special efforts to involve diverse stakeholders including farmers, CSOs, private sector and other NARS in its activities and the stakeholders were sponsored in seven different workshops/ dialogues/ expert consultations.
- The members were apprised about the categories of APAARI members and the status of membership. Currently, there are 20 Regular, 16 Associate, 9 Affiliate and 10 Reciprocal members, making a total of 55. Most members are regular payers of their membership dues, though a few are in the process of clearing their dues.
- The Audited Accounts for the period 1 January –31 December 2013 along with bank statements and audit certificate were presented which were reviewed by the members. A statement of assets and depreciation was also put up to the committee. The Executive Committee approved audited accounts unanimously.
- APAARI was also represented in other important fora such as CGIAR Fund Council, EIAC of Fund Council, Asian Farmers' Association (AFA), Tropical Agriculture Platform, GFAR Steering Committee and GFAR Program Committee.
- APAARI Work Plan for 2014, approved in Islamabad meeting, was presented and endorsed by the Executive Committee. The Work Plan included the meetings/experts consultations/symposia to be organized; APCoAB and APARIS and related activities and strengthening inter-regional cooperation through

ensuring participation of all stakeholders in implementation of CRPs and participation in other Regional Fora meetings.

Following the presentation of Progress Report, the members offered the following valuable suggestions:

- The Committee unanimously expressed its high appreciation of the commendable progress made by APAARI, particularly the range of AR4D activities carried out. The members complimented Dr. Paroda on the remarkable achievements of APAARI.
- Along with food security, there is a need to ensure nutrition security, particularly in developing countries. For this purpose, priority must be given to biofortification, adoption of pulses especially soybean as protein source, popularization of healthy and nutritious food and food diversification.
- APAARI should take initiative on promoting soybean to address protein malnutrition particularly among children.
- APAARI may consider organizing an expert consultation during 2015 on nutrition with emphasis on biodiversity based food diversification.
- Pulse production has remained low due to biological factors that limit yield of these crops. However, as exemplified by soybean, research efforts can bring about substantial yield improvement in other leguminous crops.
- A serious handicap to adoption of improved technologies by smallholder farmers is the weak linkage between research and extension workers. There is an urgent need to strengthen these linkages by involving researchers in extension and vice-versa. APAARI can play a significant role in sensitizing NARS about these gaps and suggesting appropriate solutions in collaboration with proposed network by FAO RAP.

### The XVI APCoAB Steering Committee Meeting

The XVI Steering Committee Meeting of Asia-Pacific Consortium on Agricultural Biotechnology (APCoAB) was held at Royal Princess Hotel, Bangkok on 22 April 2014. The meeting was chaired by Dr. Simon Hearn, Chairman, APAARI and attended by 14 participants comprising SC members or their representatives, and special invitees.

APCoAB progress report was presented by the Coordinator, Dr. J. L. Karihaloo which included details of: i) Steering Committee Meeting held at Bangkok on 15 April, 2013; ii) stakeholders' Dialogue on Biosafety Regulations in the Asia-Pacific Region held at Bangkok on 16-17 April, 2013; iii) APO Asian Food and Agribusiness Conference 2013: Biotechnology and Global Competitiveness held in collaboration with COA and APO at Taipei on 15-18 July, 2013; iv) Asia-Pacific Symposium on Molecular Breeding held in collaboration with AVRDC and COA at AVRDC, Tainan, 1-3 October, 2013.

Besides, four publications, i) Stakeholders' Interface on Genetically Modified Crops – Proceedings and Recommendations; ii) Expert Consultation on Managing Trans-boundary Diseases of Agricultural Importance in the Asia-Pacific – Proceedings and Recommendations; iii) Stakeholders' Dialogue on Biosafety Regulations in the Asia-Pacific Region – Proceedings and Recommendations, and iv) Proceedings of Asia-Pacific Symposium on Molecular Breeding were brought out.



*APCoAB Steering Committee Meeting*

The members appreciated the progress made by APCoAB and made some important suggestions including creation of greater awareness about open source technologies and stressing the need for public sector organizations to enhance and improve biotechnology related public communication. COA announced continuation of funding support to APCoAB for another term of three years.

Audited Accounts for 2013 along with budget for 2014 were approved by the Steering Committee. The approved work plan for 2014 included organization of Expert Consultation on Assuring Food Safety in Asia-Pacific, in collaboration with JIRCAS (4-5 August 2014); 2014 International Conference on Prevention and Control of Avian Influenza, in collaboration with COA; and Training programs on *In Vitro* Conservation and Cryopreservation for Conservation of Plant Genetic Resources – in collaboration with Indian Council of Agricultural Research (17-28 February 2014) and Food Safety, in collaboration with ICRISAT (1-14 September 2014) and Dairy Cattle and Goat Milk in collaboration with COA.

## The XII APARIS Steering Committee Meeting

The XII Meeting of the APARIS Steering Committee was held on 22 April, 2014 at the Royal Princess Hotel, Bangkok, Thailand under the chairmanship of Dr. Simon Hearn, Chairman APAARI and Principal Adviser, Australian Centre for International Agricultural Research (ACIAR). Six members of the committee and special invitees attended the meeting.



*The meeting of APARIS Steering Committee*

Dr. Raj Paroda, Executive Secretary, APAARI in his address welcomed all the members and appreciated them for sparing their valuable time to attend the meeting. He also appreciated the continued support by ACIAR, FAO and AIT to the APARIS program.

Dr. Simon Hearn, Chairman welcomed all the members of the APARIS Steering Committee and special invitees to the meeting. He emphasized the importance of communication as a tool to adopt and transfer information to different stakeholder groups. He opined that adoption of technology is based largely on good information system. Dr. Simon Hearn expressed his appreciation for the work of APARIS on the sharing of information through both publications and APAARI website. He further stressed on the challenges concerning agricultural development in the region, which requires effective communication systems and highlighted the important role being played by APARIS in this direction.

Dr. Jonathan Shaw, Executive Director of AIT Extension and Dr. Kevin Gallagher, Agriculture Research, Extension and Education (REED) Officer of FAO RAP, appreciated the collaboration between their organizations and APAARI and expressed their keen desire for continued cooperation and possible supports in future activities of APARIS.

Ms. Chanerin Maneechansook, Program Assistant, APARIS presented the Action Taken Report on the decisions taken in the Eleventh Meeting of the APARIS Steering Committee held on 13 October, 2012 at NASC Complex in New Delhi. The Committee acknowledged the progress made by APARIS and approved both the minutes and the action taken report.

## APARIS Work Plan 2014

The following work plan for 2014 along with budget was approved as follows: i) Collection of case studies/success stories on the use of ICT in agriculture in Asia-Pacific region; ii) Regional Workshop on Open Journal System (OJS), iii) Maintenance of APARIS web space, renewal of dedicated web server, redesigning of website and updating of databases; iv) APAARI Newsletter and APAARI on CD 2014; v) establishment of linkages with global, regional and sub-regional fora enabling their partnerships in the APAARI activities.

Dr. Keven Gallagher opined that it was necessary to put more attention on enhancing public understanding of science because surveys indicate that people have low interest in science and they tend to avoid it. Besides, he suggested to always keep in mind the public readability when preparing information and content of articles.

Dr. Simon Hearn in his closing remarks conveyed his appreciation of the progress made by APARIS. He thanked all the members for attending the meeting and appreciated their valuable contributions to strengthen APARIS activities in the region.

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



*Participants of the Training Course*

An international training course on 'In Vitro and Cryopreservation Techniques for Conservation of Plant Genetic Resources' was organized from 17 - 28 February, 2014 at National Bureau of Plant Genetic Resources (NBPGR), New Delhi in collaboration with Indian Council of Agricultural Research and Bioversity International. This is fourth such training program organized by APCoAB for APAARI member organizations. In this course, nominees from MARDI, Malaysia; SLCARP, Sri Lanka and DOA, Thailand, besides 13 other national and international trainees, participated.

*(Continue on page 7...)*

## Kasetsart University Library



*Kasetsart University Library, a knowledge center on agriculture*

Kasetsart University Library was established in 1943. From its inception, the small library provides services to the University faculty, students and staff as well as the staff of Department of Agriculture. In 1951, the library was merged with the library of the Department of Agriculture and was renamed "Central Library". The Library was a Section under the Ministry of Agriculture and Cooperatives until 1957. It was later transferred to the Office of University Affairs which oversaw all higher learning institutions. The Library gained faculty status in 1977.

### Vision

Kasetsart University Library aims to be Kasetsart University's Knowledge Center, as well as the country's Digital Library on agriculture and the Green Library focusing on energy saving and environmental conservation.

### Mission

The Library acquires and collects information on all disciplines. Modern technology is used in administration and providing services by well-trained staff with the determination to contribute to the University's academic excellence.

### Services for Education and Research

To increase the quality of the University's education and research, the KU Library is entitled to provide academic services to the University's personnel. It is responsible for being the University's knowledge repository, digital library on Thailand's agriculture, and a green library which conserves energy and environment, managing and developing services using the sufficient economy philosophy, proactively developing and enhancing services to increase the educational quality, providing information services to support learning and teaching and research for Kasetsart University students, faculty, and staff. In addition, Kasetsart University Library is the country's first prototype eco-library and one of the country's agricultural knowledge service centers having the most complete database. Currently, the Library acts as Thai National AGRIS Center (International Information System for the Agricultural Sciences and Technology, AGRIS), and was selected by the International Development and Research

Center (IDRC) to act as the International Buffalo Information Center (IBIC), the Current Agricultural Research Information System (CARIS) and the Agricultural Information Network Center of the Thai NATIS (National Information System), and a member of the Thai Library Integrated System (ThaiLIS), and the core library of the Kasetsart University Library Network (KULINET).

The Library occupies two buildings; the Tepparat Vittayachot building and the Chuangkasetinlapakan building to provide distinguished services as follows:

- Self-checkout Machine Service
- Laptop Loan Service
- Self/Group Study Room Service
- Information Literacy Service
- Research Square –reading area for study and research
- Research Information Service
- Delivery Service –book delivery as requested by faculty members/researchers/ academicians
- Kasetsart University Agriculture Knowledge Center (AGKC)
- International Buffalo Information Centre (IBIC)
- Thai National AGRIS Center
- Video on Demand Service
- Language Learning Room Service
- Theater/ Mini Theater Room Service
- Garden Library Services
- Eco-Library –Library for life and environment



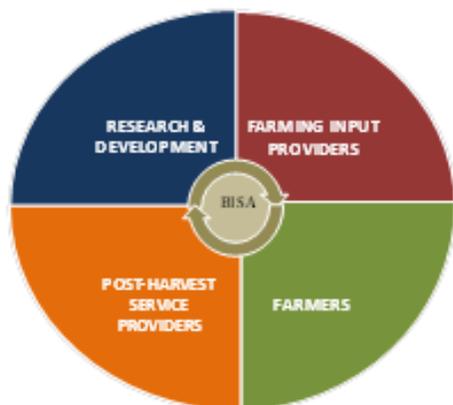
*The green digital library focuses on energy saving and environmental conservation*

The library together with its various branches currently holds 504,552 volumes of books at Bangkok campus, audiovisual 4,864 titles and 95,677 microfiches and 38 (e-journal, e-book) database for services at the main Library and subscribes to 2,025 periodical titles. The statistics shows that approximately 3,500 persons use the library services each day.

For more information, please visit: <http://www.lib.ku.ac.th> or phone +66-2-942-8616

## Borlaug Institute of South Asia (BISA)

India became self-sufficient in wheat production in 1968, after Indian farmers planted and harvested semi-dwarf wheat varieties from Mexico. Nobel Peace Prize Laureate Dr Norman Borlaug started the historic agricultural revolution that helped deliver 50 years of food security to the South Asia region. Today, despite the progress in agricultural productivity, South Asia is slipping into another food and nutrition security crisis. Studies indicate that annual growth in South Asia's wheat productivity (tons per hectare) is slowing down just as demand is increasing rapidly, due in part to population growth. Significant food price increases are also witnessed.



*BISA's Role as a Catalytic R4D Coordination Platform*

Moreover, impacts of climate change, land scarcity, shrinking groundwater tables, population growth, increased affluence and changing diets are major challenges. Also, the technologies that enabled the region's first Green Revolution have mainly benefited high-potential and irrigated areas, while farming practices in dryland and rainfed areas remain largely unchanged. Even those areas that benefitted the most now risk becoming victims of their own success – the Green

Revolution's agricultural boom has strained natural resources, a situation that will only worsen under the stresses of a changing climate.

Recognizing these challenges, the International Maize and Wheat Improvement Center (CIMMYT), the Ministry of Agriculture, Govt. of India and the Indian Council of Agricultural Research (ICAR) have taken a key step to address food and nutritional needs in the region by establishing the Borlaug Institute for South Asia (BISA) - An International Agricultural Research Institute for Maize and Wheat Systems in South Asia to employ novel tools and strategies to catalyze the region's progress in agricultural research for development (AR4D).

### Mission

BISA is a state-of-the-art research institute that provides an apolitical platform for developing and coordinating access to innovative solutions for agricultural value chain stakeholders. BISA is developing an agricultural research platform, demonstration plots and training facilities throughout the region, with a focus on holistic, interdisciplinary, collaborative approaches to AR4D in breeding, conservation agriculture and socioeconomics for wheat and maize-based cropping and food systems. BISA's facilities and formal institutional mechanisms allow strategic, intensive and meaningful collaboration between regional and international scientists, as well as public and private stakeholders across the region's agricultural value chains.

Inter-institutional, interdisciplinary, international knowledge exchange, as well as the exchange of seed varieties, will be among BISA's most important contributions to the region's sustainable agricultural growth, setting it apart from existing research institutes. BISA will facilitate direct, sustained contact between international and regional researchers and downstream stakeholders – farm service providers, retailers and farmers themselves – to ensure that research products and technologies are designed to have optimal impact and appeal among those stakeholders. BISA also will help create a new generation of agricultural researchers who are connected internationally and have the first-hand knowledge of the context in which their research will be applied. It will offer world-class infrastructure for cutting-edge research relevant to the region and its farmers, including those with small land holdings.

Rather than duplicating existing efforts, its mission is to provide a platform to create synergies between existing efforts

and to identify areas in the value chain where further activity is needed. BISA is backed by CIMMYT and receives supported from ICAR.

The development and sharing of food security knowledge in South Asia is generally constrained due to geopolitical environments that confine research within one country or an organization, inequitable access to technological improvements and the disconnect between international and localized efforts. BISA is uniquely positioned to serve this function in South Asia as an impartial, regional non-profit coordinating platform for discovery and sharing best practices.

### **BISA's Impact**

There are three key areas that will benefit the most from BISA:

- End-user farmers and the society: Demonstration sites and technology transfer centers will be established on farms in partnership with existing agricultural research and extension programs. BISA will provide opportunities for researchers in South Asia to interface directly and consistently with farmers and other intended technology users.
- Private sector value chain members (input and post-harvest product and service providers): BISA will conduct or facilitate the execution of value chain analyses and market size assessments in order to target production increases to meet demand and define business opportunities (particularly for women). It will engage farm equipment manufacturers and seed businesses in innovation platforms for the accelerated development of local and competitive intellectual property. It will also ensure the dissemination of precision agriculture information and decision support tools through cell phone and internet-based technologies.
- The AR4D scientific community: BISA will establish state-of-the-art research facilities to work with and support the agricultural R&D community in South Asia. It will accelerate breeding progress among local public and private sector breeding programs with new know-how and adapted lines that carry unique traits. It will also establish platforms for long-term field experimentation and training on sustainable production

systems that utilize scale-appropriate conservation and precision agriculture technologies and practices, and geographical information system-reflective spectroscopy (GIS-RS) information. BISA will establish research platforms for research in cutting-edge science such as double haploids and high throughput plant phenotyping technologies. These facilities will be made available to all those who are involved with agriculture research.

In India, BISA has developed its research stations at three strategically selected sites on 1,200 acres of prime agricultural land that the Government of India, jointly with the respective State Governments, have generously granted to the Institute on nominal lease terms. Located at Ladowal, near Ludhiana, Punjab; Pusa, Bihar; and Jabalpur, Madhya Pradesh, the sites represent three different agro-climatic and socioeconomic environments typical of different parts of South Asia. The governments of Nepal and Pakistan have also taken the first step towards establishing BISA in their countries. The initial sites in India will showcase BISA's novel operating model, generating further interest from stakeholders to eventually establish additional research stations in other South Asian countries.

*(Source: Vibha Dhawan, Deputy Director, Research Partnership & Coordination, CIMMYT-India, V.Dhawan@cgiar.org)*

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### **International Training Course on *In Vitro*...Continued from page 4**

The course comprising 23 lectures and 11 practical exercises was conducted by 16 technical experts from India, United Kingdom and Belgium. The topics included: in vitro conservation and cryopreservation of germplasm of vegetatively propagated and non-orthodox seed species and use of molecular tools for plant genetic resources (PGR) management and conservation of plant genomic resources. The role of APCoAB and APAARI in promoting agricultural research through policy advocacy, knowledge dissemination and capacity building was also discussed in a separate lecture. Visits to other agricultural research, development and extension centers in Delhi were organized towards the end of training course.

## Pakistan

### Capacity Building Workshop by PARC



*Participants of the workshop*

The Social Sciences Division (SSD) in collaboration with the Planning & Development Division (P&DD), Pakistan Agricultural Research Council (PARC) offered a training workshop titled “Capacity Building for Writing Technical Proposals for Grants” to agricultural scientists from the Sindh province. Main objective of the workshop was capacity building of Provincial researchers/ scientists for writing of quality technical proposals for competitive grants under Agricultural Linkages Program (ALP).

The Workshop organized at National Agriculture Research Center (NARC) during 9-13 February, 2013. It was second in the series of seven workshops planned for the federal capital, all four provinces, Azad Jammu Kashmir and Gilgit-Baltistan. This workshop focused participation of scientists, researchers and educators from the agricultural research and education organizations of Sindh.

International Food Policy Research Institute (IFPRI), Islamabad collaborated with PARC experts in this effort to design the course contents, materials and provide two valuable resource persons who delivered lectures in association with the PARC team. The participants were trained in all aspects of technical proposal writing, right from research idea development to submission and follow-up of the proposal. A lecture on the use of Google Scholar for searching peer reviewed literature was also introduced for those having limited access to the online journals. The scientists trained assured to organize similar events at their organizations with the help of PARC experts and take their help to organize more provincial sessions and train scientists from more organizations in Sindh Province.

*(Source: Muhammad Altaf Sher, Director International Cooperation, PARC, icparc@yahoo.com)*

## Philippines

### PCAARRD inks MOU with MAP

The Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD) signed a Memorandum of Understanding (MOU) with the Management Association of the Philippines (MAP) recently to promote collaboration between the S&T community and the business sector.

The MOU stipulates that MAP would share their knowledge and expertise in the promotion of R&D-generated products of PCAARRD. It also covers joint programs, projects, and activities between PCAARRD and MAP. The MOU also reaffirms the commitment of MAP and PCAARRD to inclusive and sustainable growth as it recognizes the critical role of research output commercialization to enrich economic domestic dynamics.

In the MOU, MAP is expected to: i) encourage MAP members to be business partners of PCAARRD in commercializing the Council’s research outputs on agri-based products; ii) assist PCAARRD in developing the program for a “Matching Forum” in 2014; and iii) Support PCAARRD in the conduct of all information campaign activities related to commercialization of research outputs.



*Signing of MOU*

On the other hand, PCAARRD is expected to: i) provide MAP with relevant information to encourage its members to be partners of PCAARRD in the commercialization of its research outputs; ii) assist MAP in identifying and reaching out to key stakeholders within MAP, the Government, and the business sector who may serve as business partners of PCAARRD for the commercialization of its outputs; and iii) support MAP in the conduct of all information campaign activities related to the commercialization of PCAARRD’s outputs.

*(Source: Dr. Patricio S. Faylon, Executive Director, PCAARRD, p.faylon@pcaarrd.dost.gov.ph)*

## PCAARRD and ACIAR Launch Manuals



*Launching of Manual*

The Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD) and the Australian Center for International Agricultural Research (ACIAR) recently launched two technical manuals titled: "Lung Scoring: A Tool for Improving Swine Respiratory Disease Investigation, Diagnosis and Control" and "Field Sample Collection: A Quick Reference for Swine Respiratory Disease Investigation and Diagnosis."

The manuals are products of the PCAARRD-ACIAR project for improved investigation, diagnosis, and technical support for the control of respiratory diseases of pigs in the Philippines and Australia.

The manuals were also developed by the project in support of its R&D initiatives for swine respiratory disease surveillance and diagnosis. Its publication aims to foster capacity-building activities and cultivate adoption of best practices in the industry particularly among veterinarians and technical field personnel involved in disease surveillance. These manuals may also serve as reference for researchers, teachers, and students.

The launch was held during the project's joint R&D program review at the Oasis Hotel, Angeles City, Pampanga. Project partners from the Bureau of Animal Industry (BAI), Department of Agriculture Regional Field Unit 3-Regional Animal Disease Diagnosis Laboratory (DA RFU 3-RADDL), Provincial Veterinary Offices (PVOs) of Bulacan and Pampanga, and University of Queensland (UQ) in Australia participated in the review and launch.

PCAARRD Executive Director Dr. Patricio S. Faylon, Australian Project Leader Patrick Blackall, and ACIAR Program Manager for Animal Health Mike Nunn led the hand-over ceremonies of the manuals to project partners. The hand-over signals that the project's work will be continued by its local Government unit partners in their work as regulatory and implementing agencies for pig health.

*(Source: Dr. Patricio S. Faylon, Executive Director, PCAARRD, p.faylon@pcaarrd.dost.gov.ph)*

## Nepal

### NARC established Coffee Research Program

Nepal Agricultural Research Council (NARC) established Coffee Research Program at Bhandaradanda, Baletaxar VDC of Gulmi District, Nepal. It is a 1st Center for the Coffee Research in Nepal. Chief Secretary of Nepal Government Mr. Lilamani Paudel was the Chief Guest for the Coffee Research Program opening ceremony. The ceremony was organized on 16 April, 2014. This research program covers a total of 100 ropanies of land for coffee plantation and research works which was provided to NARC as per the decision of Nepal Government.

The opening ceremony was chaired by Dr. Dil Bahadur Gurung, Executive Director, NARC. Crop and Horticulture Director of NARC, Mr. Yagya Prasad Giri welcomed to all the guests and participants and highlighted the objectives of the program. Besides, Chief District Officer, Ex-parliament Member, representatives from different district level political parties, Journalists, Director of Regional Directorate of Agriculture, Pokhara were also present in the ceremony.



*Opening Ceremony of the research center*

Similarly, more than 400 neighborhood farmers, Chiefs of Gulmi different offices in District Headquarter were also present. Speaking on the Ceremony, Mr. Lilamani Paudel (Chief Secretary, Nepal Government) said that this Coffee Research Program is the 1st and the only one in Nepal and is important for the local and other people of Gulmi and the countries. He further emphasized that all coffee problems will be identified and solved accordingly. It is hoped that after the establishment of the Coffee Research Center, farmers will be benefitted from the Coffee Research Program.

For more details, please visit <http://narc.gov.np/narc/index.php>

## CAPSA

### Enhancing Agricultural Research and Extension Linkages

Increasing demand for diverse and quality food production and processing poses a challenge for the Asia-Pacific region. Climate change, diminishing natural resources, increasing urbanization and continuing global economic uncertainty are also putting pressure on food production systems aimed to eliminating hunger and poverty.

Sustainable intensification of agricultural production requires efficient research and extension systems that support development and absorption of innovative practices and technologies. This requires investment in research, incorporation of best practices and enhanced integration with the work of farmers' groups, civil society organizations and the private sector, including information and communication technology (ICT) service providers.

The Expert Consultation on 'Strengthening Linkages between Research and Extension to Promote Food and Nutrition Security' that took place on 11-12 December 2013 in Bangkok, Thailand, brought together national leaders in research and extension as well as representatives of civil society, private sector and international organizations.

The Consultation was jointly organized by the Food and Agriculture Organization of the United Nations (FAO) and the Centre for Alleviation of Poverty through Sustainable Agriculture (CAPSA), a regional center of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), with support from the Asia-Pacific Association of Agricultural Research Institutions (APAARI) and the European Union funded project 'Network for Knowledge Transfer on Sustainable Agricultural Technologies and Improved Market Linkages in South and South-East Asia' (SATNET Asia)'.

This interactive forum aimed to assess existing research-extension system linkages in the light of above mentioned challenges, identify opportunities and gaps and explore how research-extension services can contribute to present and future food and nutrition security for the region's growing population with changing dietary demands.

The meeting agreed upon an Action Framework to guide stakeholders in enhancing research-extension linkages and partnerships for follow-up actions in the region. It is expected to contribute to more sustainable food systems and help improve farm productivity in Asia and the Pacific. As a key outcome, Mr. Hiroyuki Konuma, ADG FAO RAP, announced support for incubation of an Asia-Pacific

regional network for agricultural extension services with an aim to enhance agricultural research and extension linkages to harness research results for the benefit of farmers, especially smallholder farmers.

The Network will be hosted by FAO-RAP for the initial incubation period of 2-3 years until the transfer of the secretariat function to a participating country. It would include Government, international/regional organizations, NGOs/CSOs (civil society organizations) and private sector actors involved in rural advisory services, regulatory actions, ICT applications and other extension services. The SATNET Asia project can provide useful linkages with existing networks and capacity - building activities. In addition to the Network, the following key deliberations were among the outcomes of the meeting:

#### Adapting to a new research-extension environment

There is a need to reorient the institutional capacity of extension systems to better align with the change in research focus towards climate-smart agriculture and sustainable practices. The paradigm shift from input-intensive to knowledge-intensive agriculture needs to go hand-in-hand with promoting innovative thinking in extension systems to focus on diversified farming systems, and sustainable value chains and industries.



*Closing Session of the Expert Consultation*

#### Creating space for research-extension interface

Extension and outreach can be built into research projects to encourage a research-to-adoption continuum instead of research and extension working separately. The commercialization of science outputs can accelerate the use of research findings by farmers. The increased involvement of researchers in farmers' fields can also provide opportunities for them to be extension agents, better assess farmers' needs and socioeconomic constraints, and to undertake adaptive and applied research.

### Enhancing quality of extension services

Extension systems must deliver up-to-date, accurate and location-specific information and services to farmers. In this context, development of legal frameworks defining roles and responsibilities of all extension stakeholders should be assessed. Capacity building of extension agents should also ensure that their knowledge keeps ahead of that of their clientele and must address the shift in emphasis in their role from technology transfer to facilitating knowledge-sharing as 'knowledge brokers'. The use of ICT in delivery of extension services can expedite outcomes in a cost-effective manner.

### Mobilizing resources and establishing stakeholder partnerships

Innovative mechanisms to leverage additional resources such as creation of a competitive investment fund for agricultural extension and innovation to support entrepreneurial ideas should thus be explored to address the frequent budgetary constraints faced by these systems. The engagement of other stakeholders such as the private sector and CSOs in delivery of integrated research-extension services needs to be further strengthened and institutionalized, and their involvement in multi-stakeholder national consultations promoted.

### Fostering enabling policy initiatives

The public sector has a central role in providing integrated research-extension services in most countries while also enabling access to knowledge and undertaking overall regulation and monitoring. Government policy initiatives can be leveraged to promote a market-alignment and technology provider role for the private sector, a community mobilization role for NGOs, and a cost-sharing and change-facilitator role for development agencies. Supporting innovation by small and medium agricultural enterprises, investment in research and extension systems, increased use of ICT, promotion of fairly managed contract farming, and sharing of experiences on implementation of national agricultural extension policies and impacts, are other examples of enabling policy interventions.

### Documenting evidence

Documenting this impact and spreading greater awareness about impact pathways and potential returns from agricultural innovation can facilitate advocacy initiatives and attract investors. The Expert Consultation offered a vibrant forum for knowledge sharing and learning, and a valuable opportunity to take stock of the current state of agricultural research and extension systems in Asia and the Pacific. The Action Framework that was developed will guide actions of stakeholders to ensure that the benefits of agricultural research results are efficiently translated into practice and adopted by farmers to achieve their food security and nutrition.

*(Source: Martina Spisiakova, Knowledge Management Officer, CAPSA, m.spisiakova@uncapsa.org)*

## BRAC

### Community-led Research on Sustainability of Fodder Crops in Bangladesh

Agricultural land use in the coastal areas of Bangladesh is yet to improve. The cropping intensity of this region is low as compared to the country's average. About 1.0 million ha rice land is severely affected by salinity in dry and flooding in wet season. Farmers mostly grow low-yielding traditional rice in monsoon (Aman) season. Most of these lands remain fallow in the dry (Rabi/Boro) and pre-monsoon (Aus) seasons. The salinity intrusion also has impact on the livestock production due to the crisis of fodders in the coastal area. This results in reduction of weight gain in animal and less milk production. The current deteriorated state of much of fodder production is a major concern for livestock especially on the saline prone coastal area.

For increasing production of livestock, it is essential to improve the feeding systems. Due to the non-availability of good quality feed and fodder, the production of milk and health status of livestock is very poor in the coastal areas of Bangladesh. During the past, very little attention was paid for the development of pasture and fodder in the coastal areas. This can be attributed to lack of knowledge of suitable forage species, their agro-technology and availability of seed or planting materials. Now efforts are being made to introduce highly nutritive, palatable and high yielding varieties of grasses to proliferate in the coastal areas at various altitudes. All the agencies occupied with the research and development activities of forages have transferred the technology to farmers using various methodologies. Community led participatory action research has been one of the most important research pursuits under which research is being done by the community and the farmers are made aware of the methodologies for fodder production.

This community based participatory action research was implemented by BRAC & WorldFish under the CGIAR Research Project of Aquatic Agricultural System (AAS). The key program objectives were to develop skills and innovation capacity of farmer's, increase benefits from environmentally sustainable increases in system productivity, socio-ecological resilience and adaptive capacity, reduce gender disparities in access to and control of resources and decision making, improve policies and institutions to empower aquatic agricultural systems users and effective knowledge sharing and learning.

Poor and marginalized farmers, livestock pastoralists including both men and women were the target groups. Almost 200 households were involved directly in the action research and many more households engaged through meetings and campaigns as part of the dissemination of knowledge. In the coastal areas of Bangladesh, four upazilla, two from Khulna district, one from Shatkhira district and one from

Barguna district i.e. Dumuria and Batiaghata, Kaliganj and Amtali, respectively were selected for fodder production to compare the productive efficiency and the sustainability in coastal areas of three different fodders i.e. napier, para grass and jamboo grass.



*Participating farmers recording yield data*

A Research Support Team (RST) was formed through professionals with diverse experiences in research, extension and community management under BRAC leadership. The RST was primarily provided timely year-long program of science support to the farmer-led research initiatives on livestock fodder undertaken by AAS. BRAC coordinated this Research Support Team in attaining the project objectives.

Farmers carried out the research activities and record-keeping under the guidance of RST. Innovative ideas were developed and used by farmers (e.g. use of polythene to protect from excessive rain) in carrying out the research activities.

First harvesting was done at 60 days after sowing. Jamboo grass produced the highest fresh yield of 2.03 kg m<sup>-2</sup> where Napier and Para produced 1.75 kg m<sup>-2</sup> and 1.42 kg m<sup>-2</sup>, respectively.

Subsequent harvesting was done at 40-45 days interval. Para grass was found better in wet and submerged habitat in visual observation while Napier and Jambo grass favour in sunny and high land. Among these three varieties, Para grass can tolerate soil salinity slightly.

Before the intervention, the concept of fodder cultivation was alien to the farmers in the village and only a handful of farmers in the villages used to cultivate fodder for their cattle. The fodder requirement was generally met from grasses grown wild in fallow lands. Milk production used to come down by over 50 per cent in the summer months due to fodder scarcity in the villages, which made cattle rearing uneconomical and unattractive. After the inception,

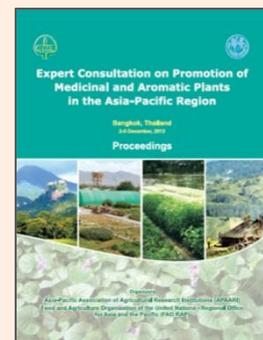
areas under improved varieties of fodder increased tremendously, some of the farmers have started selling fodder in their village market. About 96 per cent of the direct beneficiaries in the village inspired by the performance of the project are interested in further area expansion under fodder cultivation.

Inadequate availability of good quality fodder is the major limitation in further development of the livestock sector in the country. This intervention is envisaged to result in putting in place community based mechanisms aimed at sustainable management of grazing lands, especially around the coastal regions. It also aims at involving the rural communities through active participation, developing their research skill and innovative capacity, towards practicing fodder cultivation. It is expected that the initiative would result in enhancing the fodder availability. This will have a very significant impact on the subsistence rural economy, improving social status and reducing gender disparities, particularly in respect of rural poor/ landless people depending upon livestock rearing.

This community based research provides an entry point for farmer-led participatory adaptation, in which knowledge and suggestions from external experts are combined with the initiatives of local people in joint exploration of promising innovations. It strengthens local capacities for a continuing process of adaptation, as it empowers rural communities to plan for and cope with impacts of fodder for livestock both now and in the future.

*(Source: Dr. Md. Sirajul Islam, Program Head, Agriculture and Food Security Program, BRAC, sirajul.i@brac.net)*

## APAARI Forthcoming Publication



Proceedings of the Expert Consultation on Promotion of Medicinal and Aromatic Plants in the Asia-Pacific Region

## AFA

### Sixth AFA General Assembly Meeting



*AFA General Assembly Meeting in Session*

The sixth General Assembly Meeting of Asian Farmers Association (AFA) was organized at Bali, Indonesia on 6-9 May, 2014. AFA members, partners and other stakeholders attended the deliberations. Dr Bhag Mal, Consultant represented APAARI in this meeting. The meeting provided an opportunity to learn about the activities of AFA and the role of its stakeholders and other partners and also provided opportunity to APAARI to share its outstanding work and salient accomplishments with the participants.

On 8 May, 2014, a workshop on “AFA Initiatives on International Year of Family Farming (IYFF) Priority Agenda: Of Lands, Production and Marketing Issues” was organized and was facilitated by Lany Rebagay. Several presentations were made by AFA members and representatives of PROLINOVA, GFAR and APAARI. On Behalf of APAARI, Dr Bhag Mal, Consultant made a presentation on “Opportunities for Farmer-led APAARI Processes” which was received very well by the AFA members and other stakeholders. The achievements of APAARI were indeed were highly appreciated by the participants.

On 9 May, 2014, the General Assembly meeting was organized which was facilitated by the AFA Chair. The agenda items included presentation of progress report of 2012-2014, Work Plan for 2014-2016, amendments, election of office bearers and commitments by partners and stakeholders for solidarity with AFA. The solidarity message for APAARI was presented by Dr Bhag Mal, which is as follows:

- APAARI believes in inclusive growth of agricultural research for development (AR4D) with involvement of all

stakeholders including farmers. It has one seat on its Executive Committee for farmer associations. Currently, Ms. Esther Penunia, Secretary General, Asian Farmers Association (AFA) is on the Executive Committee of APAARI.

- AFA has an added value in the CSO community in the Asia-Pacific region particularly in promoting the interest of smallholder women and men farmers, as it can raise the voice at appropriate platforms and project the problems of farmers and their organizations so as to convince the researchers and policy makers to find right solutions of specific problems.
- There is an urgent need for considerable improvement in areas such as: i) strengthening skill enhancement and building capacity of farmers and their organizations, ii) reorienting research from commodities to farming systems mode with involvement of all stakeholders including farmers in planning and implementation of AR4D, and iii) increasing awareness among the farmers and policy makers so as to create enabling policy environment.
- Key challenges that need to be addressed include: i) establishing resource sharing and knowledge sharing centers for development of production value chain, ii) strengthening linkages between research, advisory and extension services through effective partnerships, and iii) greater participation of women farmers in the organization as well as the production value chain.
- Possible areas of cooperation between AFA and APAARI are: i) providing a platform for discussion about the needs of farmers and redressing the problems faced by them, ii) support the participation of AFA representatives in APAARI organized meetings, and iii) exchange of information, knowledge and technologies relating to AR4D through publications of APAARI and APAARI website ([www.apaari.org](http://www.apaari.org)).
- APAARI recognizes the important role and good services being rendered by AFA for the cause of farmers. APAARI is committed to continue strengthening collaboration and partnership with AFA for the overall wellbeing of farmers (both men and women) in the Asia region and wishes a great success to AFA in its noble endeavours.

*(Source: Dr. Bhag Mal, Consultant APAARI, [b.mal@apaari.org](mailto:b.mal@apaari.org))*

## FAO RAP

### 32<sup>nd</sup> FAO Regional Conference for Asia and the Pacific



*Opening Session of the Conference*

More than 200 participants representing member countries in Asia and the Pacific, observers from other UN specialized agencies, international non-governmental organizations, intergovernmental organizations, civil society, international and national media attended the 32<sup>nd</sup> FAO Regional Conference for Asia and the Pacific in Ulaanbaatar, Mongolia, on 10-14 March, 2014.

The conference was organized in two parts: a Senior Officers Meeting on 10-12 March, and a Ministerial-level Meeting on 13-14 March. The Senior Officers Meeting was inaugurated by Mr. Hiroyuki Konuma, Assistant Director-General and Regional Representative of FAO, and His Excellency, Khaltmaa Battulga, Minister for Industry and Agriculture, Government of Mongolia. Mr. Hiroyuki Konuma outlined key challenges facing the region in efforts to reduce poverty and food insecurity and updated delegates on developments in FAO. His Excellency, Khaltmaa Battulga, welcomed delegates and formally opened the meeting. He highlighted the importance of cooperation and partnership to enhance food security throughout the region.

The first two days of the Senior Officers Meeting focused on in-depth discussion on regional and global policy and regulatory issues in the Asia-Pacific which was organized under six sessions: i) state of food and agriculture, future prospects and emerging issues, ii) update on the Committee on World Food Security, iii) realizing economic opportunities in agriculture to promote greater food security in Pacific Island countries, iv) meeting farmers' aspirations in the context of Green Development, v) restoration of grasslands and forest for climate change mitigation and adaptation, and the promotion of ecosystem services and vi)

program and budget. A field visit to a herder's camp and family farm was also organized on the third day.

The last two-days, 13-14 March, were dedicated to a high-level ministerial session involving the Minister, Vice Minister and high-level delegates of participating countries. The conference highlighted the challenges in achieving food and nutrition security faced by many countries such as climate changes and devastating natural disasters. The discussion also focused on measures to speed up progress of alleviating hunger in the region where the need of promoting sustainable agricultural production and productivity, open and efficient trade of food, effective food value chains, enhancing food safety and quality, and capacity building were emphasized as important keys. A round table on the double burden of malnutrition was held on the last day of the conference.

Mr. Lkhasuren Choi-ish, representative of the Government of Mongolia, in his closing remarks thanked the participants for their contributions which had led to the success of the Regional Conference. He called for renewed efforts and collaboration in addressing the challenges of combating hunger and ensuring sustainable rural development in the region.

For full details on the regional conference, please visit <http://www.fao.org/docrep/meeting/030/mk077e.pdf>

### New APAARI Publications

- Wax Apple Industry in Taiwan: A Success Story
- Proceedings of the Asia-Pacific Symposium on Molecular Breeding held on 1-3 October 2013 in Taiwan
- APAARI Flyer 2014



The publications are available for free download at:  
[www.apaari.org](http://www.apaari.org)

## ICARDA

### Third Regional Coordination Meeting of ICARDA-SACRP

The Third Regional Coordination Meeting of ICARDA South Asia & China Regional Program (SACRP) was held at the Chinese Academy of Agricultural Sciences (CAAS), Beijing, China from 16-21 June, 2014. The main objective of the meeting was to discuss the progress made in various areas of collaborative research in South Asia & China since 2009 and to develop future areas of research for development partnerships. NARS leaders and scientists from Bangladesh, Bhutan, China, Nepal, India and Pakistan participated in this important meeting. Various technical sessions were organized to facilitate detailed discussions on technical aspects, review country-wise on-going collaboration with ICARDA and future prospects, and the formulation of future work plans in the region



*Participants of the meeting of ICARDA-SACRP*

Dr. Wu Kongming, Vice President of CAAS, was the Chief Guest and inaugurated the meeting. He acknowledged ICARDA's steadily growing presence in the region and looked forward to a broader partnership to discuss various future research agenda common to both in tackling food and nutritional security in the developing world. The inaugural function, presided over by Dr. Zhang Yanqing, Director General of IEDA, was attended by 88 participants from various agricultural universities and institutes of China and other countries. Dr. Kamel Shideed, ADG (ICC), ICARDA was the Guest of Honor. Dr. Shideed appraised the participants about ICARDA's activities in South Asia & China region and gave a presentation on ICARDA's mission, mandates and programs and stressed on the need to address capacity development, establish a platform for exchange of scientific knowledge, and cater to the needs for collaboration. He highlighted ICARDA's recent Decentralization Strategy and establishment of Food Legume Research Platform in Madhya Pradesh, India.

In her keynote speech, Prof. Feng Dongxin, DDG-International Cooperation, CAAS enlightened the house by giving a presentation on the history of China with CGIAR, the ever-growing partnership, and the existing and proposed future collaborative activities of CAAS with the CGIAR. This was followed by a presentation by Prof. Mei Xurong DG, Department of Research Management & Chief Scientist for Dryland Agriculture, CAAS, giving a detailed insight on China's experience in enhancing food and nutritional security: major milestones and lessons learnt.

During the field visits on 19-20 June, 2014 at Taiyuan in the province of Shanxi, the delegations visited experimental stations at Dongyang, Shouyang, Jingshang and Zongai, interacted with researchers, scientists and farmers, and inspected experimental fields.

ICARDA affirmed its commitment for China and the region, and CAAS reciprocated by confirming that it would formally enter into a bilateral agreement with ICARDA through a MoU to work on various aspects of research and development.

### Low Toxin Grasspea Varieties in India

Grasspea is eaten as a prime source of protein and essential micronutrient for the poor and tribal peoples in South Asia since ages. It is grown in India in about 750,000 ha for human food and straw and fodder for animal feed, under various cropping systems, but mostly as a relay crop in rice fields. However, its utilization as a food crop is restricted due to presence of a neurotoxin (ODAP), which causes lathyrism. Therefore, cultivation of low-ODAP/ODAP-free cultivars is highly desirable from health point of view. Grasspea can be grown on a wide range of soil types, tolerates moderate salinity and is highly resistant to drought, flood, diseases and insect-pest attack. Considering nutritional, economic and cultural benefits, wider cultivation of grasspea is warranted by replacing high-toxin low yielding traditional varieties with high yielding low-toxin varieties.

Several low-toxin varieties (Nirmal, Ratan, Mahatiwara, Prateek) have been developed in India, but their dissemination to farmers is lacking. In this endeavour, an initiative has been undertaken with the support of the Ministry of Agriculture, Govt. of India in collaboration with ICAR institutes, State Agricultural Universities, and NGOs. Grasspea area expansion in rice-fallows to increase availability of fodder and safe food for low income consumers, production of good quality seed for continuity of seed chain, increased seed replacement rate (SRR) are the main activities. Additionally, international grasspea nurseries for earliness, high biomass and low-ODAP from Syria were supplied to various partner centers for their evaluation in the field to select better genotypes under Indian conditions. Our joint work shows that the impact of technological intervention on improved variety vs. local variety and on improved technology vs. farmer's practice documented advantage of 31-38 per cent and 13-43 per cent, respectively. New low-toxin varieties, "Nirmal and Ratan" gave significantly higher yield than traditional varieties. These were, therefore, put under seed production by the seed hubs. Started with 145 ha with 251 farmers from 31 villages, the area was expanded to 235 ha with 687 farmers from 69 villages covering a total of 13 districts. A total of 220 qt. grasspea cultivar seeds having low ODAP were supplied to farmers. Capacity development program on physico-chemical detoxification methods have been undertaken involving more than 275 house-wives. All these activities have been appreciated by the Government of India.

*Source: Dr. Ashutosh Sarker, Coordinator, South Asia and China Regional Program, A.Sarker@cgiar.org*

## ICRISAT

### ICT for improving productivity and profitability of agriculture



*Participants of the workshop*

ICRISAT and the International Fund for Agricultural Development (IFAD) came together at a two-day workshop on “Innovative ICT Approaches and Tools for Improving Productivity and Profitability of Smallholder Agriculture”. At the workshop, a proposal was finalized to use, evaluate, and sustain ICT knowledge platforms, tools and decision support systems to unlock the potential of rainfed agriculture. This proposal aims to enhance the already proven successful model of ICRISAT’s “Krish Gyan Sagar and Krishi Vani - powered by Green SIM”. The workshop was held on 4-5 June, 2014 at the ICRISAT headquarters with participation from both public and private partners. The workshop was steered by Dr. Dileep Kumar Guntuku, Global Leader, Knowledge Sharing and Innovation, ICRISAT and Dr. Malu Muia Ndavi, Senior Program Officer, IFAD.

*(Source: ICRISAT Happening 13 June, 2014)*

### Combating soil-borne diseases and aflatoxins in groundnut



*MOU signed between ICRISAT and PPRI-VAAS*

The need for groundnut researchers to uplift the livelihoods of smallholder farmers in Asian countries by devising strategies to combat soil-borne diseases and aflatoxins, was discussed at the 3-day international workshop organized by ICRISAT on “Management of Groundnut Diseases”.

The workshop was organized in partnership with the Oil Crops Research Institute (OCRI) of the Chinese Academy of Agricultural Sciences (CAAS) in Hanoi, Vietnam on 12-14 May, 2014 and was hosted by the Plant Protection Research Institute (PPRI) of the Vietnam Academy of Agricultural Sciences (VAAS).

At the opening ceremony of the workshop, ICRISAT’s Dr Farid Waliyar, former Director for West and Central Africa, reiterated the importance of groundnut as a major protein source in Asia and sub-Saharan Africa. Further, he explained the role of major biotic constraints, including aflatoxin contamination, in hampering groundnut productivity worldwide. He also affirmed the importance of training workshops and thanked the organizers of this workshop, the PPRI and the financial support from CAAS represented by Prof Liao Boshou. On the eve of the workshop, ICRISAT entered into a MoU with PPRI for mutual cooperation and agreement in research for development.

A total of 35 participants (from Vietnam, China, India, Thailand, and Indonesia) shared and discussed the groundnut status reports from their respective countries. Drs Hari Kishan Sudini and P Janila from ICRISAT participated as resource persons. A field trip was organized on the third day for participants to see the crop effected by peanut scab disease, an emerging groundnut disease in Vietnam. This workshop was organized as part of Window-3 bilateral support to the CGIAR Research Program on Grain Legumes.

*(Source: ICRISAT Happening 30 May, 2014)*

## GFRAS

### Meeting on Strengthening Extension and Advisory Services in Asia and the Pacific

The Global Forum on Rural Advisory Services (GFRAS) organized a meeting on “Strengthening Extension and Advisory Services in Asia and the Pacific on 25 March, 2014 through videoconferencing. Ten participants from various organizations, viz., GFRAS, FAO RAP, SATNET-CAPSA, APAARI, APIRAS, AESA, PIRAS, and PARC, Pakistan participated. Dr Bhag Mal, consultant represented APAARI in this meeting and briefly presented the roles, responsibilities and major achievements of APAARI which were received well.

The objectives of the meeting were to: i) understand roles and activities of each partner in extension and advisory services, ii) find opportunities for synergies and collaboration, and iii) develop working principles, general goals, tentative plan for future. Participants discussed potential synergies and ideas on how to work better together in future. There are many different networks in the region and there is need to avoid duplication and to synergize and streamline the work in a

collaborative manner. Several organizations are working on capacity development issues and facilitating research-extension linkages. There is also much collaboration with other regional bodies (e.g. FARA in Africa, CGIAR, GFAR in Rome). Many organizations are collecting success stories and good practices and sharing information on publications, tools, events; and are developing databases. Most are using social media. Other issues on which people are working include ICTs; youth; professionalization and certification; and sustainable agriculture (including indicators for sustainability). All organizations are working towards reduction of hunger and food insecurity.

An important topic of discussion was on the follow up of expert consultation on research and extension linkages jointly organized by FAO RAP, UN-CAPSA and APAARI in December, 2013. One of its major recommendations was the establishment of an Asia-Pacific regional network for agricultural extension services based on the APAARI model. The network would include government, international/regional organizations, NGOs/CSOs and private sector actors involved in rural advisory services, regulatory actions, ICT applications and other extension services. CAPSA's SATNET Asia project could provide useful linkages with existing networks and capacity-building activities. The Framework is expected to contribute to more sustainable food systems and help to improve farm productivity in Asia and the Pacific.

Participants mentioned that while this statement implies a network for specifically for extension, actually what participants demanded was a network to bring all actors in research and extension together at a high level. The network would be hosted at FAO in Bangkok. The idea is to add value and not to duplicate. Terms of reference for this network are being developed and will be shared with the participants. It was discussed that research-extension linkages cut across the network function are not specific to just one network. Thus, the processed new network could help strengthen research-extension (and all other actors in the innovation system) linkages in other networks. The innovation system linkages are especially important at national level and can be supported by the various networks. The discussion concluded with focus on use of resources to strengthen existing networks rather than starting new ones.

Ideas for follow-up and to strengthen collaboration were to: i) share the meeting notes, documents, and email contacts of participants for this meeting, ii) invite one another to events, iii) join one another's networks, iv) use the email list to share what we are doing, v) have further consultations among stakeholders on these issues, and vi) share documents and information about events, meetings and conferences.

*(Source: Dr. Bhag Mal, consultant APAARI, b.mal@apaari.org)*

## TAP Global Task Force Meeting

The first Tropical Agriculture Platform (TAP), Global Task Force Meeting was held in Montpellier, France on 10-11 April, 2014. Dr Raghunath Ghodake participated in this meeting on behalf of APAARI. The TAP, recently established at the initiative of G20 nations and supported by FAO is to facilitate and promote capacity development (CD) in agricultural innovations in developing countries of the tropics for agricultural development and growth. The platform comprised of and represented by over 40 national, regional and international organizations/agencies has created a mechanism of Global Task Force (GTF) to plan, coordinate and oversee the further progression of the implementation of the TAP activities globally.

APAARI has been selected as a member of TAP GTF and is also a member of Regional Task Force (RTF) for coordinating TAP activities in the Asia-Pacific region. The other members of RTF are FARA and FORAGRO, undertaking similar activities in Africa and South America.

This meeting represented by over 15 regional and international organizations was specifically called to deliberate and decide on the CD framework/ tools, modalities of Global Task Force operations, election of chair and vice chair of GTF, modalities of CD expert group, and modalities of Regional Task Force. The meeting considered some recent positive developments such as a German APO working for the TAP secretariat and EU agreeing in principle to provide funding for TAP activities over the next 4-5 years. This will require detailed proposal to be jointly prepared by TAP, FAO and AGRINATURA. Also discussed were aspects of governance of TAP, especially duplications/overlapping with activities of GFAR and IFAD initiatives (though IFAIG - International Fund for Agricultural Innovation and Growth) and having a number of layers (such as SC, GTF, CD Experts, RTF) in the TAP structure. It was decided that the governance issue would be addressed by the on-going GFAR governance review/MTP and the TAP structure would be sorted out by the TAP General Assembly. The meeting resolved and finalized modalities for GTF and further worked on TOR for CD experts and modalities for RTF, the latter two were to be further refined through virtual and email interactions.

At least two countries from the Asia-Pacific region would be selected for piloting various activities of TAP. If all goes well the funding from EU would be available for the TAP activities for implementation from the beginning of 2015.

*(Source: Dr. Raghunath Ghodake, PNG NARI, raghunath.ghodake@nari.org.pg)*

## Celebrating the International Year of Family Farming (IYFF 2014)



The 66th Session of the United Nations General Assembly declared 2014 the International Year of Family Farming (IYFF) with the aim of putting family farming at the center of agricultural, environmental and social policies in national agendas. The celebration of the IYFF is an opportunity to raise the profile of family farming by focusing world's attention on its important role in eradicating hunger and poverty, providing food security and nutrition, improving livelihoods, managing natural resources and protecting the environment.

### Key objectives

- Support the development of policies conducive to sustainable family farming by encouraging governments to establish the enabling environment (conducive policies, adequate legislation, participatory planning for a policy dialogue, investments) for the sustainable development of family farming.
- Increase knowledge, communication and public awareness.
- Attain better understanding of family farming needs, potential and constraints and ensure
- Create synergies for sustainability

### Global lines of action

- Promotion of dialogue in policy decision-making processes: Dialogue and cooperation should be enhanced with the relevant stakeholders to ensure that IYFF messages influence relevant policy decision-making processes. Through this line of action, public and private organizations at national, regional and global levels will be brought together to discuss issues related to family farming, smallholder farming and fisheries.
- Identification, documentation and sharing lessons learned and successful experiences of existing pro-family farming policies at national and/or other levels to capitalize relevant knowledge on family farming.
- Communication, advocacy and outreach: A powerful and effective advocacy campaign will be produced in coordination with partner institutions (e.g. WRF, WFO) with a view to reach out to farmers and their associations, decision-makers, financial institutions, the media and general public. Ad-hoc activities will be promoted in partnership with community media.

Further information about the International Year of Family Farming (IYFF), master plan and forthcoming activities, please visit <http://www.fao.org/family-farming-2014/en/>

## New Appointments

### New Director General of CoRRB



Dasho (Mr.) Namgay Wangchuk has joined the Council for RNR Research of Bhutan (CoRRB) as the new Director General on 6 December, 2013. Prior to this, he served as Director General of Department of Disaster Management under the Ministry of Home and Cultural Affairs. He started his career in 1982 as Divisional Forest Officer in various Districts under the Department of Forests, Ministry of Agriculture and Forests.

During his 32 years of dedicated service, he had held many senior Government positions including District Administrator (Governor) in Trashigang and Paro Districts and Managing Director/CEO of Natural Resources Development Corporation Ltd. (NRDCL), a Government owned Corporation.

Dasho Namgay Wangchuk is a Forester by profession and has a Bachelor's Degree in Bio-Science from North-Eastern Hill University, India; Bachelor's Degree in Forestry from University of Washington, Seattle, USA and Master Degree in Resources Management from University of Edinburgh, Scotland, UK.

### New President of the Indian Agricultural Universities Association (IAUA)



Indian Agricultural Universities Association (IAUA) announced that Dr. A.K. Srivastava, Director of the National Dairy Research Institute (NDRI) Karnal, India, has been elected as the President of the Indian Agricultural Universities Association for the year 2014. He has taken over this position from 1 January,

2014. Dr. A.K. Srivastava is endowed with an in-depth knowledge of agricultural research for development. Prior to this, he held the position of Director-cum-Dean, Post Graduate Studies SKUAST, Jammu; Head, Division of Pharmacology and Toxicology and Dean, Faculty of Veterinary Sciences and Animal Husbandry, Sher-e-Kashmir University of Agricultural Sciences & Technology, R.S. Pura, Jammu. His experience at senior and corporate management levels and his understanding of development issues involved at the national and international levels will give a new direction to the functioning of IAUA and will take it to newer heights.

APAARI wishes them great success in their new assignments.

## Meeting with Agriculture Minister, Vietnam



*Presentation of Souvenir by Agriculture Minister*

During his visit to Vietnam Academy of Agricultural Sciences (VAAS), Dr. Raj Paroda, Executive Secretary, APAARI along with Dr. Nguyen Van Bo, President, VAAS called on Dr. Cao Duc Phat, Minister of Agriculture and Rural Development and apprised him of various activities and achievements of APAARI. He was also briefed about the forthcoming Asian Maize Conference and General Assembly meeting (GAM) of APAARI to be held in Bangkok from 30 Oct.-1 Nov., 2014. Dr. Paroda also profusely thanked him for the award of medal conferred on him during the last year in recognition of his contributions to VAAS, Vietnam.

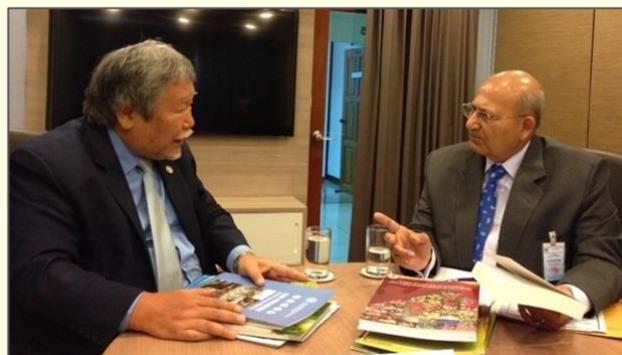
## Visit to Kasetsart University Library, Thailand



*Dr. Raj Paroda with officials of KU Library*

Dr. Raj Paroda, Executive Secretary called on the Director, Dr. Aree Thunkijanakij, at the University Library, Kasetsart University, Thailand on 28 February, 2014. Dr. Aree and her staff made a brief presentation about mission and activities of the University Library and highlighted that the Library functions as a center of knowledge and information particularly for agricultural research and development. After the presentation, Dr. Paroda visited the library to see its facilities which won the Thailand Public Services Awards for the Year 2013 from the work on "Knowledge Service on the Green Path: Library for Life and Environment (Eco-Library)" organized by the Office of the Public Sector Development Commission (OPDC). During the visit, collaboration between APAARI and the University Library, Kasetsart University was discussed so as to strengthen partnership in areas of mutual interest. Dr. Paroda also agreed to send a set of APAARI publications for use in the library.

## Meeting with ADG, FAO RAP, Bangkok



*Dr. Raj Paroda in discussion with ADG, FAO RAP*

Dr. Raj Paroda, Executive Secretary and Dr. J. Karihaloo, Coordinator, APCoAB had a meeting with Mr. Hiroyuki Konuma, ADG, FAO Regional Office, Bangkok on 23 April, 2014 regarding ongoing collaboration between FAO and APAARI. Mr. Konuma was apprised of various APAARI's initiatives, including Asian Maize Conference and General Assembly of APAARI to be held in October, 2014. He was also briefed on Expert Consultation on Food Safety being organized in collaboration with JIRCAS in Japan in August, 2014. Mr. Konuma expressed his satisfaction on APAARI's initiatives on extension, ICT and medicinal plants and provided a copy of Regional Strategy on Rice. He also gave his consent to be the joint organizer with APAARI and CIMMYT for the Asian Maize Conference and assured his full support to the activities of APAARI, including its office located in the new FAO Annex Building.

## Meeting with Officials of DOA, Thailand



*Dr. Raj Paroda with officials of DOA*

Dr. Raj Paroda, Executive Secretary of APAARI, had a meeting with Dr. Suwit Chaikiattiyos, Deputy Director-General of Department of Agriculture (DOA) Thailand on 27 June, 2014 at DOA office. The meeting was held to discuss about an establishment of the Memorandum of Understanding (MoU) to strengthen partnership between APAARI and DOA in areas of mutual interest. Dr. Paroda apprised Dr. Suwit Chaikiattiyos about the Asian Maize Conference and the General Assembly Meeting of APAARI to be held in October 2014, in Bangkok, Thailand. As the host country, Dr. Chaikiattiyos agreed to be a co-organizer of the conference and offered to host a reception dinner to the event's participants.

### Dr. Raj Paroda receives Deepak Rathore Award



Fortnightly Newsletter “Scientific Approach” the only Newsletter completely devoted to science published from Jaipur had established two awards in the memory of Science Communicator Mr. Deepak Rathore. Every year, a committee consisting of knowledgeable people of the country selects two persons, one scientist and one science communicator for this award, one each from India and abroad.

For the year 2014, this award in India was given to the well-known eminent scientist, Padama Bhusan Dr. Raj Paroda and in the international category to Dr. Maria, Professor of Saopalo University of Brazil,. Earlier recipients of this award from India included renowned scientists, namely, Professor Yash Pal, Dr. Anil Kakodkar and Professor Ved Prakash.

### APAARI Participation in other Fora/Meetings

#### Dr. Simon Hearn, Chairman, APAARI

- Eleventh Fund Council meeting, 7-8 May, 2014, Mexico

#### Dr. Raj Paroda, Executive Secretary, APAARI

- Borlaug Summit on Wheat for Food Security, 25-28 March 2014, Ciudad Obregon, Mexico

#### Dr. Bhag Mal, Consultant, APAARI

- Meeting on Strengthening Extension and Advisory Services in the Asia and the Pacific, 25 March, 2014 through Videoconferencing
- General Assembly Meeting of Asian Farmers Association (AFA), 6-9 May, 2014, Bali, Indonesia

#### Dr. Raghunath Ghodake

- Meeting of the TAP Global Task Force, 10 - 11 April 2014, Montpellier, France

### Forthcoming APAARI Meetings/Workshops

- Expert Consultation on Assuring Food Safety in Asia-Pacific jointly organizes by APAARI and JIRCAS on 4-5 August, 2014 at Tsukuba, Japan
- Training Program on Analytical Techniques in Nutrition, Food Safety and Biosafety on 1-14 September 2014 at ICRISAT, Telangana, India
- The 12th Asian Maize Conference and Expert Consultation on Maize for Food, Feed, Nutrition and Environmental Security to be jointly organized by APAARI, CIMMYT, FAO RAP and Department of Agriculture, Thailand on 30 October – 1 November, 2014 at Bangkok, Thailand
- APAARI General Assembly Meeting on 1 November, 2014 at Bangkok, Thailand

### Forthcoming International Conferences/Events

- Small-scale Postharvest Handling Technologies Short Course/Study Tour on 25-29 August 2014 in Bali, Indonesia. For details, please visit <http://postharvest.org>
- 9th Conference of the Asian Federation for Information Technology in Agriculture on 29 September –2 October, 2014 at Edith Cowan University, Perth, Australia. For details, please visit <http://asicta.org/AFITA2014/>
- Humidtropics International Conference on Systems Research for Sustainable Intensification in Smallholder Agriculture on 7-10 October, 2014 at the Conference Center of the International Institute of Tropical Agriculture (IITA), in Ibadan, Nigeria. For details, please visit <http://humidtropics.cgiar.org/conference1/registration>
- The 11th Solanaceae Conference on 2-6 November, 2014 at the Arraial d’Ajuda Convention Center, Brazil. For details, please visit <http://www.sol2014.com.br/>
- The Conference on Conservation Agriculture for Smallholders (CASH) in Asia and Africa on 7-11 December, 2014 at Mymensingh, Bangladesh. For details, please visit <http://www.scac2014.org/>

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