29th GFAR Steering Committee Meeting
Montpellier

Dr. Simon Hearn
Chairman

Asia-Pacific Association of Agricultural Research Institutions (APAARI)
**Mission**
Our mission is to promote the development of National Agricultural Research Systems in Asia-Pacific region through facilitation of inter-regional, inter-institutional and international partnerships.

**Vision**
ARD in the Asia-Pacific region is effectively promoted and facilitated through novel partnerships so as to contribute to sustainable improvement in the productivity of agricultural systems and to the quality of the natural resource base that underpins agriculture, thereby enhancing food and nutrition security, economic and social well being of communities and the integrity of the environment and services it provides.
APAARI

Strategic Thrusts

APAARI
A neutral platform for strengthening of AR4D through innovative partnerships among stakeholders

Information Dissemination
Regional Research Networking
Building Research Partnerships
Human Resource Development
Technology Transfer
Policy Advocacy
Focus Areas (Vision 2025)

- Enhancing Production and Productivity
- Genetic Resource Management and Use
- Natural Resource Management
- Climate Change Adaptation and Mitigation
- Linking Farmers to Market
- Biotechnology for Yield Enhancement
- Biosafety and Biosecurity Regulations
- Biofuels for Energy
GCARD Road Map (Themes)

- Collective focus on key priorities, as determined and shaped by science and society
- True and effective partnership between research and those it serves
- Increased investments to ensure required development returns from AR4D
- Generate, share and make use of agricultural knowledge
- Effective linkages that embed research in the wider development context
- Development impact returns from agricultural innovation
Addressing Future Challenges

- Policy advocacy
- Need assessment
- Increased investments in AR4D
- Knowledge management
- Role of women in agriculture
- Retaining youth in agriculture
- Precision/Conservation agriculture
Key Outcomes

• Spending on public agricultural R&D increased by 50% from US$ 8.2 billion in 1996 to US$12.3 billion in 2008.
• Investment growth drove by region’s low- and mid-income countries.
• “Underinvested” budget less than 1% of GDP was allocated to agricultural research in most countries.
• Increased number of scientists and improved qualification level indicated significant progress in human resource capacity building.
• Supporting policy reforms offer benefits of agricultural R&D.
• Need stronger linkages between the performers of agricultural research and its end users.
Priorities for Agricultural Research for Development (AR4D) in South Asia – Policy Paper

- South Asia: A Global Hotspot of Poverty & Hunger
- Policy Dialogues: Bangladesh, India and Nepal
- Regional Synthesis Report for South Asia developed and Presented in GCARD 2, in Uruguay
- Regional Strategy - AR4D Priorities
  - Enhance AR4D investment (3-4 times)
  - Intensify agricultural research and innovations
  - Higher priority on research on natural resource management
  - Ensure functional autonomy of NARS
  - Strengthen human resource development
  - Re-orient current agricultural education system
  - Strengthen translational technology management and delivery systems, and agro-advisory services
  - Skill development for research planning, visioning and implementation
  - Strengthen agricultural engineering research inputs and services
Major Recommendations

- Countries need to adopt promising GM crops particularly to address the needs of smallholder farmers
- Greater commitment by public sector organizations to GM technology development and biosafety compliance
- Make use of farmer champions for outscaling proven biotechnologies
- Regional and sub-regional cooperation and collaboration in modern biotechnology and biosafety in the Asia-Pacific
- Financial assistance mechanism at the regional level
Key Recommendations

- Need for National Action Plan on genetic resources management
- Involvement of local communities for in situ conservation
- Need for expansion of Annex. I crops of the Treaty
- National Biodiversity Laws need to be enacted
- Avoid duplication of samples in gene banks
- Need to harmonize regulations under CBD and ITPGRFA
- Training and capacity building in PGR be encouraged
- Strengthening partnership among NARS-CGIAR
- Greater thrust on prebreeding initiatives
Asian Food and Agribusiness Conference 2013: Biotechnology and Global Competitiveness  
15–18 July, 2013

Major Recommendations

• Governments should provide financial support and supportive policy environment, and infrastructure for biotech innovations
• Governments should put in place appropriate science based biosafety regulatory frameworks
• There is a need to address concerns on cultivation of biotech/GM crops through appropriate communication strategies
• Countries need to prioritize biotech applications appropriately to meet their needs.
• Countries will have to use biotechnology for green food production in order to deter food insecurity and address the anticipated effects of climate change.
• Countries are urged to use the experience gained from public acceptance of non-GM applications such as biofertilizers, biopesticides molecular breeding and micropropagation to support GM biotech applications
**Major Recommendations**

- Adopt molecular breeding approaches to achieve improved agricultural productivity, nutritional quality and farm profitability.
- Prioritize crops/animals and traits to be targeted for improvement through molecular breeding.
- Application of molecular tools be encouraged to enhance the use of diverse germplasm in breeding programs.
- Need for close cooperation among Asia-Pacific countries in application of molecular tools for crop and animal improvement.
- Three networks on rice, vegetables and livestock identified need to be operationalized through appropriate national initiatives.
- AVRDC and APAARI to facilitate group meetings and collaborative activities related to the identified networks with the support of COA.
Major Recommendations

- Prioritize medicinal and aromatic plants (MAP) in each country for concerted research and development
- Rare and endangered species to be identified for conservation
- Develop regional database of MAP under cultivation and collected from wild
- Build strong institutional base to undertake systematic research on MAP.
- Investment on MAP to be tripled supported by proper policy advocacy
- Traditional knowledge and technologies be shared
- Need for linkage between research and industry
- Regulatory mechanism for biosafety and international trade
- Establish Regional Network on MAP for the Asia-Pacific region
Key Recommendations

- Investing in agricultural research and development geared towards sustainable, resilient, and economically viable agriculture
- Monitoring climate variations and developing early warning systems
- Strengthening capacities of farmers for information and database management
- Developing *in-situ* model farms and identify, train and support farmers/ farmer technicians
- Supporting farmer-to-farmer learning exchanges, study visits, and solidarity exchanges
- Making available appropriate tools, equipments and machines to farmers
- Enhancing support to women farmers to organize, and initiate own activities.
- Providing institutionalized mechanism within CGIAR/ GFAR for meaningful participation of representatives of small-scale farmers
*Major Recommendations*

- Funding support to new scientists to initiate research in a program mode
- Reorient agricultural research through inter-institutional and inter-disciplinary interactions
- Emphasize on joint research with private sector
- Encourage collaborative research and training with advanced research institutions
- Incentives to young scientists to develop patents and innovations
- Encourage youth to present research work in International Conferences
- Involve young scientists in decision making process
Major Recommendations

- Paradigm shift in AR4D with renewed emphasis on “Farmer First”
- Outscaling of innovations based on techno-economic feasibility, relevance and utility and adopting in a mission-mode
- Identify, test and refine farmer led innovations
- Effective and efficient extension mechanism and marketing reforms
- Creation of a cadre of young technology agents for custom hire services
- Incentives and rewards to farmers though “Farm Innovation Fund”
- Institutional reforms for better co-ordination, convergence and efficiency
- Establish self-help groups (SHGs), co-operatives and farmers’ companies
- Replicate successful public-private-partnership models
- Innovative farmers’ to be recognized as “Farm Professors”
- Provision of credit at low interest rates and insurance against risk factors
Major Recommendations

• Need for greater consultations by CRPs with NARS in the region
• Flow of germplasm and prebreeding materials from CG Centers to NARS to be accelerated
• CGIAR Centers to target on new innovations, while NARS should work for their faster adoption, refinement and validation
• Knowledge sharing and capacity development should be priority of CG Centers
• Interactive sessions/workshops need to be organized more frequently
• Partnership with agricultural universities in the region needs to be strengthened
• Involve and empower both women and youth especially for secondary/speciality agriculture, extension services, value addition and marketing
• New mechanisms to share/transfer knowledge/technology for outscaling innovations
• CGIAR to play greater role in policy advocacy for strengthening partnership
Major Recommendations

- Reorient agriculture by promoting agri-innovation, agri-business and entrepreneurship
- Greater involvement of youth to achieve second green revolution for household nutrition security
- Special emphasis on secondary /specially agriculture
- Linking agriculture with health, environment, nutrition and basic sciences
- Innovative approaches in developing and transferring technologies
- Enhance capacity of youth, through vocational trainings and school education
- Involve youth in decision making processes for R&D programs
- Higher investments to motivate youth to adopt agriculture as a profession
- Policy support for inter-institutional and public-private partnership
- Need for creating awareness through media about opportunities in agriculture
- Strong political will and enabling policies for youth involvement in AR4D initiatives
- A Regional Network be established for future agricultural growth through youth
Expert Consultation on Strengthening Linkages between Research and extension to Promote Food and Nutrition Security
11-12 December, 2013, Bangkok

Action Framework for Strengthening Research-Extension Integration

- Establishing a regional network for extension services
- Adapting to a new research-extension environment
- Creating space for research-extension interface
- Enhancing quality of extension services
- Mobilizing resources and establishing stakeholder partnerships
- Fostering enabling policy initiatives
- Documenting evidence and promoting awareness
APAARI

Consultation on Collective Actions for Opening Access to Agricultural Information and Knowledge
13-15 December 2012, Thimpu, Bhutan

Actions Identified

• Sensitization of SAARC Agricultural Ministers and Senior Policy Makers
• Compilation of ICM projects and experts and testing AgriVIVO
• Need-based training programs to ICM managers in developing NARS
• Policies and strategies on open access to agricultural research articles
• Developing catalogue of e-extension initiatives in India with critical analysis of impact
• Development of AGROVOC; Development of Handbook of Agriculture on Wiki
• Joining CIARD RING; Joining AgriFeeds by NARS for effective sharing of information and news to global users
• Developing Agricultural Information Repositories
• Developing e-learning module on open access to agricultural information as part of IMARK
Other Important Conferences/Workshops Organized

• Workshop on Agricultural R&D Investments in Asia-Pacific Region, Bangkok; 16-17 February, 2012
• Workshop on Climate-Smart Agriculture in Asia, Bangkok; 11-12 April, 2012
• Regional Consultation on Improving Wheat Productivity in Asia, Bangkok; 26-27 April, 2012
• Expert Consultation on Managing Trans-Boundary Diseases of Agricultural Importance, New Delhi; 10-12 October, 2012
Publications

Documentation and dissemination of agricultural information and knowledge

Proceedings

Success stories

APAARI on CD
Knowledge Sharing

**Website**

Strengthening of RAIS/RAILS through strengthening APARIS web space and development of databases for ARD experts and projects
Linkages with CRPs

• APAARI was consulted by some CRPs in program formulation
• APAARI on Advisory Committee of CRP on Grain Legumes
• Dr. Raj Paroda elected as Chair of Independent Advisory Committee (IAC) of CRP on Grain Legumes
• 12th Asian Conference and Expert Consultation on Maize being organized by APAARI, CIMMYT and VAAS linked with CRP on Maize

Support to Smallholder Farmers

• APAARI supported participation of smallholder farmers from different countries in various workshops/consultations:
  • Regional Workshop on Improving Wheat Productivity, Bangkok
  • Regional Workshop on Youth & Agriculture, Islamabad, New Delhi
  • NARS-CGIAR Interactive Session, Islamabad
  • National Workshop on Outscaling Farm Innovations, New Delhi
  • Expert Consultation on Research and Extension, Bangkok

Representation in APAARI Executive Committee

• NARS, CG Centers, GFAR
• NGO - BRAC, FO – AFA
• Involvement of Private Sector (under consideration)
GFAR Supported Activities (2013-2014)

- Limited funding support in 2012; LoA signed in 2012, funds received in 2013
- Only three workshops organized with available funding
  - Consultation on Collective Actions for Opening Access to Agricultural Information and Knowledge (Dec. 2012)
  - Stakeholders' Dialogue on Biosafety Regulations in the Asia-Pacific Region (April 2013)
  - National Workshop on Outscaling Farm Innovation (Sept. 2013)
- No funding support available in 2014 and hence no activity with GFAR support could be planned yet
- Activities to be undertaken during 2013-15 along with budget were submitted as per GFAR-MTP requirement
- Since no funds received for 2013, the projected activities be considered for 2014-2016.
### APAARI Approved Work Plan (2014)

<table>
<thead>
<tr>
<th>Activities</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Publications</strong></td>
<td>• APAARI Newsletter (June and December, 2014) and APAARI on CD-2014</td>
</tr>
<tr>
<td></td>
<td>• Publication of Success Stories/ Status Reports/Case Studies on Agricultural Innovations, including ICT and Biotechnology</td>
</tr>
<tr>
<td></td>
<td>• Publication of Proceedings of regional consultations/ dialogues /workshops</td>
</tr>
<tr>
<td><strong>2. Meetings/ Expert Consultations/ Symposia</strong></td>
<td>• APAARI Executive Committee meeting (April, 2014)</td>
</tr>
<tr>
<td></td>
<td>• APAARI General Assembly meeting (October, 2014)</td>
</tr>
<tr>
<td></td>
<td>• Expert Consultation on Improving Rice Productivity in Asia</td>
</tr>
<tr>
<td></td>
<td>• Regional Workshop on Improving Productivity of Maize in the Asia-Pacific Region</td>
</tr>
<tr>
<td></td>
<td>• Prioritization of Demand-driven Agricultural Research for Development in Southeast Asia</td>
</tr>
<tr>
<td><strong>3. APARIS Related Activities</strong></td>
<td>• APARIS Steering Committee meeting (April, 2014)</td>
</tr>
<tr>
<td></td>
<td>• Regional Workshop on ICM for Agricultural Development</td>
</tr>
<tr>
<td></td>
<td>• Training Workshop on Open Access Publishing Using Open Journal Systems in India</td>
</tr>
<tr>
<td></td>
<td>• Report on CIRAD RING for knowledge sharing in Thailand</td>
</tr>
<tr>
<td><strong>4. APCoAB Related Activities</strong></td>
<td>• APCoAB Steering Committee Meeting (April, 2014)</td>
</tr>
<tr>
<td></td>
<td>• Expert Consultation on Food Safety, in collaboration with JIRCAS</td>
</tr>
<tr>
<td></td>
<td>• Symposium on Veterinary Disease Surveillance and Diagnosis, in collaboration with COA</td>
</tr>
<tr>
<td></td>
<td>• Training program on food safety, in collaboration with ICRISAT</td>
</tr>
<tr>
<td></td>
<td>• Training program on biotechnology/biosecurity in Chinese Taipei</td>
</tr>
<tr>
<td><strong>5. Inter-regional Cooperation</strong></td>
<td>Strengthening cooperation in the following:</td>
</tr>
<tr>
<td></td>
<td>• Ensuring participation of stakeholders in implementation of CRPs</td>
</tr>
<tr>
<td></td>
<td>• Participation in other Regional Fora meetings</td>
</tr>
</tbody>
</table>
### APAARI

**Activities proposed under GFAR MTP- 2014***

(* Funding still awaited)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Activity</th>
<th>Budget estimate (US $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Current status, impact and need for further strengthening regional networks for effective implementation of AR4D activities</td>
<td>30,000</td>
</tr>
<tr>
<td>2</td>
<td>Organizing policy dialogues for identifying research and development priorities based on need assessment in South-East Asia</td>
<td>30,000</td>
</tr>
<tr>
<td>3</td>
<td>Review and implementation of Bangkok declaration for re-orientation of AR4D</td>
<td>30,000</td>
</tr>
<tr>
<td>4</td>
<td>Building partnership with APIRAS and other regional fora such as CAPSA, APSA, SPC etc.</td>
<td>20,000</td>
</tr>
<tr>
<td>5</td>
<td>Organization of expert consultation on food security in agricultural biotechnology, in collaboration with a NARS member of APAARI</td>
<td>30,000</td>
</tr>
<tr>
<td>6</td>
<td>Regional workshop on status and needs on marker assisted selection, in crop improvement</td>
<td>20,000</td>
</tr>
<tr>
<td>7</td>
<td>CIARD partnership through support to national RINGs/ Nodes/Gateways; and continuation of database development and strengthening APARIS webspace</td>
<td>12,000</td>
</tr>
<tr>
<td>8</td>
<td>Ensuring participation of stakeholders in implementation, monitoring and evaluation of CGIAR CRPs relevant in the Asia-Pacific region</td>
<td>20,000</td>
</tr>
<tr>
<td>9</td>
<td>Success stories/status reports on agricultural technologies and innovation systems relating to crops, information technology and biotechnology, value chain and marketing systems</td>
<td>35,000</td>
</tr>
<tr>
<td>10</td>
<td>Publication of proceedings of regional workshops/ consultations / reports on specific topics</td>
<td>25,000</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>2,92,000</strong></td>
</tr>
</tbody>
</table>
Thank you