Regional Consultation on Agricultural Research for Development

Proceedings and Recommendations
Bangkok, Thailand 10-11 September, 2012

For Copies Contact:
Asia-Pacific Association of Agricultural Research Institutions (APAARI)
C/o. Food and Agriculture Organization of the United Nations-Regional Office for Asia and the Pacific (FAO RAP)
4th Floor. FAO RAP Annex Building, 202/1 Lam Laung Road, Klong Mahanak, Sub-District, Pomprab Sattrupai District, Bangkok 10110, Thailand
Email: apaari@apaari.org, http://www.apaari.org

Organized by:
Asian Farmers Association for Sustainable Rural Development (AFA)
Asia-Pacific Association of Agricultural Research Institutions (APAARI)
Global Forum on Agricultural Research (GFAR)

Hosted by:
Sor Kor Por (SKP)
Regional Consultation on Agricultural Research for Development

Bangkok, Thailand
10-11 September, 2012

PROCEEDINGS AND RECOMMENDATIONS

Organized by:
Asian Farmers Association for Sustainable Rural Development (AFA)
Asia-Pacific Association of Agricultural Research Institutions (APAARI)
Global Forum on Agricultural Research (GFAR)

Hosted by:
Sor Kor Por (SKP)
About the Organizers

The **Asian Farmers Association for Sustainable Rural Development (AFA)** is a regional alliance of national federations and organizations of small scale women and men farmers and producers. It was established in 2002 after a series of farmer exchange visits organized by its strategic NGO partner, AsiaDHRRRA (Asia Partnership for the Development of Human Resources in Rural Asia). In these five farmer exchange visits, conducted over three years, farmers saw the great need to come, share, learn and act together towards their common desire for a better quality of life for themselves, their families, and their farming communities. AFA invites national farmers’ organizations as members and works with NGOs in facilitating the formation of national farmers’ organizations and in continuously building their capacities. It convenes a General Assembly every two years and an Executive Committee meeting every semester. For more information, visit: [http://www.asianfarmers.org](http://www.asianfarmers.org)

The **Asia-Pacific Association of Agricultural Research Institutions** is a regional association that aims to promote the development of National Agricultural Research Systems (NARS) in the Asia-Pacific region through inter-regional and inter-institutional cooperation. The overall objectives of the Association are to foster the development of agricultural research in the Asia-Pacific region so as to promote the exchange of scientific and technical information, encourage collaborative research, promote human resource development, build up organizational and management capabilities of member institutions and strengthen cross-linkages and networking among diverse stakeholders. To meet these needs, the Association: i) convenes General Assembly once in two years, holds regular Executive Committee meetings twice a year and organizes consultations, workshops, trainings, etc., ii) collects, collates and disseminates research findings, iii) maintains links with other fora in the region and outside through meetings, participation and information exchange, and iv) promotes need based collaboration in research projects among member institutions, analyzing priorities and focusing on regional agricultural development. For details, please visit: [www.apaari.org](http://www.apaari.org)

**GFAR (Global Forum on Agricultural Research)** is a multi stakeholder-led initiative that serves as a neutral forum for dialogue and action on strategic issues in agricultural research for development (ARD). It facilitates and promotes cost-effective partnerships and strategic alliances among ARD stakeholders in their efforts to alleviate poverty, increase food security and promote the sustainable use of natural resources. GFAR is comprised of the following group of stakeholders: the National Agricultural Research Systems from the south (Southern NARS) through their regional fora, National Agricultural Research Systems from the north (Northern NARS), the Consultative Group on International Agricultural Research Centers (CGIAR) and Non-CGIAR International Agricultural Research Centers (IARCs), Farmers’ Organizations (FOs), Non-Governmental Organizations (NGOs), the Private Sector (PS), Donors and Development Agencies. To find out more about GFAR, please visit the website: [http://www.egfar.org/egfar/](http://www.egfar.org/egfar/)
Contents

Background and Rationale 1

Opening Session 2

Technical Sessions 3
  Technical Session I: GCARD Road Map 3
  Technical Session II: FO Initiatives in Agricultural Research for Development 5
  Technical Session III: Experiences of AFA Members in AR4D 10
  Technical Session IV: Synthesis of Discussions in Technical Sessions 20
  Technical Session V: Planning Workshop-Working Groups 21
  Technical Program VI: Presentation of Reports of Working Groups 22
  Plenary Session: Synthesis Report of Planning Workshop 26

Closing Remarks 28

Major Recommendations 30
  Research 30
  Capacity Building 31
  Partnership 32
  Policy 32

Annexures
  Annexure I. Synthesis Report of Regional Consultation shared in GCARD 2, held at Punta del Este, Uruguay 33
  Annexure II. Technical Program 37
  Annexure III. List of Participants 39
Foreword

The Bangkok Declaration on “Reorienting Agricultural Research for Development in Asia-Pacific Region”, adopted in the “Regional Consultation on Agricultural Research for Development” held at Bangkok on 30-31 October, 2009 conveyed three important messages: i) the needs of small farmers are kept into consideration and must ensure that they are together, (ii) there is a need to re-orient research from commodities to farming system, and (iii) all stakeholders should be involved in the planning and implementation of agricultural research for development (AR4D). These messages were discussed in the Global Conference on Agricultural Research for Development (GCARD) held at Montpelier, France in 2010 and a GCARD Road Map was developed. It clearly transpired that there is a need to re-enforce GCARD Road Map principles and lay thrust on smallholder farmers and sustainable and environmentally friendly agriculture. There is also an urgent need for more re-orientation of research and development, through participatory approaches and more effective roles of farmers in research redirection, project implementation, monitoring, evaluation, and impact assessment. Farmers be seen as equal partner and not considered to be at the receiving end only.

Knowing the strategic value of effective AR4D, the Asian Farmers Association (AFA) in collaboration with Asia-Pacific Association of Agricultural Research Institutions (APAARI) decided to have a strategy paper developed for required intervention in GCARD 2 planned to be organized in Punta del Este, Uruguay in October, 2012. The main aim was to ensure that the farmers’ perspectives and experiences are really brought to the discussions resulting in outputs that are beneficial to the farmers. In view of this, the “Regional Consultation on Agricultural Research for Development” organized by AFA, APAARI and GFAR at Bangkok on 10-11 September, 2012 was very timely. The consultation provided a neutral platform to the representatives of different Farmers’ Associations in Asia, APAARI and GFAR to discuss the priority needs and expectations of the farmers and farming communities and bring out useful recommendations.

This publication summarizes the proceedings and recommendations of the regional consultation and I hope that its wide circulation will generate awareness and draw attention for appropriate action by national and international organizations. It is our expectation that this publication will also be of considerable use to the planners, administrators, researchers, farmers and other stakeholders in understanding the priority needs for both research and development so as to find effective solutions aimed at improved livelihood of farmers in the region.

Raj Paroda  
Executive Secretary  
APAARI
## Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFA</td>
<td>Asian Farmers Association for Sustainable Rural Development</td>
</tr>
<tr>
<td>AGM</td>
<td>Annual General Meeting</td>
</tr>
<tr>
<td>APAARI</td>
<td>Asia-Pacific Association of Agricultural Research Institutions</td>
</tr>
<tr>
<td>API</td>
<td>Aliansi Petani Indonesia (Indonesian Peasant Association)</td>
</tr>
<tr>
<td>APPOLI</td>
<td>Boyalali Organic Rice Peasant Alliance</td>
</tr>
<tr>
<td>AR4D</td>
<td>Agricultural Research for Development</td>
</tr>
<tr>
<td>CC</td>
<td>Coordination Committee</td>
</tr>
<tr>
<td>CD</td>
<td>Compact Disc</td>
</tr>
<tr>
<td>COA</td>
<td>Council of Agriculture</td>
</tr>
<tr>
<td>CSO</td>
<td>Civil Society Organization</td>
</tr>
<tr>
<td>CSRC</td>
<td>Community Self Reliance Center</td>
</tr>
<tr>
<td>DHRRA</td>
<td>Development of Human Resources in Rural Asia</td>
</tr>
<tr>
<td>DLRF</td>
<td>District Land Rights Forum</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>FFS</td>
<td>Farmer Field Schools</td>
</tr>
<tr>
<td>FNN</td>
<td>Farmer and Nature Net</td>
</tr>
<tr>
<td>FO</td>
<td>Farmer Organization</td>
</tr>
<tr>
<td>GAP</td>
<td>Good Agricultural Product</td>
</tr>
<tr>
<td>GCARD</td>
<td>Global Conference on Agricultural Research for Development</td>
</tr>
<tr>
<td>GCWA</td>
<td>Global Conference on Women in Agriculture</td>
</tr>
<tr>
<td>GFAR</td>
<td>Global Forum on Agricultural Research</td>
</tr>
<tr>
<td>GMO</td>
<td>Genetically Modified Organism</td>
</tr>
<tr>
<td>HH</td>
<td>House Holds</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
</tr>
<tr>
<td>IFAP</td>
<td>International Federation of Agricultural Producers</td>
</tr>
<tr>
<td>IFOAM</td>
<td>International Federation of Organic Agriculture Movements</td>
</tr>
<tr>
<td>IPM</td>
<td>Integrated Pest Management</td>
</tr>
<tr>
<td>IRRI</td>
<td>International Rice Research Institute</td>
</tr>
<tr>
<td>ISO</td>
<td>International Standards Organization</td>
</tr>
<tr>
<td>ITC</td>
<td>Information Technology Communication</td>
</tr>
<tr>
<td>JAS</td>
<td>Japan Agriculture Standards</td>
</tr>
<tr>
<td>KAFF</td>
<td>Korean Advanced Farmers Federation</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Government Organization</td>
</tr>
<tr>
<td>NLRF</td>
<td>National Land Rights Forum</td>
</tr>
<tr>
<td>NPUST</td>
<td>National Pintung University for Science and Technology</td>
</tr>
<tr>
<td>PAKISAMA</td>
<td>Pambansang Kilusan ng mga Samahang Magsasaka</td>
</tr>
<tr>
<td>PDCI</td>
<td>Pecuaria Development Cooperative, Inc.</td>
</tr>
<tr>
<td>PGS</td>
<td>Participatory Guarantee System</td>
</tr>
<tr>
<td>Phil DHRRA</td>
<td>Philippine Development of Human Resources in Rural Asia</td>
</tr>
<tr>
<td>PPJ</td>
<td>Jambi Peasant Union</td>
</tr>
<tr>
<td>SRI</td>
<td>System of Rice Intensification</td>
</tr>
<tr>
<td>TDFA</td>
<td>Taiwan Dairy Farmers Association</td>
</tr>
<tr>
<td>TOT</td>
<td>Training of Trainers</td>
</tr>
<tr>
<td>TWADA</td>
<td>Taiwan Wax Apple Development Association</td>
</tr>
<tr>
<td>UMFI</td>
<td>Upland Marketing Foundation, Inc</td>
</tr>
<tr>
<td>USD</td>
<td>US Dollar</td>
</tr>
<tr>
<td>VDC</td>
<td>Village Development Committee</td>
</tr>
<tr>
<td>VLRF</td>
<td>Village Land Rights Forum</td>
</tr>
<tr>
<td>VNFU</td>
<td>Vietnam National Farmers Union</td>
</tr>
<tr>
<td>WAFF</td>
<td>Korean Advanced Women Farmers Federation</td>
</tr>
</tbody>
</table>
Regional Consultation on Agricultural Research for Development

Background and Rationale

The Asian Farmers Association for Sustainable Rural Development (AFA), a regional alliance of national farmers’ organizations, currently having 12 member organizations in 10 countries in Southeast, South and East Asia, representing 11 million small scale women and men farmers, was invited to participate in the second Global Conference on Agricultural Research for Development (GCARD2), proposed to be held during 29 October – 1 November 2012, at Punta del Este, Uruguay. The global conference is expected to provide opportunity to all sectors and regions to report their activities since 2010, and to agree on collective actions and the next steps for the implementation of the GCARD Road Map. Knowing the strategic value of effective AR4D for resource-poor farmers, AFA in collaboration with Asia-Pacific Association of Agricultural Research Institutions (APAARI) decided to have a strategy paper developed for required intervention in GCARD2, to ensure that the farmers’ perspectives and experiences are brought to the discussions and its outputs are beneficial to the farmers.

Part of these preparations entailed a full understanding of the GCARD Road Map by AFA members which enabled the participants to answer the three key questions for GCARD2: i) where are we today? ii) how are we making these changes happen?, and iii) what impacts can we show?

The regional consultation was jointly organized by the Asian Farmers Association for Sustainable Rural Development (AFA), Asia-Pacific Association of Agricultural Research Institutions (APAARI) and Global Forum on Agricultural Research (GFAR) at the Royal Princess Hotel, Bangkok, Thailand on 10-11 September, 2012. The consultation was attended by 24 participants from AFA member organizations, APAARI and GFAR. The outcomes/results of the consultation will be AFA’s inputs to the events involving AR4D issues, particularly the GCARD discussions. The results were also the beginning of a process that aimed to strengthen partnerships on common concerns and interests between APAARI and GFAR in the region and at the country levels.

The regional consultation was organized with the following objectives:

- To be aware and appreciate the value of GCARD Road Map and to put forth the role of the sector (farmers) in putting the Road Map into action
- To know the key roles of other stakeholders in the AR4D and GFAR processes
- To discuss the status (developments, initiatives) as well as the challenges encountered by farmers in making collective action work with other AR4D stakeholders, at both national and regional levels
- To come up with recommendations on the kind of partnerships for AR4D that has be to built/strengthened at national, regional and international levels to carry out crucial actions suggested in the Road Map
The expected outputs of the consultation were: i) AFA representatives educated and guided for their effective participation in GCARD2, and ii) concrete action plan for implementation in next two years by AFA, APAARI and GFAR, developed.

The brief synthesis report of the regional consultation shared in GCARD2 at Punta del Este, Uruguay, technical program and the list of participants are given in Annexures I, II, III, respectively.

**Opening Session**

The consultation formally started with the welcome remarks by Mr. Sophal Uon, Chairperson, AFA, and Dr. Raj Paroda, Executive Secretary, APAARI.

**Mr. Sophal Uon**, Chairperson, AFA highlighted that this consultation was another step for the development of AFA. The regional consultation will bring more research activities that will lead to agricultural development and bring more cooperation among the AFA members and also with new partners. He also hoped to learn more about the experiences of other members. The consultation will be very helpful to the farmers and will enable them to become researchers leading towards faster development.

**Dr. Raj Paroda**, Executive Secretary, APAARI expressed great pleasure in participating in this important consultation. He mentioned that APAARI is a regional association of agricultural research institutions established in 1990 by the Food and Agriculture Organization of the United Nations (FAO) with regional office in Bangkok. Most of the countries in the region represented through the national research systems are part of APAARI. A number of research activities were conducted, large number of conferences/workshops/expert consultations organized and more than 45 success stories developed based on the best practices and the results are compiled in CD and also placed on website for wider discrimination.

National Research Systems not only involve researchers but also the farmers and NGOs. APAARI has been involving farmer associations from the beginning and has one seat on its Executive Committee for farmer associations, occupied previously by the International Federation of Agricultural Producers (IFAP). This seat is currently vacant and now we are looking for a replacement.

Dr. Paroda emphasized that the Bangkok Declaration has three important messages: i) the needs of small farmers are kept into consideration and must ensure that they are together; ii) there is a need to reorient research from the commodities to farming systems, and iii) all stakeholders should be involved in the planning and implementation of agricultural research for development. These messages were discussed in the Global Conference on Agricultural Research for Development (GCARD) held in Montpellier, France in 2010 in which GCARD Road Map was developed and is available on APAARI website: www.apaari.org.

He further highlighted that this consultation was organized keeping in view the objectives of the upcoming GCARD2 meeting in Uruguay and as the Chairperson of Program Committee of GCARD 2, he was instrumental in getting the topic of “innovations” included in the program. He hoped that during the discussions, the participants can come up with their own views on what innovations can be replicable? what should be the priority of farmers? what kind of partnerships will be built? what kind of capacities do the farmers need? and what foresight
actions are needed? At GCARD2, a market place will also be organized where the work of many farmers pertaining to linking to markets will be shared.

He emphasized that APAARI is a neutral and non-political platform and is not placed at the driving seat and clarified that what you will discuss and decide in this consultation is entirely up to you. APAARI is with its stakeholders including farmers and your inputs will be raised at global meetings/conferences. There is a need to strengthen farmer organizations (FOs) and see that they come together. The knowledge which is available with farmers should be documented and APAARI can help you in jointly publishing your innovations.

He further mentioned that he is currently the chairman of Farmers’ Commission of Haryana, one of the progressive states in India. The Commission organized a consultation on farmer-led innovations and you can see in its published proceedings as to how farmers came out to share their work. There is a need to properly document these innovations. Also there is a need to discuss and decide how farmers can help implement the GCARD Road Map? what responsibilities can Farmer Organizations (FOs) take? what support do they need? and how can they be equally important partners of APAARI?

Ms. Esther Penunia, Secretary General, AFA, presented the details about the consultation including the background, objectives and program schedule to be followed. She highlighted that farmers are faced with the interlinked issues on poverty, food and nutrition security, financial crisis, energy crisis and climate change. There is a growing call to invest in sustainable, ecological, organic agriculture with family farmers. There is a need for like minded individuals and sectors to work together and also need for the farmers sector to get involved in decision making processes. She mentioned that the consultation has four objectives: i) to be aware of and appreciate the value of the GCARD Road Map and to put forth the role of the farmer sector in putting the good points of the Road Map into action, ii) to know the key roles of other stakeholders in the Agricultural Research for Development (AR4D) and GFAR processes, iii) to discuss the status (developments, initiatives) as well as the challenges encountered by farmers in making collective action work with other AR4D stakeholders, at both national and regional levels, and iv) to come up with recommendations on the kind of partnerships for AR4D that has be to built/strengthened at national, regional and international levels to carry out crucial actions suggested in the Road Map.

She also mentioned about the expected outputs of the meeting and also the program details to be followed including discussion on GCARD Road Map, interactions relating to the initiatives, challenges and lessons in AR4D and organizing a planning session to find answers for the following questions: i) what skills, capacities and experiments do the farmers need? ii) what are the possible AR4D actions that can meet these needs? iii) what are the possible partnerships that can be forged to meet these needs?

**Technical Sessions**

**Technical Session I: GCARD Road Map**

**Facilitator:** Ms. Esther Penunia

**Mr. Thomas Price,** Senior Officer, GFAR, made a presentation on "GFAR, GCARD and Farmers' Organizations: Transforming Agricultural Research for Development." He mentioned that GFAR
was established in 1996 by both FAO and International Fund for Agricultural Development (IFAD) and is being hosted by FAO. It is a multi-stakeholder forum composed of regional research fora, such as APAARI, CGIAR centers, FAO, IFAD, NGOs and FOs which were previously represented by International Federation of Agricultural Producers (IFAP). It promotes partnership and strategic alliances. Global demographic, environmental, economic and social trends, such as persistent hunger and poverty, and the growing recognition of the wisdom of local knowledge and local science have compelled GFAR to look beyond research and beyond academia and also to look beyond production in agriculture and rural areas. Thus, GFAR has positioned itself as a multi-stakeholder catalyst for advocacy for change, transforming institutions for the future, a venue for inter-regional collective action.

The GCARD Road Map was developed during the first multi-stakeholder Global Conference on Agricultural Research for Development held in Montpellier, France in 2010. The Road Map provides pathways for action to transform and strengthen agricultural innovation systems by all involved.

There are four objectives of the GCARD process: i) to facilitate alignment of the research agenda with development needs of the small-scale and resource-poor farmers, ii) to advocate for more effective investment for AR4D, iii) to facilitate dialogue between diverse stakeholders on innovation pathways, and iv) to promote the integration of the international agricultural research systems with national systems. Corollary to these, there are four basic questions that GFAR wanted to address: i) why hasn’t existing knowledge better benefited smallholder farmers? ii) why have many apparently effective technologies not been adopted? iii) why isn’t agricultural innovation better valued in development? iv) how can collective action be built towards systemic and extensive development impacts? In order to have the desired development impact or outcome, knowledge and technology is essential but not sufficient. There must also be enabling environment and inputs as well as policies promoting AR4D.

The GCARD Road Map has six elements which include: i) inclusively define key AR4D priorities and actions, driven by evolving development, ii) invest in equitable partnership and accountability among all stakeholders, iii) achieve increased investments in resources for AR4D to meet development demands, vi) develop required institutional capacities for agricultural knowledge, v) relate agricultural innovation to development programs and policies, and vi) involve stakeholders in demonstration and reporting of outcomes.

Mr. Price emphasized on how the GCARD Road Map can be turned into practice? This will be the main question during the GCARD2, to be held at Punta del Este, Uruguay, on 29 Oct - 1 Nov, 2012. The theme will be “Delivering the Change: Foresight and Partnership for Innovation and Impact on Smallholder Livelihoods”. There will be three main challenges to be addressed by GCARD2: i) take forward the priorities of the GCARD Road Map: foresight (prioritization), partnerships for impact and capacity development; ii) respond to key development needs: food and nutrition security, rural livelihoods, environmental resilience; and iii) determine progress by all sectors against the GCARD Road Map objectives.

The farmers participating in GCARD2 will have their own priorities based on their past experiences and the priorities will include: i) farmers’ empowerment in research, farmers’ rights and genetic resources, ii) market access and integration, iii) gender follow-up to the global conference on women in agriculture, iv) biodiversity and agro-ecology, and v) climate change and conditions for local innovation and enterprise. During this consultation, the farmers in Asia were able to identify their key priorities which can be projected in GCARD2.
Discussion

Mr. Muhammad Rifai: How does GCARD identify the priorities?

Mr. Thomas Price: GFAR Secretariat is small. The priorities are defined by the stakeholders. All regional fora have now been asked to get multi-stakeholdership. GFAR provides opportunities for stakeholders to work together in partnership mode. In GCARD, the strong participation is from the research community.

Technical Session II: FO Initiatives on Agricultural Research for Development

Facilitator: Ms. Esther Penunia

Farmer and Nature Net (FNN), Cambodia

Mr. Sophal Uon, made a presentation on "The Triumph of SRI in Cambodia: 2000-2012" in which he elaborated the system of rice intensification (SRI) in Cambodia, Mr. Sopheap Pan acted as translator. Mr. Sophal Uon mentioned that in Cambodia, 60 per cent of the population (around 1.8 million families) is rice farmers. 2.5 million hectares of land are devoted to rice production, 2.0 million hectares of which are rain-fed. Rice production is around 8.0 million tons, with an average national yield of 2.8 tons per hectare. The yield of rain-fed rice is 1.5 - 2.5 tons per hectare (non SRI fields).

The conventional approaches in rice intensification rely on introducing high yielding improved varieties, and using recommended prescription of fertilizers and pesticides. Farmers act as recipients of technology transferred by research through extension services. This approach leads to increasing dependency of farmers on external support and inputs, losing appreciation of the local resources, and decreasing self-confidence and self-reliance. SRI is an alternative approach to rice intensification. It recognizes the huge natural potential of the rice plant and the innovation potential of farmers in growing rice. It focuses on changing the mind-set of farmers and developing methods or management practices that create a conducive environment for each rice plant to grow. It supports farmer-led experimentation and extension to evaluate and disseminate the most appropriate methods and/or management practices.

In 2000, there were only around 28 farmers using SRI in Cambodia. By 2012, there were already around 200,000 SRI farmers. They recorded a yield increase of 50-150 per cent, reduced cost (>70%) of seeds and fertilizers, and yields of more than six tons per hectare under rain-fed conditions using traditional seed varieties, which helped in realization of the natural potential of rice plant. Tiller development and root growth of rice were improved with traditional seed varieties and SRI methods. SRI represents a change of belief on how rice grows, as well as changes in the existing ways/methods of growing rice by focusing on helping rice plants to utilize their full natural potential. The combination of improvements using simple practices leads to significant yield increase through a synergy effect.

The most important changes in planting practices that happen with a shift to SRI is as follows: flooded fields to non-flooded wet/dry fields; use of old seedlings to use of younger seedlings; use of many seedlings to use of one good seedling; forceful transplanting to careful transplanting; deep-rooted planting to shallow rooted planting; unequal spacing to equal spacing/row planting; no regular weeding to early and frequent weeding; and use of chemical fertilizers to use of compost. Combining all these practices creates a positive synergy effect.
There are three new practices in SRI that are the most important: i) keeping the fields away from being permanently flooded during vegetative stage (mainly only wet), ii) planting only one good seedling, and iii) planting in square patterns or in rows, and the distance (space) between each plant varies according to the age of the seedling or the time of planting (for seasonal rice), and the water level in the fields. SRI involves transplanting young seedlings with care, early and frequent weeding, and selecting good seeds for the new season. The most notable outcomes or results of the change in practices include: use of more seeds to less seeds; use of more water to less water; use of more chemical fertilizers to less or zero chemical fertilizers; use of less compost to use of more compost; less workload to more workload; low yield to higher yield; low net income to higher net income; and lastly, farmers gain more self-confidence and creativity and more power to control the technology.

There are some key activities that are important in promoting SRI. These include: i) starting with a small group of innovative farmers to experiment on a small plot, ii) exposure visit to SRI farmers (farmers, government officials, NGOs and others) to let people see before believing in SRI, iii) training of trainers and extension agents on how to work with farmers on SRI, and iv) training SRI farmers to become SRI farmer promoters.

**Discussion**

**Dr. Raj Paroda:** SRI is labour intensive. In some states in India where there is availability of more labour, this is important and can be successfully implemented. However, in states where there is shortage of labour, this is not a good choice. For some rice varieties, there is no need for flooding the fields. This good practice of not flooding the fields is now picking up in India.

**Mr. Thomas Price:** How do you select and develop seeds?

**Mr. Sophal Uon:** We train the farmers to develop their own seeds of good quality.

**Ms. Esther Penunia:** What is the experience of farmers who are shifting to SRI in terms of yield while in transition?

**Mr. Sopheap Pan:** When the SRI was first introduced to a farmer, he did not believe. But, he started the experiment and applied the 12 principles. In his experiment, he recorded the expenses on inputs and the income from yields and made comparisons. It was observed that in the first year of shifting, the yield dropped. But during the succeeding years, the yield continued to improve especially when all the SRI principles were applied.

**Taiwan Wax Apple Development Association (TWADA), Taiwan**

**Mr. Shun Te Tsai,** made a presentation on "The Initiatives of Taiwan Wax Apple Development Association (TWADA)" and **Ms. Shui Hui Tsai** acted as translator. Mr. Shun Te Tsai mentioned that the Taiwan Wax Apple Development Association is composed of 380 farmers (men: 260; women:120). Its vision is to promote the cultivation and management techniques of wax apple and to develop the marketing channel for domestic and export market. TWADA's primary partner for agricultural research and development is the Council of Agriculture (COA). It is the competent authority on the agricultural, forestry, fishery, animal husbandry and food affairs in Taiwan. Its responsibilities include guiding and supervising provincial and municipal offices in these areas.
Currently, there are a total of 60 offices under the COA (23 organizational units and 37 affiliated offices under these units). More particularly, TWADA works with the Kaohsiung District Agricultural Research and Extension Station, COA. The Station is one of the seven agricultural research and extension stations in Taiwan. The Station consists of five research units/sections (Crop Improvement Section, Crop Environment Section, Agricultural Extension Section, Chinan Branch Station and Penghu Branch Station) and three administration units. Their research on tropical fruit crops focuses on the breeding and cultural practices for improvement of wax apple, Indian jujube, litchi, mango, papaya, and guava.

In addition to government agency, TWADA also works with National Pingtung University for Science and Technology (NPUST), located in Pingtung, which occupies 285 hectares land and considered the largest and most beautiful campus in the country. It has enjoyed the reputation of being a “National Park University.” It educated innumerable scholars for the crews of the widely recognized Taiwan Agricultural Teams and for domestic companies.

TWADA, together with its partners, focuses its research initiative on wax apple particularly on the production, marketing and human resource development. The objective of the research is to increase the productivity of wax apple and to assist wax apple farmers to secure certification of International Standards Organization (ISO) and explore the marketing channel for domestic and export market. The human resource development was geared towards education and better incentives to attract the best talent at all levels and to retain trained researchers and advisers. Most importantly, it is geared towards encouraging young people into agriculture. In Taiwan, as in most agricultural countries, agriculture is an ageing and undervalued profession and the wax apple farmers are too old and cannot immediately adapt to the new technology or knowledge.

TWADA in collaboration with COA, NPUST and other partners conducts capacity building activities which include the following: i) sustainability of production and food health, ii) upgradation of production technology (processed foods and organic products), iii) financial reward systems, iv) raising the wax apple farmers’ revenue, and v) field coaching and farmers exchange visits.

The facilitating factors that made TWADA’s research initiatives successful were; i) strong linkages with our partners and farmers, ii) government policy and funding support, and iii) good mentoring and education programs, provided by NPUST.

One important lesson drawn from the work of TWADA is that farmers are willing to do everything that will enhance the income of farmers and improve the quality of their life.

Discussion

Mr. Muhammad Rifai: Who is supporting the farmers?

Mr. Shun Te Tsai: Both the government and farmers’ groups are supporting the individual farmers. The formation of TWADA was facilitated by the government. The research experiments were conducted at the farmers’ fields.

Dr. George Chou: When farmers start their business, the government gives grants. Even when they lose, they are given some support by the government. The rice policy being adopted in Cambodia was also adopted 30-40 years ago in Taiwan. Now our country is developed and
we are overproducing. The government has now encouraged the farmers not to produce rice, and is subsidizing the rice farmers who are not producing.

**Mr. Kim Seung Hong:** Taiwan is still divided into three zones with specific crops being grown in each zone. For example – north zone is suitable for fruits. How about the central zone and the southern zone?

**Mr. Shun Te Tsai:** Earlier rice was the main crop in the island 30 years ago. But, now each district has developed its specific crops and the main product. Many districts have developed outstanding products, such as wax apple in Pingtung.

**Ainokai, Japan**

**Mr. Yoshikuni Yatani,** made a presentation on “Ainokai’s Initiative on Agricultural Research for Development”. He highlighted the progress made during 2011 and 2012 and focused mainly on capacity building, research and networking.

Ainokai organized the following trainings: i) seminar on sustainable life techniques focusing on original wood burning kitchen stove making and economics of localization, ii) night seminar on organic farming in Nagoya city targeting on “Wanna be” farmers living and working in urban city of Nagoya, iii) food processing techniques like bread baking, pickle making, Japanese miso and soy sauce making, etc., iv) kitchen stove testing event focusing on cooking rice with wood burning kitchen stove, v) special course for soil and seedling raising techniques, vi) organic farming and sustainable way of living which included learning Gandhi spirit by spinning cotton balls, and vii) development of transition town. Followed by the transition town symposium held on 10 June, 2012, a group of people got together to transform Iga into a transition town. The first meeting was held on 8 July, 2012 in Ainou in which it was proposed to set-up a local currency in Iga area to promote local economy and network of citizens.

Ainokai conducted a consciousness survey of Ainokai members, supporters, and newsletter subscribers. The objective of the survey was to know about members’ views, thoughts and opinions towards Ainokai. The questionnaire was sent to about 1,200 people out of which 84 people responded. The result was cited in the Ainokai newsletter with the comments of their board members. Ainokai intends to reflect the result of the survey in their future activities.

In terms of networking and responding to the result of the survey conducted, Ainokai is now holding meetings all over Japan. It is expected that this meeting can create or revive, strong linkages between members and Ainokai. In addition, Ainokai also attended several AFA activities including the Farmers’ Forum in Italy, Rio+20 in Brazil and the General Assembly of AFA in Vietnam. They also joined in the ‘No Nuke Demonstration’ and contributed in collecting petition against nuke energy. They also joined training workshop for Japan Agriculture Standards (JAS) certification and regular Screening Committee meeting of JAS for organic certification.

**Discussion**

**Ms. Ika Krishnayanti:** How does Ainokai work with the consumers?

**Mr. Yoshikuni Yatani:** Ainokai has opened organic shops in Nagoya and Oska, and the consumers take advantage of these shops.
Mr. Kim Seung Hong: All the compost and organic fertilizers are very expensive in Korea. How do Ainokai members handle such a high price?

Mr. Yoshikuni Yatani: Ainokai members rear the animals, and they make compost and organic fertilizers from the dungs of their animals. So they do not have to buy the fertilizers.

Ms. Lei Yvoan: I have two questions. First, in the affected areas of the nuclear disaster, how many members in how many provinces are now working? Second, I would like to know the organic certification process of your organization – is the organic product accredited by your government or by your organization?

Mr. Yoshikuni Yatani: Regarding the first question on the number of members living in areas affected by nuclear disaster, I would like to inform you that some members stopped their farming. Some of them left for other areas not affected by nuclear disaster and started organic farming. Regarding the second question on accreditation, I would like to inform you that it is the government who accredited organic certification to Ainokai. Ainokai’s regular members who are organic farmers, numbering 300, are living all over Japan.

Mr. Jagat Basnet: Are Ainokai members small farmers or landless farmers?

Mr. Yoshikuni Yatani: Japan, after World War II, made genuine land reforms. Theoretically, there is no landlord in Japan now. All farmers got the land from the land reform program of the government. Most of Ainokai members are land owners, but not big scale. In the south district area, farmers own only an average of one hectare land per family. In the northern and eastern parts of the country, farmers own on the average two hectares land because of the difference in land productivity.

Korea Advanced Farmers Federation (KAFF)/Women Advanced Farmers Federation (WAFF), Korea

Mr. Kim Seung Hong made a presentation on "Korean Initiatives on AR4D Including Activities of Korea Advanced Farmers Federation (KAFF) and Women Advanced Farmer Federation (WAFF)". Ms. Young Ran Choi acted as translator.

KAFF and WAFF in South Korea are focused on advocacy and also there is a research department. The government also has a big research and development agenda for agriculture, and usually conducts agriculture experiments for a period of five years. The research results are disseminated to the farmers through extension and training.

KAFF is more focused on policy advocacy on farmers’ rights and development. KAFF has held 18 meetings with Parliament, and now eight bills, which KAFF has submitted to Parliament, are in motion. Some of the important bills are: i) bill to exempt young men in rural areas from military service, ii) bill to exempt farmers from certain taxes, and iii) policy proposals to each presidential candidate e.g. proposal for free trade analysis, proposal for one per cent corporate tax on imports to be given to rural areas.

Discussion

Mr. Muhammd Rifai: We are interested to know about the engagement of KAFF with Congress to produce some bills that will affect farmers. In Indonesia, farmers are also involved in drafting
some bills. How can you be effective in preparing the bills and getting these passed for the protection of farmers’ rights?

**Ms. Young Ran Choi:** We have congress persons who are allies of the farmers’ organizations. In areas where farmers constitute the majority of the population, the farmers conduct research at their own level. In that area, the congress men are aware that the farmers hold the votes and, therefore, they listen to the farmers, and help addressing their problems.

**Dr. Thomas Price:** What are your ways of encouraging youth for farming?

**Ms. Young Ran Choi:** The government gives a start up capital soft loan of USD 200,000 to young people who want to join the farming. This capital loan is payable in 15 years. After 5 years, the person can decide whether he should really get involved into farming, and if so decides, the government will give USD 80,000 as grant. Also now, we have a bill pending before the Congress to exempt the young farmers from rendering military service.

**Mr. Jagat Basnet:** Is your research done by the experts outside or within your farmers’ organization?

**Ms. Young Ran Choi:** The eight agenda/bills were drafted through a series of meetings with many sectors, involving some lawyers, academia, and others concerned.

**Mr. Jagat Basnet:** Do you have partnerships with other FOs? how are you working with them?

**Ms. Young Ran Choi:** There are other national farmers’ associations, for example, there are associations specifically for crops and fruits. Yes, we work with them on specific issues in partnership mode.

**Mr. Ajay Vir Jakhar:** Is there a limit to how much land a farmer can own?

**Ms. Young Ran Choi:** Agrarian reform has been done before. Now, there is no limit how much land a farmer can own. If a farmer owns less than 10 hectares, he can have priority in some government programs and get incentives for adopting agriculture.

**Technical Session III: Experiences of AFA Members in AR4D**

**Facilitator:** Ms. Esther Penunia

**India Farmers Forum, India**

**Mr. Ajay Vir Jakhar,** of India Farmers Forum made a presentation on “Experience of India Farmers Forum in AR4D”. He primarily focused his presentation on policy advocacy due to the reason that the policy makers do not consult and listen to the farmers. He mentioned that a magazine is being published with 10,000 copies and covers discussions on food security, foreign direct investment and fossil fuel use. We would like the policy makers to decide on what is really important for farmers. We are trying to increase awareness among the farmers and policy makers in this direction.

Every developing country farmer wants profitability. Once we focus on this, then there will be automatic increase in agricultural productivity. We also want the GCARD process to advocate
for self reliance of the farmer. Farmers should not be dependent on subsidies for the rest of their lives. We also want GCARD to focus on the processes on building scenario. e.g. what will happen in 2015 if we try to use fossil fuels? We also advocate that along with organic practices, the latest technology should be developed and taught. Farming has to be a marriage of science and convention. There can be no one solution for many problems in the whole world, and hence specific problem oriented solutions need to be evolved.

He highlighted that funding obviously is a serious constraint, and because of the increase in the prices of food, funding for agriculture has to be enhanced. We are advocating private investment in agriculture, as public investment has been very low. For example, the BT cotton is pushed up by private companies as a result of which cotton production has increased considerably and now we are exporting cotton.

He further mentioned that agricultural research, as of now, has not yet translated for better conditions as it takes long time to take effect. We know that a lot of research data is available. We should transfer the agricultural research results to the farm level. We need to transfer good practices to the farmer. We are focusing on input optimization, and would like more research focus on this aspect.

He stressed that India Farmers Forum receives no government funding and it is fully funded by farmer organizations and farmer cooperatives. He also mentioned that the farmers are ready to learn from the experiences of other farmers, and this consultation has provided a good platform for this purpose.

**Discussion**

**Mr. Yoshikuni Yatani:** What is the limit of land ownership of the farmers in India?

**Mr. Ajay Vir Jakhar:** There is a limit of 12 hectares that one family can own and it is classified as privately-owned land.

**Aliansi Petani Indonesia (API), Indonesia**

**Mr. Muhammad Rifai,** made a presentation on "Production Management and Market Access" relating to one of the initiatives of Aliansi Petani, Indonesia (API) called “Production Settlement and Strengthening the Producers’ Position in the Agricultural Production Chains by Conducting the Programs of Peasant Organizations Strengthening and Collective Marketing” **Ms. Ika Krishnayanti** acted as translator.

The presentation addressed several strategic issues such as: (i) identification of the profile of the organization, including strengths, weaknesses and potential resources owned or controlled by farmer organizations to promote the development of value chain of production, (ii) increasing the peasant organizations’ capacity for improving the quality, quantity and continuity of the products that meet the market demand/conditions required by the buyers (quality control), (iii) developing agricultural business units (cooperatives) and collective marketing, (iv) strengthening the peasant organizations’ capacity at the national level and district level, (v) establishing learning, resource sharing and knowledge sharing centers for the development of production value chain of peasant organizations, and (vi) participation of women farmers in the organization and production value chain.
The project aimed to: i) create stronger peasant organizations that are self-supporting and accountable and are able to facilitate peasant families so that it becomes possible for them to access the agriculture economic resources in rural areas and enhance their bargaining position on the value chain of commodity, and ii) increase the role of peasants in the process of creating the government policy through collective marketing and strengthening of peasant organizations.

The specific objectives of the project were to: i) increase the income of the peasant organizations which are the members of Indonesian Peasants Alliance (API) through developing collective marketing in five selected districts, ii) increase peasant organizations’ bargaining position in the agricultural commodity chains developed by the members of API, and iii) develop learning and knowledge centers that originated from peasant experience on collective marketing and peasant organization strengthening.

The major achievements and notable outcomes of the project were as follows: i) enhancement of production and income of members' small-scale-farmer business (cooperative), ii) development of good bargaining position in every value chain of agricultural commodity by peasant organizations, and iii) the knowledge and experience sharing among members of peasant organizations regarding collective marketing system and strengthening of the peasant organizations.

He further mentioned that there were five beneficiaries of the project. The names and details of these beneficiaries are given below:

i) **Beneficiary 1**: Lumajang Peasant Union
   - Product: Banana (*Pisang Emas Kirana*)
   - Location: Lumajang District, East Java Province
   - Total members: 3,000 farmer households
   - Total production: 400 tons/month

ii) **Beneficiary 2**: ORTABUN Peasant Organization
    - Product: Cocoa
    - Location: Banggai District, Central Sulawesi Province
    - Total members: 2,500 farmer households
    - Total production: 50 tons/month

iii) **Beneficiary 3**: Jambi Peasant Union (PPJ)
    - Product: Duku fruit (*Lansium domesticum*)
    - Total members: 17,000 farmer households
    - Total production: 500–1,000 tons/season

iv) **Beneficiary 4**: Jembrana Pesant Union
    - Product: Cocoa
    - Location: Jembrana District, Bali Province
v) **Beneficiary 5:** Boyolali Organic Rice Peasant Alliance (APPOLI)
   - Product: Organic rice
   - Location: Boyolali District, Central Java Province
   - Total members: 3,000 farmer households
   - Total production: 1,125 tons/season

**Discussion**

**Mr. Thomas Price:** Are you undertaking value addition work in cacao and exporting the value added products? For example, chocolates in Europe are from Ghana.

**Mr. Muhammad Rifai:** In the beginning, the farmers were not interested in planting cacao anymore because of severe insect-pest infestation that occurred in 2000. They were cutting down the cacao trees and planting other useful trees. Later on, they found a way to reduce insect-pest infestation and learned the technique of the culture of cacao tree. Now they are interested to plant cacao again. Earlier, it used to take 5 years for a cacao plant to grow and start flowering. Now with adoption of grafting technique and replanting system, the tree starts flowering at eight months stage. In Bali, we facilitate farmers to have direct access to market – to the manufacturer of chocolate, who exports the product to USA, Japan, and Sweden. Since, there is no middle men involved in this process, there is now improvement in the income of the farmers. Now, we have consolidated the cacao farmers into one entity of cooperative and undertake collective farming. The impact is that earlier the price of fermented cacao was USD 1.6-1.8 per kg, but after adopting the collective marketing system, the price is USD 2.2-2.3 per kg depending on the exchange rate.

**Mr. Shun Te Tsai:** Could you throw some light on value addition, such as producing chocolate powder/flour?

**Mr. Muhammad Rifai:** Presently, there is not much value addition work being undertaken but we are just starting. After the collective marketing system is in place, we can start value addition work on a large scale.

**PAKISAMA, Philippines**

**Mr. Efren Arroyo,** who is one of the leaders of PDCI highlighted the experience of one of its members – the Pecuaria Development Cooperative, Inc (PDCI) whose various partnerships helped the farmers to achieve many accomplishments, such as being one of the top agricultural cooperatives in the country and the biggest single, local supplier of organic rice in the mainstream market. He first showed a seven minute video on Pecuaria which was followed by discussion, focused mainly on partnerships.

He highlighted that the first partnership developed was among the farmers. There were several groups in our community but they were not working together. A professional farmer federation,
KOSOG-PAKISAMA, assisted PDCI by deploying a professional community organizer. Through the community organizing approach, a group was formed which comprised 426 farmer members who later formed a farmers’ cooperative.

The second partnership was developed, as a farmers’ organization, with the Department of Agrarian Reform. The government agency gave us the control and ownership over 900 hectares of land under the government’s agrarian reform program. Initially, there were problems regarding land ownership but PDCI finally got their land after four years of struggle and negotiations.

Because the farmers gained control over the land, they were able to decide on what to plant and where to sell the produce, and thus could get more incentives to produce better. But, we did not have enough production capital. It was difficult to get production credit from the government since we did not have any track record yet. PDCI asked a partner NGO network, PhilDHRRA, to provide us loan as per the initial production capital needs. But, many of us being former farm workers, knew very little about agriculture technology. Thus, we further developed our partnership with PAKISAMA, a national farmers federation, who taught us integrated, diversified, organic farming system and trained some of our members as the farmer-technicians. PAKISAMA was working in partnership with scientists from a state-owned Agricultural University and taught us how to breed rice and produce organic fertilizers. Soon, PDCI farmers found themselves becoming also scientists, testing and finally succeeding, after ten years, in breeding commercial varieties of organic rice.

The next challenge was where to sell organic rice. PDCI wanted a better price for rice so we partnered with an NGO known as Upland Marketing Foundation Inc. (UMFI) which became our marketing institution and in a short time made our organic rice prominent in 300 malls and outlets. Our PDCI members were happy because they were able to buy their products at higher price which their cooperative milled and sold to their partner marketing NGO. We further diversified our business, produced organic fertilizers and sold these to members and other farmers in the locality. Later, we started to undertake contract-growing for established poultry processors. All these partnerships made PDCI and our members more viable food producers.

Regarding the challenges in partnerships, he mentioned that the farmers in PDCI developed partnerships with various agencies at different periods of 22 years history. We describe the nature of our partnerships as principled and critical. We regard ourselves as independent and autonomous from third party organizations such as government, CSOs, and business organizations. Sometimes, we quarrel especially with some government officials who thought of partnerships as another name for cooperation and were not taking us seriously. But by and large, we had very productive partnerships over the years and we look forward to higher level of partnerships to push forward our common development agenda in the coming years.

Based on PDCI experience, PAKISAMA has three most important lessons and recommendations, which are as follows:

- Agricultural research partnerships are most relevant if these are people-justice-centered and focused on the needs of the primary actors, in this case, the small holder producers. Control and ownership over land, seeds, sustainable agriculture technologies, and market are very important to small farmers. Thus, agricultural researches that will help speed up the process of acquiring these factors of production and exchange are the ones that
are urgently needed. Farmers thus recommend to the government to seriously implement agrarian reform and sustainable agriculture programs that provide necessary impetus for farmer-led agri-research.

- Small-scale farmers need not only the improved technologies but also institutional arrangements through the deployment of community organizations and networks, in significant numbers, to catalyze the formation of viable farmers’ organizations who will engage the various institutions of government, CSOs, academia, and business community on various aspects of agriculture development. Research can only be relevant if institutions are well established, functional and sharing knowledge and resources. In the interest of farmers, these is a need to include items on various agricultural research aspects in the budget, and also the support to the deployment of community organizers and networks focused on sustainable agriculture promotion and extension.

- Farmers learned that research programs need not be government or corporate or NGO-led. In fact, PDCI has undertaken the ten-year research program on organic rice breeding pretty much based on the efforts of farmer-technicians aided by friendly scientists. Thus, we recommend that a significant portion of funds earmarked for agricultural research be allocated to the mobilization and training of farmer-scientists and the strengthening of agri-cooperatives.

**Discussion**

**Mr. Sophal Uon:** What was the process adopted in establishing your cooperative?

**Mr. Jagat Basnet:** Is your cooperative different from the government cooperative?

**Mr. Efren Arroyo:** Our cooperative started in 1991, and we registered the cooperative with the government. All our members are agrarian reform beneficiaries and each member has 1.7 hectares land. We have undergone many problems in reaching to the current stage. Initially, we started with nothing, but subsequently we got funding assistance. With good track record, many agencies helped us. Now, we are in a position to give dividends to the members of the cooperative. The government regularly evaluates us for our performance and credibility.

**Vietnam National Farmers Union (VNFU), Vietnam**

**Ms. Lei Yvoan,** from Vietnam National Farmers Union (VNFU) presented the results of the field study on its Organic Development Project. She highlighted that the development of organic agriculture in Vietnam is driven by concern over the risks of high residues of chemical pesticides. The first solution to address this problem is to adopt “clean” or “safe” agriculture with integrated pest management (IPM), following Vietgap and Globalgap. But, other organic agriculture methods should also be supported. Main organic production in Vietnam targets the export markets of shrimps, tea, fruits, cashew, and spices, among others.

Organic farming is not new in Vietnam, as local farmers have practiced traditional farming for hundreds of years. Farmers recognize that it can recover the quality of soil and biological diversity. It can also solve the problem of pollution, soil erosion and low mass of soil caused by the massive use of chemical fertilizers and pesticides. Consumers also need safe food despite the higher price.
She mentioned that the VNFU organic project was implemented in three phases during 2005-2012. The first phase of the project (2005 – 2008) involved field studies by farmers. A total of 120 farmers in 12 groups were involved in the field studies of rice, vegetables, fruits (litchi, orange) and aquaculture. The studies resulted in the development of technical manuals and training materials. It also resulted in the development of three organic farming systems for three crops, namely, rice, vegetable and fruit trees. However, the study on aquaculture has not yet been completed.

The second phase of the project (2008 – 2010) involved training of trainers (TOT) for farmers to become capable organic farmers. There were also farmer field schools (FFS) for more than 2,500 farmers. Organic farmer groups were also established. Finally, participatory guarantee system (PGS) certification for organic products was also developed.

The third phase of the project (2010 – 2012) involved follow-up of the FFS/TOT/organic farmer group development, market development/cooperation with companies meeting customer requirements, and development of organic supply chains/value chain analysis.

Ms. Lei Yvoan also highlighted that the research study process started with the choice of organic methods that can best bring safety and nutrition for food and soil. It progressed according to the following steps: inception study/database; trials and experiments on organic farming and conventional farming; recording observations on crop growth every week/recording of the process; using interventions/technologies such as compost making, herbal pesticides, liquid spray from garlic, neem, and integration of crops. The study also got the support of the local government as one person from the Local People’s Committee joined the process.

The commune provided land for the conduct of trials and experiments in the fields. The project worked closely with agricultural research institutes and universities in Vietnam, which helped in giving feedback on the results of soil testing and analysis, application of traditional seeds, green manure and compost making, among others.

She further highlighted that during the second phase of the project (2008 to 2010), the knowledge and research results were shared and used through various means. There was direct sharing through training of trainers, farmer field schools, workshops and training materials, development of a participatory guarantee system for Vietnam, and field visits. Indirect sharing and use of knowledge and results were also made through the establishment of organic farmer groups/inter-groups, marketing study/marketing strategy/market development, public communication to farmers and consumers and communities, development of product chains, policy advocacy workshop on the policies for organic agriculture development in Vietnam, and participation of all stakeholders in applying the results of the research.

From the project’s experience, the following recommendations were made: (i) the government should have specific policies to promote organic agriculture at the national as well as at regional level, (ii) there should be capacity building for organic farmer organizations, including field research potential, (iii) there should be more research programs and studies on organic farming and other good agricultural practices (GAP) and methods to be applied in tropical regions, especially on disease treatment, agro-biotechnology, and aquaculture, and (iv) regional research projects should be undertaken in which farmer organizations can get involved and share inputs, outputs and knowledge.
Three inter-groups were formed to undertake production, marketing, and certification management functions. Production group takes care of planning, techniques, and materials. Marketing group assists in selling and promotion. Certification management group takes care of inspection planning and organization, report review, decision making, and monitoring and follow-up of sanctions. The PGS Coordination Committee (CC) consists of seven volunteers from among the different members of the PGS. The Annual General Meeting (AGM) of PGS members will appoint the Coordination Group for the time being. The PGS CC has the responsibility for the overall governance of the PGS particularly with regard to the integrity of the system and the PGS standards. It has the right to check the internal working of both Producer Group and Inter-Group. It issues the certificates and has the right to withhold certification. It also maintains the PGS database including the record of non-compliances and actions taken.

The following important results were achieved:

i) Inspection and certification:
   - 2009: 1 out of total of 9 registered PGS groups is certified.
   - 2010: 11 out of total of 14 registered PGS groups are certified.
   - 2011: 20 out of total of 24 registered PGS groups are certified.
   - 2012: 23 out of total of 27 registered PGS groups are certified.

ii) 22 ha out of total of 3,112 ha registered are certified PGS and include vegetable, longan and pomelo.
iii) 173 farmers among 262 registered under PGS are certified.

iv) Sanctions:
   - 2010: two warnings on account of applying low grade compost into organic field.
   - 2011: one warning; in one case, the certification was withdrawn.
   - 2012: one warning

Discussion

Mr. Mohammad Rifai: We are interested in the certification system, especially PGS. It is important for small scale organic producers. How do you label organic products; especially the GMO products mostly are not labelled. In Vietnam, is the PGS applicable for national or only local level? Is PGS a national law? Is there any other certification system for organic products?

Ms. Lei Yvoan: If we do not have certification, our consumers cannot recognize our products. Our Ministry has not yet developed the certification system. We have established accreditation committee consisting of the project members and the consumers - 7 persons as members.

Mr. Muhammad Rifai: The certification is a condition required by the consumers/buyers. This is for the food safety. But, sometimes the certification requirements are difficult to be met by small farmers, particularly when certification standards are high.

Ms. Lei Yvoan: I totally agree with you. We started certification with the IFOAM PGS because if we wait for the government system to be in place, it will be too complex and we will have to wait for a long time.

National Land Rights Forum (NLRF), Nepal

Mr. Som Bhandary made a presentation on "Land and Agrarian Rights Initiatives of National Land Rights Forum (NCRF) and Community Self Reliance Center (CSRC)". Mr. Jagat Basnet acted as the translator. NLRF and CSRC jointly implemented on-ground initiatives such as: i) support to sustainable farming initiatives through forming women’s agriculture cooperatives, ii) working with Village Development Committee (VDC) for the support of agriculture inputs and agriculture offices, iii) coordination of movements on fundamental rights issues (land, agriculture, food, forest), and iv) NLRF/DLRF showing the examples of animal husbandry and agriculture farming.

They also implemented policy, research and advocacy activities such as: (i) lobbying to endorse the implementation of the National Land Use Policy, (ii) support to coordination of movements (land rights, community forestry, dalits and women), and (iii) networking and policy support for sustainable agriculture/partnership with Forest Action.

NLRF members are doing collective farming with permission of VDC on the public land. They harvest an estimated 10 q of lentils and 100 q of rice through collective farming. NLRF plays the role of advocator and practitioner. A model of land and agrarian reform was developed. The struggle through collective efforts resulted in providing the land certificate to its members. There is collective effort and collective ownership. Another benefit of the struggle is women’s ownership of the land. NLRF also does land and agriculture encampment.
There has been a shift away from farming, as people are moving to the non-farm sector due to eviction from tenureship/share cropping, but there is a weak linkage between farm and non-farm sector. Rural livelihood security as a whole is also being threatened and vulnerability is growing since the climate as well as food production are fluctuating and food insecure households cannot cope up with the situation.

The source of food supply has seen a growing dependence on international monopoly market dominated by big national companies, as well as a growing dependence of farming sector on external technology.

Agricultural policies in Nepal suffer from the lack of political ownership, high input plan with low level of investment commitment, and lack of coordination for research and extension and with other sectors like forestry, land and labour. The main issue is also that the policies are not in favour of resource poor farmers and there is no target fixed for addressing food security.

The opportunities for action include: i) mainstreaming of knowledge challenges-research, comparative study and innovations; ii) influential networks of practitioners, researchers and service providers - to adopt policy and promote institutions that support adaptive production and productivity system; iii) coordinated movements/actions such as land rights, community based forestry, common land use, agroforestry; and iv) increased production and productivity of resource poor farmers and livelihoods diversification through on-farm demonstration.

The major achievements made in food and nutrition security sector include: i) women’s cooperative started to use the waste and fallow land to secure the food and nutrition, ii) those who received the tenancy rights now have greater share of production and are contributing to food and nutrition, and iii) some of the VLRF groups have started the vegetable farming and collective farming which are contributing to food and nutrition.

He also highlighted the importance and need for capacity development. In 2011, 40 farmers were trained on sustainable agriculture. Now they themselves have started the sustainable agriculture. The capacity of local leaders and facilitators engaged in land and agrarian reform at the community level called as community-led land and agrarian reform was also developed. The government priorities have been influenced in the areas of: i) existing land use policy, ii) starting formation of national land policy, iii) critical engagement in agriculture development strategy, iv) 15 per cent VDC budget for agriculture, and v) women’s joint ownership and women’s cooperative.

In order to share and use agricultural knowledge, the following activities were conducted: i) workshop on organic rice and rice industry, ii) exposure of VLRF members to agriculture knowledge (inter-country), iii) workshop with the partnership with the agriculture sections, and iv) sharing of information on agriculture issues like climate change and sustainable agriculture.

He also stressed on the need for promoting agricultural extension work. There is a plan to support at least 50 community groups on agriculture every year and to support women agricultural cooperatives. There are also collaborations with other organizations, such as VDCs, agriculture offices, and NGOs. There is also a need to claim 15 per cent VDC budget for agriculture extension.
There are several issues and lessons learned. There is no strong partnership between the agriculture researchers and agriculture support organizations. There is less partnership in action research in agriculture. Finally, there is no monitoring of the utilization of budget of VDC and the agriculture office which leads to blaming and counter blaming among NGOs and government office.

Discussion

Mr. Muhammad Rifai: I am interested to know about the efficient land use and collective marketing system because land use is the base of agrarian reform. How do you manage the system of collective farming, because each farmer involved in collective farming may have different style of work, different capacity, different amount of work and how do you share the produce?

Mr. Jagat Basnet: We were able to convince the government to have the national land use policy. It is really a challenge to do collective farming. We have taken the land from the Village Development Committee (VDC) in order to adopt collective farming. It is like a contract of each farmer with the VDC. They have to work in the group, and they will share the produce among themselves as per the appropriate mechanism developed.

Technical Session IV: Synthesis of Discussions in Technical Sessions

Facilitator: Ms. Esther Penunia

Ms. Esther Penunia, synthesized the highlights of the presentations and the views expressed during the discussions in Technical Sessions on Day 1 and presented the summary report. Five key areas were identified indicating where lie the FO priorities, and where AR4D can be focused on. These five identified key areas are as follows:

- The first area is on ensuring farmers’/producers’ access to productive resources such as land, water, seeds and energy. NLRF had joint ownership of land with men and women members, land use policy and collective farming. PAKISAMA had partnership approach in agrarian reform implementation. Farmer and Nature Net (FNN) worked on efficient water use through system of rice intensification (SRI) and community based irrigation system and the use of local rice seeds. API worked on cross-breeding of seeds while Ainokai worked on the use of wood as fuel for efficient kitchen stoves.

- The second key area of work includes agricultural practices that increase yield, make farming profitable but at the same time protect the environment, reduce vulnerability of farmers and build their resiliency – leading to better conditions of farmers and a sustainable lifestyle. FNN, for example, has piloted and upscaled the SRI. VNFU and API developed farmer trainers and local training materials on organic farming and conducted farmer field schools. Ainokai developed sustainable lifestyle technique and transition towns. Ainokai, KAFF, WAFF, PAKISAMA are linked with academia for agri-extension work.

- The third key area of work relates to organizing and strengthening farmers’ organizations and cooperatives. NLRF, PAKISAMA, VNFU and API shared their work on organizing farmers into commodity clusters or cooperatives, and conducting organizational meetings and membership surveys.
• The fourth key area of work includes marketing. API, VNFU, FNN, PAKISAMA and TWADA are conducting marketing surveys, undertaking quality control of their products, product packaging and branding. Ainokai, VNFU and API are engaged in organic certification and participatory guarantee system (PGS). These organizations have linked with academia for product packaging and with media for promotional activities.

• The fifth key area of work is advocacy for supportive government policy. KAFF, WAFF, API, NLRF, India Farmers Forum have strong initiatives in this area. KAFF and WAFF have very interesting bills filed in the parliament, and these bills were drafted with the help of allied academicians and policy makers and analysts.

**Technical Session V: Planning Workshop-Working Groups**

**Facilitator: Ms. Lany Rebagay**

Mr. Lany Rebagay briefed the participants about the procedure to be followed for the Planning Workshop, and having group discussions. Accordingly, the participants were divided into three Working Groups according to the sub-regions in Asia (Southeast, South, and East Asia) and the composition of Working Groups was as follows:

**Working Group 1.** Southeast Asia : API, FNN, VNFU, PAKISAMA

**Working Group 2.** South Asia : NLRF, India Farmers Forum

**Working Group 3.** East Asia : KAFF/WAFF, Ainokai, TWADA

Each Working Group was asked to deliberate and answer the following three questions:

1) AFA, in 2009, identified the following priorities for AR4D. Please validate, confirm, refine, add or delete to come up with the current priorities for AR4D.

   (i) Invest in agricultural research and development that is geared towards effective, sustainable, integrated, diversified, and organic farming.

   (ii) In the area of sustainable, integrated, diversified, organic farming, the research institutions should focus on:

       - Soil fertility management
       - Crop growth and health
       - Habitat management
       - Crop breeding programs focusing on the adaptability of plants to low-input situations, weed competition, and insect pest and disease tolerance
       - Improved plant protection techniques and compounds from natural sources
       - Breeding strategies and programs for adaptability to management and environmental stress situations
       - Reduced tillage and organic systems
       - Efficient water-use/community-based irrigation
       - Participatory plant breeding and community-based genetic resource conservation efforts
iii) Research on improving resiliency of crops and increasing the diversity of traits through traditional and modern conventional breeding techniques, which will involve smallholder farmers and their organizations

iv) Documentation of various traditional, local knowledge and practices on crop breeding, seed banking, pest management, organic fertilizers, and energy-efficient mechanisms

v) Technical assistance in monitoring the climate variation and needs and making timely forecasts/warning for better planning

vi) Strengthening links between research, advisory and extension services to promote sustainable agriculture; strengthening partnerships between research institutions, extension workers and organizations of smallholder farmers, particularly women because women are good educators

2) Based on your answer to question 1 regarding the key AR4D priorities, what new skills and capacities do you need?

3) What kind of partnerships and collective actions are needed?

**Technical Session VI: Presentation of Reports of Working Groups**

**Facilitator:** *Ms. Lany Rebagay*

The reports of three Working Groups were presented by the convenors identified by the respective groups. The details are given below:

**Southeast Asia Report (API, FNN, VNFU, PAKISAMA)**

**Convenor:** *Ms. Lei Yuoan*

The Southeast Asia Working Group comprised the representation of Indonesia Peasant Association (API), Farmer and Nature Net (FNN), Vietnam National Farmers Union (VNFU) and PAKISAMA. The report of Working Group on Southeast Asia was presented by the Group Convenor, Ms. Lei Yuoan and the recommendations/salient points emerged are as follows:

1. The group validates the existing AR4D priorities of AFA, but felt the need for adding the following priorities:
   - Developing breeding strategies, especially for local and naturally adapted varieties and programs for adaptability to management and environmental stress situations
   - Reduced tillage organic systems which should be appropriate to specific local conditions and factors such as variety, climate and seasons
   - Research on improving resiliency of crops and increasing their diversity of traits through traditional and modern conventional breeding techniques (but with more appropriate and farmer friendly technology), which will involve smallholder farmers and their organizations
   - Empowering women participation (in the research focused on how to empower women, collective farming, cooperative for women group, empowering collective marketing, information dissemination/ITC)
2. The skills needed to enhance farmers’ capacities are:

- Planning skills (for research, business plan, organizational works) – for men and women
- Information and documentation, database management and analysis – for men and women (especially for women on ITC)
- Processing skills (organic rice, processed fruit, etc., value added products – crispy jackfruit, mango) - for men and women
- Marketing skills - for both men and women

3. The group felt that AFA should partner with research institutions, NGOs, private sector and other farmer networks at national, regional, and global levels, provided that they share a common vision with AFA and its members – e.g. pro-organic and small family farmers.

Discussion

Dr. Raj Paroda: Do we only need organic agriculture? Shouldn’t we see that farming should also be able to provide good income? Are we not covering other farming systems and covering only crops. But, in Southeast Asia, fishery, horticulture, and livestock, are also important.

Ms. Lany Rebagay: There is already much interest in non-organic farming and hence we want to promote and give more resources for developing and promoting organic farming systems.

Mr. Sopheap Pan: Most of our members are small scale farmers, and this organic system is applicable to the farmers. We promote organic farming because if we minimize the use of chemical fertilizers, the farmers will be greatly benefitted. It gives better economic results with more income, more productivity and more soil improvement. If we promote chemical fertilizers, there will be greater, dependency on chemicals and machines.

Ms. Ika Krishnayanti: This is not a new way of doing farming for us. But in 1960s, there was green revolution. There was degradation in soil and the environment due to enhanced use of chemical fertilizers. Therefore, we would now like to go back to our old technologies and systems, though with improved versions.

Dr. Raj Paroda: No doubt, many farmers think that this is more sustainable. I am just putting a suggestion that we should move into more sustainable organic agriculture. We are not against organic farming if this will give more yields but the situation varies from one country to another. Another important point is the re-orientation of the development research agenda. We recently organized an expert consultation on biofertilizers and biopesticides. This is part of sustainable agriculture. But, how many countries can produce biofertilizers and biopesticides? It is good to replace chemical fertilizers with organic fertilizers but we have to see whether it is practical? There should be a balanced view on this aspect.

Mr. Shun Te Tsai: Farmers are intelligent and want to take decisions themselves. Farmers always try to do what is more adaptive to their environments. Everyone needs to undertake agriculture with adequate safety measures and needs safe foods. In Taiwan, if the farmers cannot produce safe product, they will not be allowed to produce anymore.
South Asia Report (NLRF, India Farmers Forum)

Convenor: Mr. Ajay Vir Jakhar

The South Asia Working Group comprised representatives from National Land Rights Former (NCRF) and India Farmers’ Forum. The following were the salient points of the report of Working Group on South Asia presented by the Group Convenor, Mr. Ajay Vir Jakhar:

1. The group felt to add the following as priorities for AR4D:
   - Invest in agricultural research and development that is geared towards environmentally sustainable and economically viable agriculture for smallholder farmers. Research institutions should focus on:
     - Treating soil as an asset
     - Water use efficiency and measurement (what we cannot measure we cannot value)
     - Agriculture programs focusing on the local varieties and climate change resilience
     - Better quality inputs and input optimization
     - Reduced tillage systems
     - Organic practices (localized problems need localized solutions)
     - Conservation agriculture to reduce use of fertilizers, pesticides and energy consumption

2. The capacities that need to be strengthened are:
   - Use model farmers in every cluster of villages to develop local capacity. Farmers quickly adopt better farming practices as seeing is believing.
   - Facilitate farmer visits from one country to another to bring awareness and expose farmers to farming practices in vogue in other countries.
   - Research and document various traditional, local agriculture knowledge and practices.
   - Need for more women researchers in the CGIAR system

3. Farmers’ organizations will need support on the following:
   - Transferring proven technologies through extension services to the farmer preferably through women farmers
   - One extension worker in every village is required.
   - Farmers must always be given a choice of practice or input use.

4. Partnerships for AR4D should be along the following lines:
   - Joint forum of researchers and farmers to continuously discuss traditional practices and modern research, technologies
   - Direct partnership among farmer groups and research institutions
   - Collaborative partnership with private sector
In the end, there was brief discussion on the quote by Alex Evans: “The question is not how much an acre can produce in one year but for a thousand years”. In view of this, it was agreed that we should work towards developing technologies that can sustain on a long-term basis.

**Discussion**

**Dr. Raj Paroda:** The report presents a balanced and comprehensive view. Research has to be reoriented to the needs of small holder farmers. Second, instead of talking of cropping systems, we should re-orient to farming systems. We should also promote small farm mechanization.

**Mr. Sopheap Pan:** Yes, we practice small farm mechanization in our country (Cambodia). Some farmers buy a tractor for their own use but they can also provide service to other farmers who cannot buy a tractor. Some cooperatives buy farm machines and rent these to their members as a kind of service.

**East Asia Report (KAFF, WAFF, Ainokai, TWADA)**

**Convenor:** Ms. Young Ran Choi

The East Asia Working Group comprised representatives from Korean Advanced Farmers Federation (KAFF), Korean Women Farmers Federation (WAFF), Ainokai and Taiwan Wax Apple Development Association (TWARDA), the following were the salient points of the report of the Working Group on East Asia presented by the Group Convenor, Ms. Young Ran Choi:

1. The Working Group identified the needed skills, capacities, and experiments to be conducted in all the countries in East Asia. The details are as follows:

   - For KAFF and WAFF, there is a need to study the current initiatives and respond to the needs of an increasing number of farmers’ groups which are relatively small (e.g. composed of five people only) who have grouped themselves for collective production and distribution. Studies need to be undertaken to understand the kind of support needed, especially from the government and other development organizations in the area of training, education, and management aspects. Also, we need to know the methods to respond to climate change and the kind of actions the government can take to recover losses due to climate change effects.

   - For Ainokai, there is need to review the research areas being dealt by APAARI which will be useful in deciding some priorities. Also, we would like to develop techniques for safe energy to encourage local self sufficiency including energy sufficiency from hydro, solar, geo-electronics. Ainokai has declared an anti-nuclear stance. We also would like to have more studies on promotion of traditional varieties and traditional knowledge.

   - For TWADA, it has adopted low carbon agriculture since the Council of Agriculture is promoting the health, efficiency and sustainable management of agriculture, under its “Carbon Reduction” policy objective. In fact, TWADA Chairperson has received a certification from the government already on low-carbon farming. TWADA would like to have programs to enhance skills on low-carbon agriculture.
2. On women farmers, the age of women getting married and giving birth to the first child is higher than before. Many women are more independent and their status is getting higher, pursuing more professional careers, resulting in the decreasing number of women farmers.

- In Korea, the government has started the welfare credit card policy for women farmers during 2011 with a provision of expenditure of USD 80 per women per year, which can be used for payment of hospital bills, and entertainment in cinemas. The government has started also giving USD 350 to women farmers who are seriously injured. The women farmer can use this money to hire household help. We also believe that it will be very important to develop and upgrade the physical infrastructures in the rural areas such as hospitals and schools.

- In Taiwan, women farmers need to be supported through relatively lower fees for medical insurance and medical treatment.

3. Because the number of farmers in our countries are decreasing, the ultimate solution is to increase the rural population. Thus, we would like partnerships to be focusing on this aspect. Common activities can be farmers’ exchange visits, and increasing public awareness and support to agriculture. For the latter, partnership with media will be very important.

Discussion

Mr. Muhammad Rifai: Countries in East Asia have transformed from agrarian to industrialized nations. It is important for us to learn from your experience on how you encourage young people to do farming. In our country (Indonesia), this is a challenge.

Ms. Young Ran Choi: It is also a challenge for us, but we have taken some good initiatives, mainly to encourage people, especially the young, who are residing in the urban areas to go to the rural areas. Some measures undertaken were: giving incentives for retired people to go back into farming, promotion of week-end farming activities, promotion of healthy diets through consumption of local food, new arrangements for production and marketing of crops, and low-carbon mileage incentive programs.

Plenary Session: Synthesis Report of Planning Workshop

Facilitator: Ms. Esther Penunia

Esther Penunia, synthesized the Working Groups’ reports of Southeast Asia, South Asia and East Asia presented by their respective convenors. The summary and major highlights of these three reports were presented by her and the details are as follows:

1. Based on discussions on the three reports, the AFA's AR4D priorities were reaffirmed, with some comments and refinements. The main refinements include:

- The sustainable agricultural practices must also bring net economic returns to the farmers by way of less costs and/or increased incomes.

- Knowing that many farmers in Asia have been taught to adopt chemical intensive agriculture, the transition to more sustainable agro-ecological and organic approaches
has to be supported, and therefore, practices on input optimization and low-carbon agriculture have to be promoted until a farmer succeeds in switching to sustainable, integrated, diversified, resilient, and economically viable agriculture.

- Agri-practices that reduce energy consumption and use renewable sources of energy must be promoted.
- There is a need for localized solutions to local problems, and the solutions should be appropriate to small scale farmers and the process to identify solutions must involve them as well.
- There is an urgent need for increased investments on agro-ecological and organic approaches in a similar way as chemical intensive agriculture has been promoted extensively.

2. In terms of capacities needed to promote AR4D priorities, the following need to be paid urgent attention:

- There is a great need for enhancing planning skills such as on how to undertake research, develop business plan, and undertake organizational work.
- Efforts need to be made to develop skills on information dissemination and documentation or information and communication technology and data base management, involving women and youth.
- Appropriate skill enhancement programs need to be undertaken on food processing and value addition of farmers’ crops and products for which studies need to be conducted on competitiveness of organic and inorganic products as well as on packaging of products.
- There is an urgent need to enhance marketing skills which include market information, negotiation skills, and appropriate post-harvest processing and storage and related equipments.
- Greater thrust needs to be given on farmer exchange visits, farmer to farmer extension, establishment of pilot sites and model farms, in order to enhance the skills of farmers and develop the needed capacities.

3. On the needs of women farmers, the following priorities were suggested:

- Social and physical infrastructures such as hospitals and schools should be established and made attractive to women so that they will opt to stay in the farms/rural areas.
- Welfare benefits (such as medical insurance) has to be increased for women farmers.
- Farmers’ visits and training activities for farmers should be designed and scheduled in such a way that women farmers have stronger interest and better opportunities to join these activities.

In terms of partnerships, it was agreed that there is need to establish good partnership and have strong cooperation with other stakeholders – private sector, national and international research institutions and governments – as long as they share our vision and priorities and are pro-organic and pro-small farmers.
Closing Remarks

Mr. Kanisorn Punyaprasiddhi, Office Manager, Sor Kor Por, thanked all the participants for coming here to participate in this important consultation. He expressed his concern that his organization was not represented in the regional consultation on the first day due to some reasons. He also mentioned that the consultation was fruitful and the participants were benefited and they enjoyed their stay in Bangkok.

Mr. Sophal Uon, Chairperson, Asian Farmers’ Association, extended remarks on behalf of AFA. He expressed happiness on the successful organization of the consultation. He mentioned that everyone worked hard to reach at a common vision. He further emphasized on two points; firstly, we learned a lot from the experiences shared by the ten farmers organizations participating in the regional consultation. Our initiatives sometimes look similar but always are leading to the same vision. Secondly, we are happy to get results for the next plan.

He highlighted that the consensus emerged was for the focus on organic farming, but it also recognized the importance of low-carbon agriculture and high input optimization. It was also recognized that some would like to promote non-organic farming. What is important is that there should be freedom to choose, and to make partnerships with others having the same vision and interests. He also thanked Sor Kor Por for joining and hosting this consultation. He profusely thanked APAARI, and especially Dr. Raj Paroda, Executive Secretary who provided a great support in organizing this regional consultation successfully.

Dr. Raj Paroda, Executive Secretary, APAARI, in his closing remarks, mentioned that it was a great experience to facilitate this process in partnership with AFA and GFAR. APAARI would like to continue the efforts to facilitate the process but not to be seen in the front seat. The deliberations in this consultation have been very rich. Dr. Paroda thanked all the participants for their very active involvement and valuable inputs. He mentioned that good recommendations have emerged from this consultation workshop and there is a need to bring out a good compilation in the form of a synthesis report which can go to the GCARD 2 as inputs from farmers in the Asia-Pacific region.

Dr. Paroda emphasized that there is a need to take note of re-enforcing GCARD Road Map principles of giving thrust to small farmers and sustainable, environmentally friendly agriculture, including organic agriculture. We need more reorientation on research and development, more participatory approaches and more effective roles of farmers in research redirection, project implementation, monitoring and evaluation, and impact assessment. Farmers should be seen as partners and should not be seen at the receiving end only.

There is no doubt that the traditional farming practices should be promoted, documented, and shared. We must also re-enforce the results of the Global Conference on Women in Agriculture (GCWA) for empowering women, removing drudgery, and strengthening capacity building, because women farmers can play more effective roles. We must also see that youth is attracted towards agriculture and for that there must be new improved agriculture. We should diversify agriculture and link it with the markets. How do we then create an enabling environment to attract young people to get involved in agriculture? This is indeed a big challenge.

Dr. Paroda further stressed that scientists should work with farmers as researchers together, for practices to be tested for validity and for higher adoption. For this, skill development
programs need to be undertaken. We have to see that there are options for young farmers for
customized services. These young farmers can be trained for the production of biofertilizers.
We need market intelligence for linking small farmers to market and also support for post-
harvest processing technology.

He also emphasized that AFA should expand to other countries and the sooner, the better.
APAARI can provide the needed help in that decision. This platform can be very effective in
knowledge sharing at regular intervals depending on resources. It is also important to know
each other personally. Secondly, this platform can be useful for capacity building following
the principle of seeing is believing. So, farmers’ visits from one country to another are very
important. Also it is important to bring farmers to act as advisers to other farmers in other
countries, for example, as knowledge advocates. It is important that we can give innovation
fund for farmers so that they can go from one place to another and learn the new technologies
being adopted. Thirdly, in order to raise our voice, we need to build our strength at the
national and regional levels. We should influence policy makers. An appropriate mechanism
for farmers talking about farmers should be developed. We will be very pleased if there is a
regional forum where all countries can join and this can be done step by step. For example,
APAARI Executive Committee and AFA members can have a forum together. This process can
also be started with reciprocal membership of each other. APAARI also has a vacant seat for
farmers’ representative in its Executive Committee. The farmers should be seen as a strong
voice at the international level. Majority of the small farmers are in the Asia-Pacific region.
Farmers’ organizations should have representation and take more prominent role in decision
making bodies at the international level, for example, representation in the Steering Committee
of GFAR at the international level.

He profusely thanked AFA for this good beginning of partnership with APAARI and GFAR.

**Mr. Thomas Price.** Senior Project Officer, GFAR, in his remarks extended thanks to the host
in Thailand, AFA for organizing this consultation, and all the participants for their effective
participation. He also profusely thanked Dr. Raj Paroda and APAARI, for taking this initiative.

He highlighted the importance of organic farming and other models in agriculture and mentioned
that the farmers should be the masters of their own destiny. The farmers want their own choices,
their own decisions on what model of agriculture they want, what research they want to be
conducted, what techniques and technologies they want to adopt. GFAR can provide opportunities
to the farmers so that they can find these new models and then from among these new models,
they can decide what model they want to adopt. Two GFAR programs in particular are ongoing.
There is a program on farmer-driven research, and we would like to work on that with you so
that you can determine what research you want. Another one is looking at farmers rights to
seeds which is an area that has been raised often.

Another point that has been raised so often is that small holder agriculture is viewed as a thing
of the past. However, it is not so and small holder agriculture is the profession of the future,
since it is entrepreneurial, forward looking and adaptive. A lot can be done for the success of
smallholder agriculture. After all, smallholder agriculture will feed about 9 billion people in 2050
and can end hunger and poverty. In this consultation, areas have been identified where public
and private partnership can make agriculture attractive.
Finally, it has really brought your collective voice to the agricultural research community. We have this opportunity at GCARD. Unity among the stakeholders is very important. Even though you have great diversity as smallholder and are pursuing different models of agriculture, you can bring your collective voice to this agricultural research community. He welcomed AFA’s collaboration with APAARI. We want also to present as many opportunities to farmers’ organizations as possible to represent themselves in international and regional research organizations. Your regional and national organizations have tremendous promise to us all in the agricultural research community. He expressed great pleasure of being a part of this important consultation.

Dr. Raj Paroda thanked Ms. Esther Penunia, Ms. Lany Regabay, Dr. S. Attaluri, and Dr. Bhag Mal, who were working from behind to facilitate this process and successful organization of the regional consultation. Ms. Esther Penunia thanked APAARI, GFAR, Sor Kor Por, AFA member organizations, and the participants and gave tokens/small gifts to everyone.

**Major Recommendations**

The major recommendations relating to research, capacity building, partnerships and policy emerged during the discussions in the "Regional Consultation on Agricultural Research for Development" are given below:

**Research**

- Research needs to be intensified to understand the status and issues on access and control of basic production resources mainly land, water, forests and seeds, as well as policy options to address and resolve these issues.

- Knowing that many farmers in Asia are adopting chemical intensive agriculture, the transition to more sustainable agro-ecological and organic approaches has to be ensured through practices on input optimization and low-carbon agriculture. Continuous efforts in this regard have to be made until a farmer succeeds in switching to sustainable, integrated, diversified, resilient, and economically viable agriculture.

- Appropriate breeding strategies and programs need to be developed for evolving crop varieties for higher adaptability to management and environmental stress situation including biotic and abiotic stress. In this context, participatory plant breeding and community based genetic resource conservation efforts need to paid greater attention.

- Greater thrust needs to be given to research on soil fertility management, crop growth and health, habitat management, weed competition, reduced tillage, organic systems, efficient water-use/community-based irrigation; insect-pest and disease tolerance; and improved plant protection techniques and compounds from natural sources.

- Research needs to be intensified on the use of various traditional, local knowledge and practices on crop breeding, seed banking, insect pest management, organic fertilizers, energy-efficient mechanisms; marketing, market information, and value addition, meeting certification requirements.

- There is also need for intensification of research on quantification of impact of sustainable agricultural approaches including transition from chemical to organic agriculture.
• Concerted research efforts need to be made to develop economically viable farming system by integrating crops, livestock, and aquaculture on small plots of land.

• There is a need for intensified research for developing tools, equipments and machines that reduce drudgery, especially for women farmers.

• Concerted efforts need to be made to develop sustainable agricultural practices that also bring net economic returns to the farmers by way of less costs and /or increased incomes. Agri-practices that reduce energy consumption and use renewable sources of energy must be promoted.

• Well planned studies need to be undertaken to find out as to how to attract young people to farming

**Capacity Building**

• There is an urgent need to build and strengthen the capacities of farmers and their organizations in the areas of information and database management and analysis (encouraging the young people in the field of ICT), business planning, organizational management, food processing and value addition, marketing, organizing the farmer constituency along geographical and crop lines.

• Develop *in situ* model farms and identify, train and support model farmers/ farmer technicians-extensionists; ideally one farmer extensionists in every village.

• Efforts need to be made to develop skills on information dissemination and documentation or information and communication technology and data base management, involving women and youth.

• Appropriate skill enhancement programs need to be undertaken on food processing and value addition of farmers’ crops and products for which studies need to be conducted on competitiveness of organic and inorganic products as well as on packaging of products.

• There is an urgent need to enhance marketing skills which include market information, negotiation skills, and appropriate post-harvest processing and storage and related equipments.

• Greater thrust needs to be given on farmer exchange visits, farmer to farmer extension, establishment of pilot sites and model farms, in order to enhance the skills of farmers and develop the needed capacities.

• Farmers’ visits and training activities for farmers should be designed and scheduled in such a way that women farmers and youth have stronger interest and better opportunities to join these activities.

• There is a great need for enhancing planning skills such as on how to undertake research, develop business plan, and undertake organizational work.

• Enhanced support is required to build the capacities of smallholder farmers (especially women and youth) to organize, build solidarity and initiate their own activities. Greater attention needs to be given to make available and accessible appropriate tools, equipments and machines to farmers.
**Partnership**

- There is need to build good partnership and have strong cooperation with other stakeholders – private sector, national and international research institutions and governments – as long as they share farmers' vision and priorities that are pro-small farmers and preferably pro-organic.

- There is a great need to strengthen links between research, advisory and extension services; strengthening partnerships between research institutions, extension workers and organizations of smallholder farmers.

- There is a definite need to look for localized solutions to solve local problems. These solutions should be appropriate for small scale farmers and the process must involve the farmers as well.

**Policy**

- There is an urgent need to make higher investments in agricultural research and development that is geared towards sustainable, resilient, integrated, diversified, organic and economically viable agriculture for and with small-scale women and men farmers.

- There is need to establish institutionalized mechanism within CGIAR/ GFAR for meaningful participation of representatives of small-scale farmers, fishers and indigenous peoples in the designing, implementation, evaluation and monitoring of research and development initiatives.

- Adequate funding provision needs to be made to support farmer-to-farmer learning exchanges, study visits, knowledge learning-sharing activities, and solidarity exchanges at the national, regional and international levels.

- Appropriate strategies need to be developed to empower women farmers to participate in farming and marketing collectively, cooperatives, and information dissemination/communication activities.

- There is an urgent need for increased investments on agro-ecological and organic approaches in a similar way as that on chemical intensive agriculture.

- Social and physical infrastructures such as hospitals, schools, and toilets should be established in order to attract women to stay in the farms/rural areas.

- Welfare benefits (such as medical insurance) has to be increased for smallholder farmers including women.

- Technical assistance needs to be provided in monitoring the climate variations and information on early warning systems be ensured, in order to have better planning and preparedness ahead of time.
Synthesis Report of Regional Consultation shared in GCARD 2 held at Punta del Este, Uruguay

The Asian Farmers’ Association for Sustainable Rural Development (AFA) in collaboration with the Asia-Pacific Association of Agricultural Research Institutions (APAARI) and with support of the Global Forum on Agricultural Research (GFAR), organized a “Regional Consultation on Agricultural Research for Development”, on 10-11 September 2012 at Bangkok, Thailand. The consultation was attended by 16 men and 8 women participants, representing 10 national farmers’ organizations in 9 countries, whose combined membership is about 12 million small scale women and men farmers, fishers, and producers. The highlights and outcomes of this important consultation, were shared at the second Global Conference on Agricultural Research for Development (GCARD2) hold at Puntadel Este, Uruguay.

Our innovations and initiatives in different countries

In Cambodia, in a span of 12 years, 200,000 farmers from Farmer and Nature Net (FNN), with technical support from NGO CEDAC, have adopted the Systems of Rice Intensification (SRI), increasing their yields from 50-100 per cent, reducing their costs for seeds and fertilizers by as much as 70 per cent and having greater control of the technology through their own “learning-by-doing” and sharing activities; thereby resulting in increased net incomes, better self confidence, enhanced creativity and increased networking among farmers and NGO-supported technicians. As a result of good success achieved, the Cambodian Government officially endorsed SRI as a rice production strategy.

In Indonesia, Indonesian Peasant Association "Aliansi Petani Indonesia (API)" engaged the government in formulating a rice price policy/HPP, working with other farmers’ organizations, NGOs and the Ministries of Agriculture, Finance and Economy. While lobbying, API also trained farmers for crossbreeding of rice seeds. Also, API has organized its members into HH-based commodity clusters: 3,000 HHs for banana, 5,500 HHs for cocoa, 17,000 HHs for duku fruit, and 3,000 HHs for organic rice.

In the Philippines, the Pecuaria Development Cooperative Inc. (PDCI), a member of PAKISAMA, has successfully claimed their land rights through the government’s agrarian reform program, and after 10 years of support from research institutions, NGOs and the government, has produced, packaged and sold its organic rice varieties, biofertilizers and muscovado, and consequently increased the incomes of the members and making the cooperative the biggest single producer of organic rice in the market today.

In Vietnam, the Vietnam National Farmers’ Union (VNFU) conducted trainers’ training programs and farmer field schools involving 2,500 farmers on production of organic rice, vegetables and fruit trees, and is currently assisting in the development of the organic supply chain. It has also established a participatory guarantee system with the three inter-groups (production, marketing,
and certification management), involving farmers, consumers, traders, and scientists in the system. Already, 173 farmers from among 263 registered under PGS are certified.

In Nepal, the National Land Rights Forum (NLRF), continues to lobby for the effective implementation of the government’s land and agrarian reform policy, thereby helping more women and men farmers to own the lands they till. To those who have acquired lands, NLRF provides help and facilitate the formation of collective farms and women agricultural cooperatives, and links them to extension workers for training on sustainable rice production, homestead/vegetable gardening and livestock raising.

In India, the Bharat Krishak Samaj (India Farmers Forum) focuses on policy advocacy through tri-media work (print, TV) to, urge their government to consult and listen to the farmers. It also publishes a weekly magazine called 'Farmers Forum', which is being distributed to farmers and their organizations and cooperatives, researchers, scientists and decision-makers.

In South Korea, the Korean Advanced Farmers Federation (KAFF) and the Women's Advanced Farmers Federation (WAFF) submitted 8 bills in the Parliament which include policies to encourage young farmers (such as exempting young farmers from military service, provide soft agri loans and grants), price support, one per cent of corporate tax to agriculture, policies on fossil fuel use and food security and foreign direct investments and effective public-private partnerships.

In Japan, Ainokai continues to conduct seminars on sustainable lifestyle techniques such as efficient kitchen stoves, organic farming, food processing courses, soil preparation and nursery raising for seedlings, as well as in the establishment of Transition Towns - piloting this in Iga. In Taiwan, the Taiwan Wax Apple Development Association works with the government’s Council of Agriculture and the National Pintung University for Science and Technology in conducting research aimed to have better quality wax apples, better markets and prices including export markets, encourage the youth to adopt farming, and produce more safe products. The farmers' wax apples are currently being exported to Canada, China, and Singapore.

Our research priorities

As a result of in-depth discussions, the following major research priorities were identified:

- These is a great need to make higher investment in agricultural research and development that is geared towards sustainable, resilient, integrated, diversified, organic and economically viable agriculture for and with small-scale women and men farmers.

- Research needs to be intensified on the following important aspects:
  - Understanding the situation and issues on access and control of basic production resources mainly land, water, forests and seeds, as well as policy options to address and resolve these issues.
  - Soil fertility management, crop growth and health, habitat management, weed competition, insect-pest and disease tolerance; and improved plant protection techniques and compounds from natural sources; breeding strategies and programs for adaptability to management and environmental stress situations; reduced tillage
organic systems, efficient water-use/community-based irrigation; participatory plant 
breeding and community-based genetic resource conservation efforts; proper transition 
from chemical to organic agriculture.

- Use of various traditional, local knowledge and practices on crop breeding, seed 
  banking, insect pest management, organic fertilizers, energy-efficient mechanisms
- Marketing, market information, and value addition, meeting certification requirements
- Quantification of impact of sustainable agricultural approaches
- Developing tools, equipments and machines that reduce drudgery, especially in women 
  farmers' work
- Economically viable farming system integrating crops, livestock, and aquaculture on 
  small plots of land
- How to attract the young people to get involved in farming

- Technical assistance in monitoring the climate variations and information on early warning 
  systems well in advance, in order to have better planning ahead of time
- Strengthening links between research, advisory and extension services; strengthening 
  partnerships between research institutions, extension workers and organizations of smallholder 
  farmers
- Strategies to empower women farmers as they participate in collective farming and marketing, 
  cooperatives, information dissemination/information communication technology

The support we need

- Build and strengthen the capacities of farmers and their organizations in the areas of 
  information and database management and analysis (encouraging the young people in the 
  field of ICT), business planning, organizational management, food processing and value 
  addition, marketing, negotiation, policy advocacy, organizing the farmer constituency along 
  geographical and crop lines
- Develop in situ model farms and identify, train and support model farmers/ farmer 
  technicians-extensionists; ideally one farmer extensionists in every village
- Support farmer-to-farmer learning exchanges, study visits, knowledge learning -sharing 
  activities, and solidarity exchanges, at national, regional and international levels
- Make available and accessible appropriate tools, equipments and machines to farmers
- Enhanced support to build the capacities of women farmers to organize, build solidarity 
  and initiate their own activities
- Provide institutionalized mechanism within CGIAR/ GFAR for meaningful participation of 
  representatives of small-scale farmers, fishers and indigenous peoples in the designing, 
  implementation, evaluation and monitoring of research and development initiatives
The partnerships we want to forge

We are ready to develop partnerships with governments, public and private national and international research institutions, NGOs, private sector and other farmer organizations (FOs) who share our vision on sustainable rural development, who have the keen interests of the small-scale farmers at heart, who appreciate our being researchers in our own rights and who treat us as equal partners in agricultural research for development.
Technical Program

Monday, September 10, 2012

09:00 - 09:30 Opening Session

- Welcome Remarks
  Sophal Uon, Chairperson, AFA
  Raj Paroda, Executive Secretary, APAARI
  Thomas Price, Senior Officer, GFAR
- About the Consultation
  Esther Penunia, Secretary General, AFA

09:30 - 10:30 Technical Session I: GCARD Road Map

Facilitator: Ms. Esther Penunia

- GFAR, GCARD and Farmers' Organizations: Transforming Agricultural Research for Development
  Thomas Price, Senior Officer, GFAR
- Discussion

10.30 - 10.45 Health Break

10:45 - 12:30 Technical Session II: FO Initiatives on AR4D

Facilitator: Ms. Esther Penunia

- Case Presentations from Cambodia, Taiwan, Japan, South Korea
- Discussion

12.30 - 14.00 Lunch Break

14.00 - 17.30 Technical Session III: Experiences of AFA Members in AR4D

Facilitator: Ms. Esther Penunia

- Development, initiatives, challenges (i) to achieve food and nutrition security, (ii) to develop and enhance capacities, (iii) and to influence government in shaping priorities in sharing and using agri.-knowledge in agri.-extension work
  India, Indonesia, Philippines, Vietnam, Nepal
- Discussion

17.30 - 18.30 Wrapping Up / Plans for Next Day

18.30 Solidarity Dinner
Tuesday, September 11, 2012

09.00 - 09.30  **Technical Session IV: Synthesis of Discussions in Technical Session (Day 1)**

Facilitator: Ms. Esther Penunia

- Where are we today?
- How are we making these changes happen?
- What impacts can we show?
- What lessons in partnerships can we derive?

09.30 - 10.30  **Technical Session V: Planning Workshop-Working Groups**

Facilitator: Ms. Lany Rebagay

- Working Groups
  - WG 1: Southeast Asia
  - WG 2: South Asia
  - WG 3: East Asia
- Discussion
  - What new skills, capacities and experiments do we need?
  - How can specific needs of women farmers be prioritized?
  - In all of the above, what kind of partnerships and collective actions are needed?

10.30 - 11.00  *Health Break*

11.00 - 11.30  **Technical Session VI: Presentation of Reports of Working Groups**

Facilitator: Ms. Lany Rebagay

- Convenor WG 1
- Convenor WG 2
- Convenor WG 3

11.30 - 12.15  **Plenary Session: Synthesis Report of Planning Workshop**

Facilitator: Ms. Lany Rebagay

**Presentation of Synthesis Report**

Ms. Esther Penunia

12.15 - 12.30  **Closing Session (Remarks by Co-organizers)**

- Sophal Uon, Chairperson, AFA
- Raj Paroda, Executive Secretary, APAARI
- Thomas Price, Senior Officer, GFAR

12.30  *Lunch Break / Farewell*
Annexure III

List of Participants

Cambodia

**Sophal Uon**
#56AU, St. 230, Sangkat Beong Salang, Khan Tuol Kork, Phnom Penh,
Email: pansopheap1@gmail.com

**Sopheap Pan**
#56AU, St. 230, Sangkat Beong Salang, Khan Tuol Kork, Phnom Penh, Cambodia
Email: pansopheap1@gmail.com

India

**Ajay Vir Jakhar**
Bharat Krishak Samaj A-1, Nizamuddin West,
New Delhi, India
Email: ajayvir@hotmail.com

Indonesia

**Ika Krishnayanti**
Jl. Slamet Riyadi IV RT 10/04 No. 49-50,
Kel. Kebun Manggis Jatinegara, Jakarta Timur 13150, Indonesia
Email: ikank@yahoo.com

**Muhammad Rifai**
Jl. Slamet Riyadi IV RT 10/04 No. 49-50,
Kel. Kebun Manggis Jatinegara, Jakarta Timur 13150, Indonesia
Email: rifai_an@yahoo.co.id

Japan

**Yoshikuni Yatani**
740 Befu Igashi Mie-ken, Japan 518-0221,
Japan
Email: yatani@res.otemon.ac.jp

Korea

**Kim Seung Hong**
c/o: KAFF Darby, KAFF-Bldg 2F, 71 Karak-dong,
Songpa-gu, Seoul, Skorea, Korea
Email: 0gari@hanmail.net

**Oh Gyeong-Jae**
KAFF-Bldg 2F, 71 Karak-dong, Songpa-gu,
Seoul, Skorea, Korea
Email: realhise@nate.com

**Young Ran Choi**
WAFF- HanNongYeon Building 6F 71, Garak-dong, Songpa-gu, Seoul, South Korea, Korea
Email: youngran.choi@yahoo.com

Nepal

**Jagat Basnet**
Post Box No. 19790, Nepal
Email: jagatb@csrcnepal.org

**Som Bhandary**
Post Box No. 19790, Nepal
Email: nlrfnepal@yahoo.com

Philippines

**Efren Arroyo**
Rm. 207 Partnership Cntr, 59C Salvador St.,
Loyola Hts., Quezon City, Philippines
Email: pakisama.natl@yahoo.com

**Esther Penunia**
Rm. 206 Partnership Cntr, 59C Salvador St.,
Loyola Hts., Quezon City, Philippines
Email: afaesther@asianfarmers.org
Lany Rebagay  
Rm. 206 Partnership Cntr, 59C Salvador St., Loyola Hts., Quezon City, Philippines  
Email: afalany@asianfarmers.org

Taiwan  
George Chou  
No. 93-10, Dairy Farmer District, Bawong Village, Liouying Township, Taiwan County 736, Taiwan  
Email: techiou@mail.nctu.edu.tw

Shun Te Tsai  
No. 202, Lane 1, Renhe Rd., Nahjhou Township, Pingtung County 926, Taiwan  
Email: wenchi@mail.npust.edu.tw

Shui Hui Tsai  
No. 93-10, Dairy Farmer District, Bawong Village, Liouying Township, Taiwan County 736, Taiwan  
Email: d8722151@yahoo.com.tw

Thailand  
Kanisorn Punyaprasiddhi  
No. 80 Thetsabanrangsrarintra (Prachaniwat 1) rd; Ladyao, Jatujak, Bangkok, Thailand 10900  
Email: kanisorn56@yahoo.com.th

Vietnam  
Lei Yvoan  
Ton That Thuyet Street, Cau Giay District, Hanoi, Vietnam  
Email: voanvnfu@yahoo.com

APAARI  
Raj Paroda  
Asia-Pacific Association of Agricultural Research Institutions (APAARI), Bangkok, Thailand  
Email: raj.paroda@yahoo.com

Rujirek Urairat  
Asia-Pacific Association of Agricultural Research Institutions (APAARI), Bangkok, Thailand  
Email: urairat@apaari.org

Sriwijayasacharyulu Attaluri  
Asia-Pacific Association of Agricultural Research Institutions (APAARI), Bangkok, Thailand  
Email: attaluri@apaari.org

GFAR  
Thomas Price  
Senior Officer, Agricultural Innovation and Society GFAR-Global Forum on Agricultural Research,  
C/o FAO, OEKD, C622 Viale delle Terme di Caralla 00153 Rome, Italy  
Email: Thomas.Price@fao.org
Regional Consultation on Agricultural Research for Development
Proceedings and Recommendations
Bangkok, Thailand 10-11 September, 2012

For Copies Contact:
Asia-Pacific Association of Agricultural Research Institutions (APAARI)
C/o. Food and Agriculture Organization of the United Nations-Regional Office for Asia and the Pacific (FAO RAP)
4th Floor, FAO RAP Annex Building, 202/1 Lam Laung Road,
Klong Mahanak, Sub-District, Pomprai Sattrupai District,
Bangkok 10110, Thailand
Email: apaari@apaari.org, http://www.apaari.org

Organized by:
Asian Farmers Association for Sustainable Rural Development (AFA)
Asia-Pacific Association of Agricultural Research Institutions (APAARI)
Global Forum on Agricultural Research (GFAR)

Hosted by:
Sor Kor Por (SKP)