



Meeting of the Regional *Ad Hoc* Working Group on Linking Farmers to Markets

6-7 June 2006
Rama Gardens Hotel, Bangkok, Thailand

PROCEEDINGS



**Asia-Pacific Association of Agricultural Research Institutions (APAARI)
Global Forum on Agricultural Research (GFAR)**

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FOREWORD

Economy of most of the developing nations in the Asia–Pacific depends to a greater extent on agriculture. Hence, growth in agriculture is key to alleviate poverty and improve the livelihood of resource poor farmers. Beside depleting natural resources, one of the reasons of slow growth is factor productivity decline mainly due to poor ability of farmers to invest more in agriculture. On the contrary, capital investment in agriculture has also declined in many developing countries. Hence, in order to reverse the process, it is necessary to have a paradigm shift in agriculture from current less remunerative practices to those of innovative farming and better income generating options. This would require scientific planning, adoption of new technological options and much needed agricultural diversification. In this context, “Linking Farmers to Market (LFM)” approach appears to be the best recourse currently. Access to information, organizing major stakeholders for establishing partnerships among them, and capacity building of farmers are overarching issues which need to be addressed on priority. Fortunately, expanding internal markets in different countries and globalization of agriculture offer new options provided LFM approach is adopted and necessary technical backstopping for the post-harvest technology (PHT) is provided.

Success of LFM would largely depend on enhanced capacity at the national level for technological advances, new cost effective and resource saving processes that add value to the products, and appropriate knowledge of markets associated with the ability of the farmers to get them organized. All these would demand agricultural innovations- both on-farm and off- farm so that producer – consumer chain is strengthened for desired benefits to all concerned. Also LFM would demand greater R&D efforts in agriculture linked to PHT; agricultural diversification around low volume high value crops or products; market intelligence; and ITC for knowledge management and dissemination.

Realizing the importance of LFM, APAARI had organized an Expert Consultation on “Post-harvest Technologies for Ensuring Food Security and Value Addition for Enhanced Income” from 1-3 December 2004 in Bangkok. On 6-7 June 2006 APAARI and GFAR jointly convened an *ad hoc* Working Group (RWG) meeting to review the recommendations of the Expert Consultation in order to decide our future course of action for strengthening LFM initiatives in the Asia–Pacific region. The RWG identified four priority components of the regional partnership programs which will involve the NARS, NGOs, FOs, private sector, and other international and regional organizations. These components are: (1) clustering/farmers’ organization, (2) information and networking, (3) research responsiveness, and (4) capacity building. APAARI is working in partnership with Global Forum on Agricultural Research (GFAR) to develop both regional and global partnership programs (GPP) on LFM so that ultimate beneficiaries are the resource poor farmers of the Asia-Pacific region. APAARI would continue its efforts to work with all stakeholders to strengthen LFM related activities in the region.



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ACRONYMS and ABBREVIATIONS

AEZ	agricultural export zone (India)
APAARI	Asia-Pacific Association of Agricultural Research Institutions
APARIS	Asia-Pacific Agricultural Research Information System
APCoAB	Asia-Pacific Consortium on Agricultural Biotechnology
APEDA	Agricultural Products Exports Development Authority (India)
APNPHT	Asia-Pacific Network on Post-harvest Technology
APRACA	Asia-Pacific Rural and Agricultural Credit Association
ARD-	agricultural research for development
ASL	above sea level
AVRDC	Asian Vegetable Research and Development Center (World Vegetable Center)
BPRE	Bureau of Post-Harvest Research and Extension (Philippines)
CAS	controlled atmosphere storage
CIDA	Canadian International Development Agency
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Developpement
CLT	Cooperative League of Thailand
CFTRI	Central Food Technological Research Institute (India)
DFID	Department of International Development (UK)
DNA	deoxyribonucleic acid
FAO	Food and Agriculture Organization of the United Nations
GAP	Good Agricultural Practices
GFAR	Global Forum on Agricultural Research
GPP	Global Partnership Program
ICT	information and communication technology

IFAD	International Fund for Agricultural Development
IFAP	International Federation of Agricultural Producers
IPR	intellectual property rights
JIRCAS	Japan International Research Center for Agricultural Sciences
LFM	Linking Farmers to Markets
LGUs	local government units
MAS	modified atmosphere storage
M & E	monitoring and evaluation
NARS	national agricultural research system
NFED	National Federation of Exporters (India)
NGOs	non- governmental organization
NHB	National Horticultural Board (India)
R & D	research and development
RWG	regional working group
SAARC	South Asian Association for Regional Cooperation
SEA	Southeast Asia
SMEs	small and medium -sized enterprises
SPS	sanitary and phytosanitary (regulations)
SWOT	strengths, weaknesses, opportunities and threats
TRIPS	Trade-Related Aspects of Intellectual Property Rights
VHT	vapor heat treatment
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

BACKGROUND/RATIONALE

APAARI's initiatives in research prioritization has led to two major regional collaborative programs, namely Asia-Pacific Consortium on Agricultural Biotechnology (APCoAB) and Regional Agricultural Information System (APARIS), both of which have been supported by the Global Forum on Agricultural Research (GFAR). In 2001, APAARI member institutions identified agribusiness approaches and development as an important regional research agenda. These agribusiness approaches and development shall address (1) increased productivity and competitiveness of farmers through rural innovation, and (2) value adding post harvest technologies. Since 2002, APAARI has been active in organizing regional events in support of GFAR and FAO activities related to the Global Post-harvest Initiative: Linking Farmers to Markets.

In 2004 and 2005, APAARI sub regional groups conducted research needs assessment, and updated their research priorities considering the emergence of new events and issues, namely, globalization and market dimensions, recent progress in science including biotechnology and information technology revolution, renewed focus on rural development, provision of policy and technical support to subsistence or family producers, and the new agri-food research paradigm 'from farm to fork.' In South and West Asia for instance, new research areas deserving additional emphasis include agro-enterprise development (focus on legumes, post harvest technology for value adding products), and policy and institutional reforms with special emphasis on strategies to encourage higher investments in infrastructure, and enabling policies on marketing, credit and commodity pricing. In the Pacific, serious gaps have been identified in important research areas such as value adding and post harvest management, markets and marketing. In Southeast Asia (SEA), main priority areas include (1) food safety and security, specifically agriculture and fisheries product quality, value adding of products for competitiveness, productivity and profitability, export/import competitiveness, policy researches related to food safety, market changes, biotechnology and other emerging issues; and (2) farmers/fisher folks' capability enhancement including value chain analysis and improved market access, entrepreneurial development of farmers and fisher folks, provision of access to credit, and intra/inter-household production access. SEA recognized that research must transform subsistence farming into agro-entrepreneurship. Moreover, SEA suggested regional collaboration on joint venture on agriculture and fisheries R & D that will provide co-financing, information and knowledge exchange, linkage, networking and capacity building.

In 2004, the "Expert Consultation on Post-harvest Technologies for Ensuring Food Security and Value Addition for Enhanced Income" jointly organized by APAARI, JIRCAS, FAO, GFAR, and the Global Post-harvest Forum (*PhAction*) duly recognized the important role of APAARI in catalyzing national and other regional organizations in raising awareness and developing appropriate regional interventions to improve the effectiveness of agricultural research concerning post-harvest sector. The specific recommendations of this consultation are on the areas of research and development (NARS-based emphasis), policy, food safety and quality needs, new post-harvest opportunities such as value addition, product development, market, and technologies, capacity building and global/regional collaboration. This consultation recommended a Regional Network namely Asia-Pacific Network on Post-harvest Technology (APNPHT) with specific support and leading role of *PhAction*, FAO, GFAR and APAARI - involving some leading institutions to play the facilitation role. This network is foreseen to contribute to the establishment of a Global Partnership Program under the GFAR umbrella, involving other regional fora. A Working Group was recommended to be constituted to further examine the possibilities of future collaboration in the field of post-harvest technology/ linking farmers to market.

With the support of GFAR, an *ad hoc* Working Group (RWG) was convened by APAARI on 6-7 June 2006 in Bangkok, Thailand to prepare the Asia-Pacific region to participate in the Global Partnership Program on Linking Farmers to Markets (GPP-LFM). The specific Terms of Reference of the RWG are: (i) identify and analyze experiences and expertise available, and needed, in the region that will be functional to address the overall theme of the GPP; (ii) based on the principles that the activities of the GPP would preferably build on, and add value to, existing initiatives and experiences, the RWG will identify (and possibly establish preliminary contacts with) an initial set of partner organizations to be involved; and (iii) identify two representatives to ensure the experiences and the needs of the regions will be expressed in the Inter-regional workshop.

Twenty participants including representatives of regional and international organizations, NGOs and farmers' organizations shared their experience and knowledge on the current state of the art in this particular field, addressed relevant areas as recommended in the previous meetings, formulated a common vision, and identified the roles of the different potential partners. The agenda and list of participants are given in *Annexes 4 and 5*. The draft strategic plan which will be prepared based on the meetings' deliberations shall consider the principles of partnership and multi-stakeholder ownership and shall foster synergies among partners for greater impact, with the active involvement of the producers groups or association and the NGOs. The regional program is foreseen to focus on ways of making these institutional modes more effective in linking farmers more closely with markets and in the process improves their overall welfare.

The meeting started with background presentations on the results, conclusions and recommendations arising from previous meetings and activities leading up to the *ad hoc* Working Group Meeting, particularly with respect to food quality and safety, supply chain integration, capacity building, and related policy issues. After the presentations, the meeting broke up into workshop groups to look into existing initiatives in the area of marketing assistance and integration and draw initial lessons from such experiences. Based on the workshop discussions and the background presentations, a preliminary plan on how to move forward and possibly implement a GPP program for the region was drawn up in the concluding plenary session.

The output of this meeting and those of the other regional fora shall be brought together in an inter-regional meeting where they will form the basis of the design of a Global Partnership Programme on Linking Farmers to Markets.

Opening SESSION

The participants were welcomed by APAARI Chair Prof. Herath Gunasena on behalf of APAARI Executive Secretary Dr Raj Paroda, whom the organizing group had met earlier to discuss the essential issues of the meeting. In his opening statement, Prof. Gunasena acknowledged the role of the different stakeholders in the entire supply chain. He mentioned that while the farmers in the region are predominantly smallholder, subsistence farmers, there is a felt-need that farmers will have to be assisted in post-harvest technologies and value-addition in order to increase their income. While rural infrastructure remains poor in most parts of the region, research must be able to identify high value products that would give them the opportunity to enhance their income. Prof. Gunasena thanked GFAR and APAARI for

jointly convening this *ad hoc* Working Group in order to craft a more meaningful partnership that will hopefully link farmers to the markets.

Dr. Rupert Best of GFAR presented the Global Partnership Program (GPP) concept on LFM. He mentioned that a GPP is needed because: rural poverty, hunger and resource degradation remain perennial problems; the challenges we face in achieving multiple objectives of agricultural research for development (ARD) are complex; no institution has all the skills or capacity to achieve the impact required; and a system perspectives in problem-solving is needed. GPPs are GFAR's strategy for promoting and learning about research partnerships among different stakeholders. They address ARD issues of global relevance, build on and add value to on-going activities at different levels (local, national and global), and are jointly developed, carried out and owned by a set of diverse stakeholders. In a series of meetings conducted with the different regional fora since 2004, common cross-regional issues were identified, namely, (1) self-sufficient, subsistence or family agriculture farming sector is not adequately supported by R & D, (2) market orientation and access is vital for income generation and resource conservation, (3) demand-oriented extension and market facilitation services are needed, (4) biophysical and post-production research needs to become more market and enterprise –oriented, and (5) engagement and partnership with the private sector is a key issue.

Rupert mentioned that improving market access for small hold farmers could be a function of both technology and farmers' ability to organize them until they are fully integrated into a supply chain. As such farmers could be at the subsistence stage (individual small-scale farmers selling surplus into the market), early stage (small-scale farmers organized to sell product collectively), developing (small-scale farmers organized, adding value and diversifying products), and mature (small-scale farmers organized and fully integrated into a supply chain). The basics of the Linking Farmers to Markets GPP are: (1) to build on on-going projects (micro) and programs (meso and macro), (2) to be clearly identified with on-the-ground activities, (3) start small and grow, (4) to make monitoring and evaluation explicit, (5) with scaling-up and exit strategies well defined from start, and (6) to pay attention to governance to build ownership and commitment. The potential products of the GPP on LFM could be selected from any combination of the following: information for better decision-making, good practice guides and tools, better partnership processes, capacity built of farmers, development facilitators, researchers, and policy options for governments and the private sectors. According to Rupert, 2006 is a key year for advancing toward a GPP which includes the establishment of the *ad hoc* working groups, the further exploration of donor interest, the identification of international support team members, the formulation of the GPP with the other regional fora, and the review and approval by the Program and Steering Committees of GFAR. Should approval be given, this will trigger seed resources for establishing interim governance and initiate activities. The Asia-Pacific Region Linking Farmers to Markets Partnership Program should provide a roadmap on what it wants to do for the next 10 years and the linking processes it needs to get there.

With respect to funding opportunities, Rupert mentioned that IFAD, Italy and the Rockefeller Foundation have in the past contributed to activities associated with the Global Post-harvest Initiative. IFAD and the Rockefeller Foundation have manifested the possibility of further support. CIDA has indicated interest in activities that link farmers with the private sector, and DFID's interest lies with civil society, and how organizations of small-scale farmers can be empowered to engage equitably in supply chains. Italy has a long standing interest in small and medium rural enterprises that could be tapped. There is therefore potential for obtaining

support from the above donors for an inter-regional proposal or proposals that address their interests.

SESSION 1: Relevant Outcomes and Recommendations of 2004 Regional Expert Consultation on Post –Harvest Technologies for Ensuring Food Security and Value Addition for Enhanced Income

The results, conclusions and recommendations arising from previous meeting particularly with respect to food quality and safety, supply chain integration, capacity building, and related policy issues were presented by Dr. V. Prakash, Dr. Greg Johnson, Dr. Rosa Rolle, and Dr. Nerlie Manalili, respectively. The RWG discussed and used the recommendations as reference point to achieve greater definition of what the partnership program on “linking farmers to markets” will look like.

On policy, the RWG reaffirmed that Asia-Pacific farmers are in various stages of development with varying needs and operating under different policy environments. Each stage is characterized as follows:

- Self-sufficiency producing predominantly for own consumption
- Early stage: SMEs with low level of value addition
- Developing: commercially oriented enterprises, adding value/ diversifying
- Mature: farmers enterprises fully integrated in the supply chain

The group reiterated the relevance of the particular policy recommendations given in **Table 1**. There are models which can be considered and from which other institutions can learn or build on (**Table 2**).

On rural enterprise development and supply chain integration, it was acknowledged that rural communities and governments must become ‘market smart’ and that there is a need to balance sustainable resource use with the challenges of quality requirements, higher food safety standards and long and complex supply chains. The way forward is to add value and improve profit while reducing post-harvest losses. However, progress will depend on efficiency of production, processing, distribution and marketing systems. Key opportunities are available by bringing together the developed and the developing world in partnerships involving NARS, regional ARD institutions, NGOs and the private sector. The areas for action are on policy, institutional strengthening and capacity building, enhanced supply chain performance and networking (information exchange, learning and sharing from past/other’s experience).

On food quality and safety, the need to foster integration of food safety considerations in policy, rural enterprise development and supply chain integration management, and capacity building is well recognized. The four areas of interventions are on policy, institutional strengthening through research and capacity building, enhanced supply chain performance and infrastructure, and networking (information exchange, learning and sharing from past experience, etc).

On capacity building, a gradient approach shall be considered to address needs of the various farmers/producers in the region (*Fig. 1*). For the subsistence phase, extension advice on appropriate technology should be provided by advisory service providers from national institutions and NGOs. Those at the early stage need business skills, appropriate technologies, training on post-harvest technologies, micro-financing, marketing skills and collaboration with other farmers, which should be facilitated by business promotion institutions, R & D institutions, NGO's, rural banks, public and private sector. Commercial farmers would need business skills, technologies, quality assurance management, standards, regulatory frameworks, laboratories, logistics and infrastructure. The Bureau of Standards, training institutions, R & D institutions and Ministries of Commerce shall facilitate provision of these skills and facilities to commercial producers. Mature farmers will need training on food safety principles, SPS issues, IPR and TRIPS, assurance compliance with CODEX, ICT and other infrastructure, product diversification and market expansion. Facilitation of farmers at the mature stage is done by R & D institutions, Laboratories, Multi-nationals, private corporations such as supermarkets, other international organizations such as WIPO, FAO, etc.

Following the overview of the outputs from the Expert Consultation in Bangkok, the RWG brainstormed on what the regional program would likely be considering the above action areas. The following concerns/issues were forwarded for consideration during the small groups' discussion in Session 2 in order to further define the regional partnership program on linking farmers to markets:

1. Should the partnership program consider specific commodities?
2. Should we have science-driven agenda instead of trade-driven agenda?
3. Should we address only subsistence farmers or include the others at different stages of "market integration"? At what stage do we want to help them? We should carefully select target group to effectively address their needs.
4. If we think of smallholders, we should think of simple, doable interventions and not try and convert them into large businesses because when they get bigger, there is the tendency for them to fail.
5. While there is scope for farmers to engage in enterprise development, the question of how much farmers should do business (understood as value adding, processing, marketing), given their weak entrepreneurial skills and poor access to market information?
6. How do we empower farmers so that they get the full benefit from the supply-chain? Can we shorten the chain? How do we prepare farmers for the dual role of production and processing?
7. While it is ideal that farmers are empowered so they could go all the way to export market, massive government support will be needed. If we participate in the GPP, where do we want to go? Perhaps we need to ensure that small holders are properly and effectively linked with markets, not necessarily going to export.

8. Market chains and supermarkets proliferate but not all farmers are able to supply the volume and quality required. Food safety and quality are over-spilling to traditional markets. Farmers need to be educated.
9. Financing institutions/banks are interested to engage farmers with surplus for the market.
10. Middlemen and traders play useful roles in enhancing supply-chain performance.
11. Farmers and other players in the supply-chain will have to be trained.
12. How is government commitment to WTO translated into policy? Are there provisions for logistics and monitoring food-safety and quality based on appropriate established standards /protocols?
13. We need to know and document what others are doing, share them and learn lessons from them.
14. Given the 10-year time frame for the GPP, can we showcase one or two classical examples of viable linking processes?

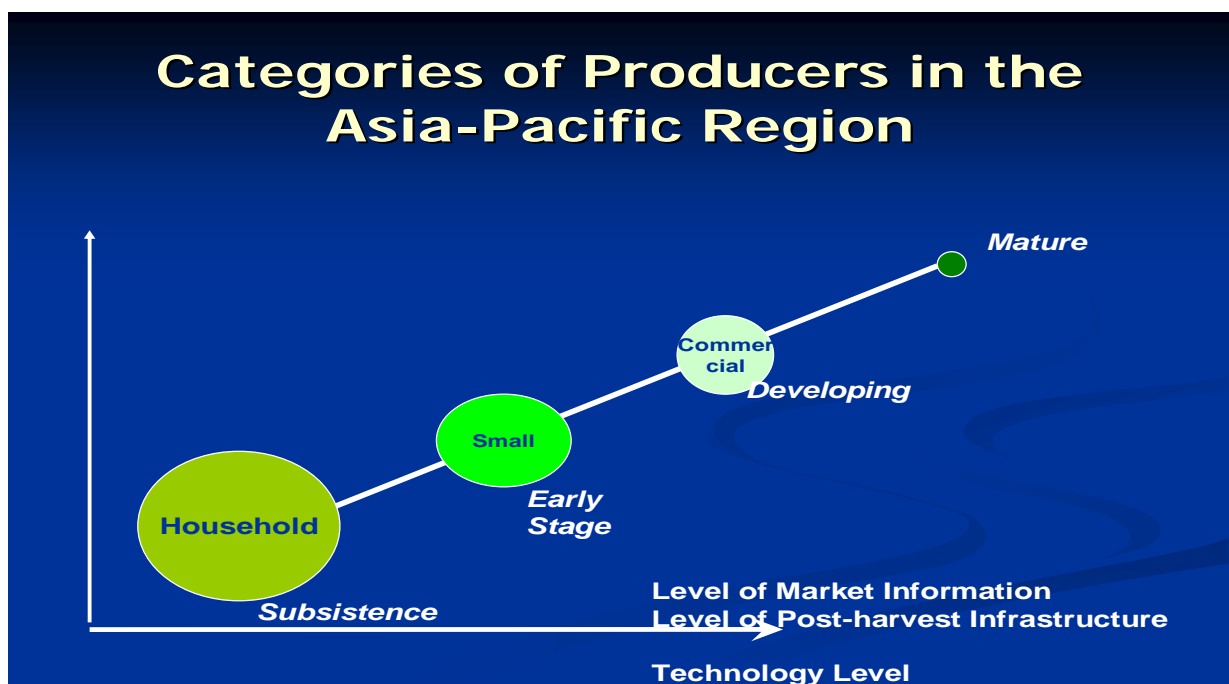


Fig.1. Categories of Producers in the Asia-Pacific region

Table 1. Policy: Gaps and Recommendations

	Gaps	Suggested Actions
Self sufficiency	<ul style="list-style-type: none"> • Post-harvest technologies (reduce losses) 	<ul style="list-style-type: none"> • Capacity building • Research , supply chain integration • Policy analysis
Early stage	<ul style="list-style-type: none"> • Access to low interest credit • Marketing orientation • Technology commercialization • Business development services 	<ul style="list-style-type: none"> • Enterprise associations • On-farm, off-farm enterprise • Enterprise incubators • Continuous training
Developing	<ul style="list-style-type: none"> • Market assessment, analysis, product development • Supply chain integration, diversify • IPR • 	<ul style="list-style-type: none"> • Link production-mass production • Legal framework of contracts • Incentives, M & E • Price stabilization
Mature	<ul style="list-style-type: none"> • Food safety implementation • Acceptance of private sector roles • Processing varieties 	<ul style="list-style-type: none"> • Research respond to private sector needs • Stable policy environment

Source: APAARI 2004. Proc. Expert Consultation on Post Harvest Technologies for Ensuring Food Security and Value Addition for Enhanced Income. Bangkok, Thailand.

Table 2. Policy: Key Institutions and Model Projects

	Key institutions & Model Project	Interested institutions
Self sufficiency	Grain storage Mother Dairy Commodity Boards	IFRI (Policy & Markets) Sri Lanka Post Harvest Institute ICAR, VN Eng'g PHI ILRI, CIAT, ICRISAT
Early stage	Mini dhal Mill Quedancor lending program Low capacity feed mills Small holder nucleus estate	CFTRI (India) Sri Lanka Post Harvest Institute
Developing	Export Development Board Food Parks (India) Traditional Knowledge library	Everyone

Mature	NFRI (Japan) CFTRI (India)	Everyone
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Source: APAARI 2004. Proc. Expert Consultation on Post Harvest Technologies for Ensuring Food Security and Value Addition for Enhanced Income. Bangkok, Thailand.

SESSION 2: Defining content of a regional program

Two working groups were formed, namely: Group 1. The Country Group - composed of potential partners from participating countries, and Group 2. The Regional Group - composed of potential partners representing regional/international organizations. The guidelines for each working group are given in *Annexes 1a and 1b*.

The workshop groups looked into existing initiatives in the area of marketing assistance and integration and draw initial lessons from such experiences. Following are the outputs of the group discussions:

Group 1: The Country Group

Facilitators: Betty del Rosario/ V. Prakash

Members:

- Philippines:** Nerlie Manalili
Rosendo Rapusas
- India:** V. Prakash
Arvind Kapur
- Thailand:** Saipin Manipun
Sing Ching Tongdee
Phanuwat Wanraway
- Indonesia:** I. Nyoman Oka Tridjaja
- Pacific:** Thierry Mennesson

Group 1 shared experiences on models linking farmers to markets, mainly commodity-based. The cases cited are both science- and trade-driven, are supported by government policy and involved public and private sectors, anchored on value-addition and competitiveness of the specific product/by-product, adopted cluster approach (farmers organizing themselves into groups for production and marketing their produce) and diversification with market access through contract or contact farming, compliance with market requirements in terms of quality, volume and timely and continuous supply, and tailor-fit capacity building initiatives. The specific cases are summarized below.

Philippines:

Case 1 on an FAO funded project, implemented by the Department of Agriculture in Southern Philippines – this showcased the cluster approach, initially with 5 smallholder farmers. The five vegetable farmers, known as lettuce clusters, are linked to institutional markets in Manila, namely, McDonald's, Kentucky Fried Chicken (KFC) and Jollibee. Farmers were trained on production protocols and assisted in terms of post-harvest technology such as cold chain (pre-cooler, refrigerated truck, reefer vans). Quality of produce, volume of production and timely delivery were ensured. The pilot project was expanded in terms of area, number of farmers, number of commodities, and market outlets. Further Government assistance included soft loans, capacity building, and facilities such as cold storage, reefer vans, crates, and packing house. Farmers' equity included quality planting materials, labor, and area. The project was implemented as per Government policy that supports development of high value crops, i. e. provision of soft loans and technology (such as cold chain). A more detailed write-up is found in *Annex 2a*.

India:

Case 2 on Technology-Driven Capacity building for India, Africa and SAARC (note: 30% clients are from India):

- (1) An awareness program involving farmers, growers and SMEs, linked with Global Company for Contract Farming, uses cluster approach on any commodity, addresses value addition including primary processing. Twenty courses are offered for training of trainers. Training Manuals and Faculty could be shared. About 20,000 have adopted the knowledge and skills for the last 7 years. CFTRI's role is in M & E;
- (2) World Bank-supported capacity building on food safety analysis by the local laboratory based on CODEX;
- (3) Value addition for legumes, pulses, millets for small holders - looks at the food chain including by-product utilization such as rice bran oil (as source of lecithin). Other by-products could be clustered;
- (4) Extension of shelf-life of horticultural products- not for subsistence farmers; Adoptable technologies such as MAS, CAS, etc are applied to mangoes and bananas for export;
- (5) Food quality in the food chain for entrepreneurs in the business (mature) to provide backward linkages; linked to awareness interventions 1-4 as above.

The above interventions are all linked with Government policy on Value Addition, with the Ministry of Food Processing driving the entire processes. The increasing adoption of knowledge and skills by the farmers, growers and SMEs is a good indication of the success of these capacity building interventions which can be shared among countries in the Asia – Pacific region.

Case 3: Processor-driven contact farming for pulverizing-type hot peppers and pickling cucumber (gherkin)

(a) Pulverizing-type hot peppers: this involved small farmers. Seeds are available and affordable. Specialized products are sold both at the local and international markets. The

processors specify quality required by both markets. Quality is certified by CTFRI, an affiliate body to clear exports. Both forward and backward linkages are considered.

(b) Picking cucumber (gherkin): year-round production mainly for export. Productivity remains high. Variety was developed by Nunhem Seeds, a private company. The inputs and seeds are provided by 45 processors under a buy-back arrangement which guarantees assured market for farm produce. Under this arrangement, payments are made after receipt of produce.

Case 4: Contract Farming for specialized onions (white and yellow) for export. This scheme involves large farmers, comprising 72 clusters nationwide, located in the agriculture export zone (AEZ). This has been introduced very recently under the Diversification Program using the concept of carbon credit. There is pressure to diversify because of restriction on movement of grains, and price wise it is better to import grains. Three private sector companies are involved, namely, (i) ILTEL in joint venture with Rothschild (supermarket chain); (ii) Reliance (petrochemicals and telecom); and (iii) Goodrich. The government agency promoting export is APEDA. Other agencies involved are the National Federation of Export (NFED), National Horticulture Board (NHB) which provides the infrastructure, nine banks which take care of both micro- and macro- credit, and the CFTRI which provides protocol for packaging and grading. There are now 2,700 shops involved on consignment basis. The target is 30,000 shops.

Thailand:

Case 5: Fragrant/aromatic rice (Hommali brand) mainly for export to the U.S. and China. This is grown by small farmers in and unique to 19 provinces in Northeast Thailand (NE). Four provinces join government scheme for certification. The government encourages intensive production in the NE and provides soft loans. It is regularly monitoring the areas, providing DNA analysis to detect adulteration, certifying for non-adulteration by affixing government logo and direct bagging and packing, and giving premium price (30% more than non-aromatic rice). Rice by-products are diversified for food and industrial uses: rice bran oil, flour, starch, coarse bran (for silica), and rice hull (for fuel).

Case 6: Rose apple- grown by small growers and standard commercial orchards, with very minimal production inputs. Quality and price are quite attractive both for domestic and export markets (mainly to China). Markets are mainly for fresh consumption. The deep red variety is rich in anthocyanin. Market positioning for nutraceuticals and functional foods will require more research and market-oriented strategy, such as: varietal improvement of deep red variety, genetic resources utilization, development of off- season variety, value chain and SWOT analysis for export, and training.

Indonesia:

Case 7: Arabica coffee- a specialty coffee grown in the highlands (1,200 m ASL) of Bali (Bangli and Flores), mainly for export (of coffee beans) to the U.S. and Japan. SUBAK, a local wisdom organization, supports capacity building of and processing equipment for 20 households. The government provides funds to SUBAK and the private sector exporter provides equipment for pulping and drying. Bean quality and quantity have improved from 21 tons to 40 tons in three years. Efforts are geared towards organic certification with assistance from CIRAD. Farmers' income also increased through cattle integration and use of manure to improve soil fertility. Coffee husks and grass are used as cattle feed. These technologies are

provided by government through the Coffee and Cacao Research Center. A more detailed write-up is given in *Annex 2b*.

Pacific:

Case 8: Post-harvest technology is very limited. There is very small export market, for example squash to New Zealand and eggplant to Japan. The government provides assistance in packaging as well as in Vapor Heat Treatment (VHT) managed at the airport.

Discussion: The above cases provided the profile of the kind of “linking farmers to market activities” that are on the ground. They highlighted:

- The need for awareness raising (government, NGOs and banks) and training of farmer groups and entrepreneurs.
- The cluster/zonal approach is a viable option to link farmers to markets.
- Better variety, long shelf-life through appropriate packaging, by-product utilization and diversification and certification for quality products could enhance farmers’ income.
- Government interventions in bulk packaging, certification (logo), facilities, laboratories, regulations, loans and enabling infrastructures and public-private partnership could open opportunities for strategic markets.

While these “pockets” of success are visible, there could be limitations when applied under a different set of conditions. The regional partnership program may not look at a single commodity, but should consider geographic areas and market scenarios, as farmers are always looking for alternatives to increase income. Value addition as an option is not sufficient to increase income, as products will have to be competitive both in the domestic and export markets. R & D will be needed for value-creation. Therefore, we need to look at both the supply and demand sides of the entire chain. While so much information is available, analytical skills of both farmers and extension service providers are needed to use the information for sound decision-making and well-informed choices. Farmers, producers and service providers need to be empowered.

The cases highlighted the importance of the following elements in the regional partnership program on LFM:

- (a) The needs of marginal, isolated communities and those that may become marginalized because of global trends;
- (b) Value-chain methodologies; and
- (c) Dialogue, trust, relationships among supply chain actors.

Group 2. The Regional Group

Facilitators: Greg Johnson/Rosa Rolle

Group Members: Akinori Noguchi, Satoru Miyata, Katinka Weinberger, Benedicto Bayaua, Alistair Hicks, Rupert Best, Raul Montemayor

The group first considered some of the overarching trends in the region.

The current situation in the region is characterized by:

- Poverty situation has been addressed;

- Donor focus is on income generation, rather than on poverty alleviation;
- Starvation is rare;
- While caloric consumption is adequate, problems exist with nutrition security and micronutrient intake; at the same time, there are emerging concerns of health risks associated with overeating;
- An income gap exists between rural and urban centers - need to consider how farmer income can be increased to reduce urbanization and improve food security;
- Increasing labor costs which point to the need for mechanization.

The factors that influence government priorities in the Asia-Pacific Region are:

- Compliance with the WTO;
- Disasters and emergencies in the Region;
- Energy costs;
- Security concerns which impact on trade

The group highlighted the following commodity groups as having high growth potential for both domestic and export:

- **Horticultural Crops**
 - Provide income generating opportunities;
 - Increasing opportunities for trade;
 - Diversity of crops creates scope for contribution to nutrition and food security in the region;
 - Provide opportunities to link farmers to markets;
 - On-going interventions in the region;
 - Available expertise and favorable institutional environment.
- **Rice**
 - Universally important crop that is critical for food security
 - Adequately covered by R&D initiatives in the region.
- **Shrimp industry**
 - Small industry with similar dimensions to that of horticultural crops.

The Group was of the opinion that if the GPP has to prioritize a commodity category, horticultural crops which can be preserved and/or stored, in order to reduce the risk of losses, would be best addressed through the proposed partnership program as a means of improving the welfare of the target beneficiaries in terms of income and nutrition.

Post-harvest Projects in the Region

FAO – An FAO Regional Project in Cambodia, Vietnam and Myanmar, focused on developing the entrepreneurial skills of women in food processing (production of safe products such as fruit juices, fermented, pickled and dehydrated products), and equipping them with basic tool kits thereby allowing them to further transfer the knowledge and skills acquired. This project was market driven and integrated capacity development in agri-business, marketing and food processing skills. It resulted in improved quality and market opportunities.

APRACA – In an effort to mitigate marketing constraints in linking farmers to local markets, a scheme is being developed in the Philippines whereby inputs are supplied by traders and suppliers, who recover input cost from farmers in the form of outputs (crops), rather than cash. This scheme will necessitate the organization of farmer groupings, the facilitation of inter-island linkages, crop insurance, etc.

AVRDC – An AVRDC project in Cambodia, Laos and Vietnam focuses on the post-harvest handling of vegetables. It includes: the market analysis of vegetable crops, analyses losses within the chains and focuses on post-harvest management and primary processing (e.g. chili drying) to mitigate these losses. Major challenges include the establishment of linkages with the private sector and scale-up of the project in order to reach a larger number of farmers.

Japanese government - One Village – One Product Concept

Not only does this concept help link rural farmers to urban markets, but it offers the potential for job creation through off-farm activities, thereby increasing income generation and reducing the poverty cycle.

Other Highly Relevant Issues for Consideration

The group highlighted the following issues that need to be taken into account in preparing the GPP:

Niche Market Opportunities

Demand for specialty products, provides niche market opportunities. Increasing incomes in the region have resulted in increased niche market opportunities in the region. The integration of small farmers into niche markets must be considered.

Creation of Market Demand

There is the need to create market demand for horticultural crops within the region, emphasizing their beneficial properties, through the development of promotional strategies within the fruit and vegetable sector.

Good Agricultural Practices (GAP)

Consideration must be given to the development of GAP (not necessarily at the level of EUREPGAP) appropriate to the regional context, which takes into account conditions in the region. This would call for standardization of GAP-related terminologies to foster common understanding within the sector.

Session 3. Action Planning – Crafting a “Linking Farmers to Market” Program

Based on the workshop discussions and the background presentations, a preliminary plan on how to move forward to implement a partnership program for the region was drawn-up using meta-cards and visioning exercises. Participants were requested to reflect on the LFM cases/activities and identify (a) which are going well and need to be continued or strengthened; and (b) what we need to start doing more of. The collective responses were categorized into ten areas as given in *Annexes 3a and 3b*, namely, (a) Safety and quality awareness, (b) Enabling policies, (c) Demand/supply chain management, (d) Value-adding technology and by-product diversification, (e) SME innovation, (f) Market research, (g)

Infrastructure, (h) Information-success stories, case studies, (i) Clustering, farmer organization, and (j) Capacity building/training.

The activities that need to be continued and strengthened are Capacity building /training and Clustering, farmer organization. Capacity building and training will be for farmers, SMEs, service providers and other partners. For farmers and SMEs, this will be on the aspects of financing, continuing education (training and re-training), information technology, and business development and production technology, among others. Capacity building of other market chain players such as the service providers and other partners and scaling-up and replication of LFM best practices were suggested. Commodity grouping of farmers to produce the volume and quality demanded by the market in a timely manner should be continued/strengthened.

The activities that we need to start doing more of are (a) Market responsiveness of researchers and institutions and (b) Information, networking and public awareness. Specifically, public-private partnership to show case technologies and action research on best practice LFM on the ground will be useful for advocacy, promotion and sharing. Farmer Forum on LFM, international exhibition of market products to enhance more aggressive movement of farmer groups, information access and interpretation can improve networking among farmers and other stakeholders.

Links between activity categories: a) supply chain management/assessment as a research approach for identifying bottlenecks; b) value adding and product, by-product technology development under 'research responsiveness', as a result of better technology needs assessment using market chain analysis techniques; c) SME innovation responses largely fall under capacity development as business and market skills; d) scaling-up of LFM approaches as a function of capacity building of development facilitators and business service providers, e) quality and safety related issues are cross-cutting and fall within the domains of policy, training/capacity development, research and infrastructure (laboratories, etc). These relationships imply a strengthening of a) market- and business-oriented research within a supply chain perspective; b) capacity development of farmers and other rural entrepreneurs, and the service providers that help build farmer capacity, c) the need to take into account product quality and food safety across both areas.

The selected components for a regional partnership program on LFM: Based on the above exercise, the working group agreed that the following four components are those that should be prioritized for the partnership program:

- a) clustering/farmer organization,
- b) information and networking,
- c) research responsiveness, and
- d) capacity building

These components are all software or process-oriented rather than hardware or content-oriented. There was a consensus that much hardware (technology) exists and also the institutional capacity to continue to produce 'hardware'. However, processes for capturing information, organizing actors and establishing relationships between them, and building partnerships among stakeholders are overarching weaknesses.

The issue of policy-related issues was not prioritized; however, it was suggested that an intervention through the ASEAN Ministers of Agriculture would be appropriate once some concrete inter-country partnerships with results are available to illustrate what works and why it works, with policy implications.

The group formulated a **Vision statement** tentatively phrased as:

“Enhanced livelihoods of rural stakeholders and farming communities in enabled environments by the provision of informed choices for market integration through responsive research and development”.

The group also agreed on a development framework that would strive to build up the capacities of farmers and their organizations to graduate from subsistence levels of production to early developmental stages where they start engaging in markets up to mature phases where they actively participate in, and even influence the behavior of, the marketing chain. This could be achieved through training programs, the promotion of effective linkages among farmers and between farmers and other players in the value chain, research responsiveness, and information sharing, networking and public awareness programs.

The roles of participating institutions/stakeholders who will champion the specific components are tentatively identified as follows:

- APAARI focusing on information dissemination,
- FAO on training and information,
- APRACA (which is a consortium of financial institutions in Asia) on farmer group training, and
- Some national research institutions (BPRE-Philippines, CFTRI, India) on research responsiveness.
- For its part, IFAP and its affiliates would be direct participants with a focus on developing effective clustering and organizational modalities at the farm production level, enabling farmers through their organizations to engage in value-adding and move up the value chain, and enhancing linkages with traders, processors, consumers and other key stakeholders in the marketing chain.

Conclusion and next steps

In their concluding remarks, Betty Del Rosario (APAARI) and Rupert Best (GFAR) expressed their appreciation for the invaluable inputs provided by the group and the resource persons, including Dr. Paroda who missed the very lively discussion during the two-day workshop. They highlighted that the rich and diverse experience of the group contributed to achieving greater definition of what the regional partnership program on LFM will look like. The expressions of interest and initial commitment of the regional champions as indicated above and the initial immediate steps listed below are very encouraging and would further foster meaningful cooperation to successfully carry out this program. In his concluding remarks, Thierry Mennesson, APAARI Vice-Chair commended the group for a very productive meeting. He thanked APAARI and GFAR for jointly organizing and sponsoring this very timely activity and hopes that the Pacific and others can learn much from this initiative.

a. Regional level

1. Documentation by APAARI of:

(a) Success stories/ LFM best practice- one page write-up for each of the cases shared to be featured in June 2006 issue of APAARI Newsletter. The details can be written- up later for publication.

(b) Profile of LFTM institutions- Dr.Nerlie Manalili to share template, for APAARI to disseminate later. This will be useful for Networking among stakeholders.

2. Training of Farmers organization in December 2006 by APRACA. APRACA is interested as well in action research jointly with APAARI and GFAR.

3. Participation during the Inter-regional meeting on LFM GPP, Cairo, Egypt, September 11-15, 2006- Two members of RWG to be identified by APAARI. Coordinator(s) will be chosen to prepare the background document for presentation during the Cairo meeting.

b. Global - Inter-regional meeting on LFM GPP- Cairo, Egypt, September 11-15, 2006

Annex 1a
Country working group

Terms of Reference

You are members of a regional planning team that has to provide input into the design of the inter-regional Partnership Programme on Linking Farmers to Markets whose aim is to ‘develop the capacity of small-scale resource poor farmers to transition to more commercially oriented agriculture through progressively strengthened links to growth markets’.

Please discuss and decide on the following:

1. Prioritize a commodity category (for example, livestock, roots and tubers, cereals and pulses, fruits and vegetables, oilseeds, etc.) common across your respective countries, and within the chosen category, select a subset of products, that meet the following criteria:
 - The products are highly demanded in the domestic market. Opportunities for export should be seen as a bonus, not an essential criterion for selection.
 - Linking of farmers to the markets for these products will bring benefits to a significantly large number of smallholder families and rural entrepreneurs.
 - There exist on-going interventions that can provide the basis on which to build the programme.
 - Expertise is available in the institutions you represent, or in your respective country, and a desire to participate in the development of a Linking Farmers to Markets partnership programme.
 - There exists a favorable governmental environment to promote and support the programme on these products.

2. Identify and briefly characterize on-going experiences, projects or interventions (research or development) that you know about and are actively engaged in that will form the basis on which to build the programme and from which others can learn.
 - Where are they located?
 - What are they achieving?
 - How are they achieving it?
 - Who is involved and what is their contribution?
 - What is particularly innovative about the experiences/ projects?
 - Are there gaps that limit their effectiveness? If so, what skills/expertise is lacking?

3. What concretely needs to be done to:
 - Improve on and learn about what is being done at the moment?
 - Extend/scale up the experiences/projects to a large number of beneficiaries?
 - Who needs to be involved and what will they do?
 - What skills/expertise, methods, tools, lessons could be provided to other countries or regions?

Annex 1b
Regional working group

Terms of Reference

You are members of a regional planning team that has to provide input into the design of the inter-regional Partnership Programme on Linking Farmers to Markets whose aim is to ‘develop the capacity of small-scale resource poor farmers to transition to more commercially oriented agriculture through progressively strengthened links to growth markets’.

Please discuss and decide on the following:

4. Prioritize a commodity category (for example, livestock, roots and tubers, cereals and pulses, fruits and vegetables, oilseeds, etc.) common across a significant number of countries of the region, and within the chosen category, a subset of products that meet the following criteria:
 - The products are highly demanded in the domestic market across a significant number of countries. Opportunities for export should be seen as a bonus but not an essential criterion for selection.
 - Linking farmers to the markets for these products will bring benefits to a significantly large number of smallholder families and rural entrepreneurs.
 - There exist on-going interventions that can provide the basis on which to build the programme.
 - Expertise is available in the institutions you represent and a desire to participate in the development of a Linking Farmers to Markets partnership programme.
 - There exists a favorable institutional and donor environment to promote and support the programme on these product categories.
5. Identify and briefly characterize on-going experiences, projects or interventions (research or development oriented) that you know about and/or are actively engaged in that will form the basis on which to build the programme and from which others can learn.
 - Where are they located?
 - What are they achieving?
 - How are they achieving it?
 - Who is involved and what is their contribution?
 - What is particularly innovative about the experiences/projects?
 - Are there gaps that limit their effectiveness? If so, what skills/expertise is lacking?
6. What concretely needs to be done to:
 - Improve on and learn about what is being done at the moment?
 - Extend/scale up the experiences/projects to a large number of beneficiaries?
 - Who needs to be involved and what will they do?
 - What skills/expertise, methods, tools, lessons could be provided to other countries or regions?

Annex 2a

Philippines Case

Breaking into Distant Institutional Vegetable Markets through Marketing Cluster and Application of Cold Chain System *

This case study illustrates how vegetable growers can work together to break into high end institutional markets, namely, fresh produce processors, hotels and fast-food restaurants, and the supermarkets.

In the highland province of Bukidnon, Southern Philippines small scale growers started out producing vegetables such as lettuce, carrots and garden pea for sale to local traders in Cagayan De Oro City, about 75 km away from the farms. One such vegetable grower is Green Haven Farm, which begun growing lettuce in 1999 with a weekly production of 100 kg. Selling the lettuce to local traders was financially unattractive because they purchased at low prices and deducted outright 25-30 percent by weight as penalty discount for trimmings and other post-harvest losses to be incurred along the handling chain, even if the vegetable produce had relatively good quality.

As this trading practice was not acceptable, the grower explored alternative market outlets in Manila. Soon enough the grower was able to establish market linkage with a vegetable processor that supplies minimally processed lettuce to the big fast-food chains such as Macdonald, Wendy's and Pizza Hut. Initially approximately 400 kg of lettuce was delivered on a weekly basis by air transport. Lettuce packed in cartons and delivered to the processor incurred 16-20 percent trimming losses, resulting in processing yield recovery less than the 61 percent specified in the marketing contract.

Attaining the high quality standard of the vegetable processor was a big challenge for the grower. But given the determination of both parties to make the market linkage succeed, the processor recommended the application of cold chain technology combined with sea transport to preserve lettuce quality and, at the same time, bring down transport cost. In addition, the processor provided technical advice to the grower on improved production protocols and good post-harvest handling practices. The problem was how to fill up a 20-foot reefer van with 3.5 tons of lettuce weekly for timely delivery to the processor. As a necessary intervention, the grower had to convince four other lettuce growers in the area to organize a marketing cluster, called the lettuce cluster, sharing among them common production protocol and quality assurance system to meet buyer's specifications.

In mid-2002, the first reefer van loaded with lettuce was shipped to Manila processor and, since that time, the cluster had been delivering the required volume and quality of lettuce on a weekly basis. With the use of reefer van, trimming losses had been significantly reduced to 10 percent maximum and processor's specification of 61 percent yield recovery had been met.

In the efforts to further improve the lettuce supply chain, the Department Of Agriculture's Bureau of Post-harvest Research and Extension (BPRE) in partnership with other government agencies provided technical assistance as well as facility support in terms of soft loan package to the lettuce cluster. A ten-foot refrigerated truck, a 20-foot reefer van, and a pre-cooler, comprised the equipment loan package.

The success the marketing cluster of five lettuce growers had achieved so far can be attributed to the close collaboration among the vegetable industry association in the area, local government units (LGUs), logistics service providers, research institutions, NGOs, and the processor-buyer within a policy environment that supports the development of high value crops. This working model of linking farmers to market provided an impetus for other independent, small lettuce growers to join in the marketing cluster. And this development had given the marketing cluster a window of opportunity to expand its production volume and, in turn, its captive institutional market.

*Source: Dr. Rosendo Rapusas, Director, Post –Harvest System Analysis and Development Department, Bureau of Post-Harvest Research and Extension (BPRE), CLSU Compound, Science City of Munoz 3120, Nueva Ecija, Philippines.

Annex 2b

Indonesia Case

BRINGING FARMERS' PRODUCTS CLOSER TO MARKET *

Introduction

In a developing country like Indonesia, globalization has brought about a change in agricultural development policy, from production to a market-oriented one. Government aims to strengthen the bargaining position of farmers' groups through support for improving farmer's facilities, technical skill, and provision of capital and fostering entrepreneurship behavior.

The case of coffee commodity in Kintamani, Bangli, Bali province is a good example to showcase how farmers' organization can assist its members benefit from getting themselves organized. The commodity has been managed under the local farmer organization called "*Subak Abian*". *Subak* means farmer organization for water management, which normally applies to rice, and *abian* means crops which grow in the uplands.

Although for most people *subak* is perceived as a mere irrigation management system, yet it encompasses a much broader scope including an equitable management of water resources within a watershed ecosystem, manifesting the *Tri Hita Karana* value bases. That value base is functioning to provide a proper relation between: (a) man and the creator, (b) man and his fellow beings, and (c) man and ecosystem or the natural resources around him. In Balinese philosophy it represents the pillars for maintaining the integrity and sustainability of natural resources to achieve welfare for all. Moreover, conceptually *subak* is an effort to establish a sustainable harmony within three dimensions, namely: (1) vertical harmony with Only One God; (2) a horizontal harmony with the fellow beings; and (3) a harmony in terms of keen interest to sustain the natural resources. In the real life the three dimensions are reflected by a hierarchical structure of sacred pura *air* (water temple) and associated rituals, *subak* organization, and irrigated land managed by the *subak* members and its role (*awig-awig*). The scope of *subak* wisdom exemplifies a feature of good governance that has been maintained for a millennium. Good governance is reflected by a just distribution of water, transparency of decision making such as water allocation and distribution, and participation of the whole *subak* members in the operation and maintenance of the irrigation system.

SUBAK ARABICA Coffee in Kintamani

Kerta Waringin (Mabi) is the name of *subak abian* at Belantih village in Kintamani district, regent of Bangli, Bali province. This *subak* has about 41 members. In 2006, coffee production target is approximately 216,000 kg raw material. In 2005, the

target of 27 tons was exceeded by nearly 40 % when production was 41.5 tons fresh beans. The raw materials were processed through wet basis, giving about 34.6 tons of dried coffee beans, and created about 25 new jobs for local workers. This *subak* owns some equipments for processing such as pulper, washer, water pump, fermentation box, water reservoir, dryer, balance, moisture tester, packing machine, storage room, small office, computer unit, waste processed equipment, sun drying floor, sachet coffee machine etc. The members of *subak* have committed to improve the quality of their products in order to maintain trust on their *subak* group.

Partnership and Mediator to Bring Farmers' Coffee to Market

Mediators always assist the *subak* members in implementing good farming, post-harvest and manufacturing practices. They look for a partner (trader or exporter) to bring farmers' coffee to either the domestic or export market. Since 2005, *subak* Kerta Waringin has already found a partner who assists the farmers improve their product quality according to consumers' expectation. To date, there are two coffee companies which established joint partnership with *subak* Kerta Waringin in Kintamani district, namely, PT. Tri Agung Mulia (TAM) and PT. Indocafco Lampung. This partnership has been mediated by Central Coffee and Cacao Research, Jember, East Java, which also provided technical and management assistance for the *subak's* coffee agribusiness. From this partnership model, the *subak* members are able to improve product quality, get better price (which dramatically increased by about 73%), and increase their income. It is envisioned that this *subak* will go into value addition and sell not only good quality Arabica coffee beans, but also coffee powder and other down stream products throughout the world. The *subak* through mediator has established cooperation with CIRAD to perform and prepare certification on "geographical indication." This model has been implemented for fresh fisheries products at the Auction Place (TPI).

Conclusion

The use of *subak* as farmer institution especially in Bali can be a model to empower farmers to work as a group, achieve economies of scale, be more productive, incur less cost, and achieve uniform and consistent quality of products that meet consumers' expectations, increase farmers' income and improve family welfare, and sustain farming and agribusiness enterprises. This model has been replicated in other coffee-growing areas in Indonesia such as in Ngada, Flores Island.

*Source: Dr. Nyoman Oka Tridjaja, Director of Processing and Marketing of Horticulture Product, Ministry of Agriculture, Indonesia.

Annex 3a

What is going well and needs to be continued/strengthened?

Safety and quality awareness (5)	Enabling policies (2)	Demand/supply chain management improvement (3)	Value adding technology and by-product diversification (5)	SME innovation (4)
Implementing quality assessment and certification	Reduce government policy regarding price support	Improve value delivery system	By product utilisation (waste and loss reduction)	SMEs – training of women entrepreneurs
Certification and labelling	Enabling policies	Popularisation of supply chain-value chain approaches	Crop-by product diversification	Develop SME
Quality and safety standards		Supply chain assessment improvement	By product utilisation	SME – innovation, products, skills
Safety/quality awareness and standards policy		Optimisation of existing FV supply chains	Value addition for income generation	Income generating activities for marginal communities
Quality and safety development for consumers			Development of low-input and adaptable food processing technologies	
Market research (3)	Infrastructure (2)	Information – success stories, case studies (5)	Clustering, farmer organisation (8)	Capacity building/training (11)
Analytical research on competitiveness	Infrastructure	Post-harvest case studies	Commodity grouping to compete in market (volume, quality, etc.) (2)	Trade
Market driven agri-research, value creation	Marketing infrastructure	Document menu of success on LFM focusing on self sufficient and early developing farmers by country (2)	Follow same clustering approach (3)	Information technology for farmers
Research on market opportunities and market chain analysis		Provide market information to growers	Farmer organisations	Business development for farmers; Training farmers entering into market; Financial skills for farmers and SMEs (3)
		Information	Strengthen the farmers organisation	Capacity building of market chain players (farmers, service providers, other partners)
		Affordable information technology (mobile phone, SMS, Internet, etc.)	Group formation	Revamping production systems by training farmers for improvement in their agronomy
				Training and education for farmers; training and retraining (2)
				Training farmers to improve zone appellation and being involved in the process
				Enhance capacity building in qualification for quality products
				Scaling up and replication

Annex 3b

What we need to start doing more of?

Safety standards enforcement and quality assurance (5)	Enabling policies and regulatory frameworks (5)	Demand/supply chain management improvement	Value adding technology and by-product diversification (4)	Scaling up LFM approaches (2)
Develop capacity for analysis on residues and pesticides	Government and private sectors dialogue		Downstream process and product and by product and waste product; by product utilisation; product and process development for value addition; value addition (4)	Scaling up LFTM approaches region-wide
Quality consistency and quality assurance	Market and price guarantee			Build capacity/skills of extension and development facilitators to link farmers to markets
Reduce SPS impacts on exchanges through same area	Level playing ground for LFM			
Enforcement of food safety standards (domestic markets); Improve domestic safety standards (2)	Improvement of policies concerning agri-business			
	Harmonisation of standards for contaminant reduction			
Market responsiveness (6)	Infrastructure (1)	Information, networking, public awareness (6)	Clustering, farmer organisation	Training education of farm leaders (2)
Linking research to farm gate	Market infrastructure; infrastructure for strategic markets	International exhibition of market products to enhance more aggressive movement of farmer groups		Build capacity skills of farmers and their organisations to respond to market opportunities and market demands
Action research on best practice LFM on the ground		Farmer forum on LFM		Providing training education for farm leaders
More research input into other stakeholders		Document success stories		
Public-private partnerships to show case technologies		Improve networking		
Public-private linked research		Global post-harvest/linking farmers to market information		
Build capacity/skills of researchers to identify needs/demands of actors in supply-value chains		Information access and interpretation (incl. IT)		

Combined totals

Quality and safety related: 10
 Demand/supply chain management: 3
 SME Innovation: 4
 Market research, market responsiveness: 9
 Information related: 11
 Training, capacity development:

Policy and regulatory framework related: 7
 Value adding technology: 9
 Scaling up LFM approaches: 2
 Infrastructure: 3
 Clustering and farmer organisation: 8

Annex 4

APAARI Ad Hoc WORKING GROUP MEETING For the preparation of the Asia-Pacific's participation in a Global Partnership Programme (GPP) on Linking Farmers to Markets (LFM)

**Jointly Organized by APAARI and GFAR.
6-7 June 2006, Rama Gardens Hotel, Bangkok, Thailand**

Agenda

6 June 2006 (Tuesday)

- | | | |
|---|--|---|
| 09.00 | Welcome and Opening Remarks | Prof. H.P. M. Gunasena
Chair, APAARI |
| 09.05 | Introductions | Betty del Rosario |
| 09.30 | Background and Rationale | Rupert Best
Research Partnership
Programmes, GFAR |
| 10.00 | Tea break | |
| <i>Session 1: Revisit relevant outcomes and recommendations of 2004 Regional Expert
Consultations on Post Harvest Technologies for Ensuring Food Security and Value
Addition for Enhanced Income</i> | | |
| 10.15 | Food quality and safety. | Chair: V. Prakash |
| 11.00 | Supply chain integration. | Chair: Greg Johnson |
| 11.30 | Capacity building. | Chair: Rosa Rolle |
| 12.30 | Lunch Break | |
| 13.30 | Policy issues. | Chair: Nerlie Manalili |
| <i>Session 2. Group work: Defining content of a regional programme</i> | | |
| 14.15 | Group 1: Country institutions.
Group 2: Regional institutions | Chair: Betty del Rosario
Chair: Greg Johnson |
| 16.30 | Group presentations (20 minutes each) | Chair: Rosendo Rapusas |
| 17.10 | General discussion and synthesis | |
| 17.30 | Close | |
| 18.00 | Meeting of Session chairs | |
| 19.00 | Welcome Dinner | |

7 June 2006 (Wednesday)

09.00 *Session 3: Action planning: Preparation draft proposal for discussion during the September 2006 GFAR Inter-regional Workshop*

Chair: Nerlita M. Manalili
Rapporteur: Betty del Rosaio

12.30 Conclusion and next steps

Rupert Best, GFAR
Betty del Rosario, APAARI

Thierry Mennesson
Vice Chairman, APAARI

Workshop Groupings:

Country group: local – national - regional inter-relationships/actions

Nerlita Manalili, V. Prakash, Rosendo Rapusas, Saipin Maneepun, Sing Ching Tongdee, Nyoman Oka Tridjaja, Arvind Kapur, Udomluck Pongsuphun, Phanutwat Wanraway, Betty del Rosario.

Regional group: international – regional – national inter-relationships/actions

Greg Johnson, Akinori Noguchi, Satoru Miyata, Katinka Weinberger, Benedicto Bayaua, Raul Montemayor, Rosa Rolle, Alistair Hicks, P. K. Saha, Rupert Best.

Annex 5

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