

http://hortikultura.litbang.deptan.go.id

Challenges and Emerging Opportunities to Develop Horticultural Value Chains in Indonesia

ACIAR – Adelaide University - Capacity building for research: promoting inclusive development of agricultural value-chains

Bogor, 1-3 September 2014



Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian



OUTLINE





Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian





http://hortikultura.litbang.deptan.go.id



I. CURRENT STATUS



Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian



HORTICULTURE GDP

• Horticulture plays pivotal roles, the GDP of horticulture rises year to year significantly





Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian



Consumption of horticultural products

Average Expenditure per Capita Every Month Based on Good Categories





Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian



CURRENT STATUS OF INDONESIAN HORTICULTURE

strengths

- High economic value
- Potential for hort. germplasm resources
- Widespread in most of AEZ
- Wide distribution of harvested areas
- Source of agricultural employees
- Availability of horticultural technologies
- Potential domestic and global markets
- High demand of horticulture products as nutrition
- Availability of land/areas for hort. extension
 opportunities

Inconsistency quality

- Low competitiveness of hort. products
- Low adoption of high yield varieties
- Incompetence of farmers in process and marketing
- Undeveloped horticulture industries
- Horticulture technologies have not been optimally disseminated yet
- Land competition
- Market structures and price volatility
- Global market competitiveness
- Climate changes
- Land competition
- Infrastructures for marketing

threats

weaknesses



Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian



It is necessary to:

- Increase productivities by GAP and GHP
- Build national seed industries
- Study supply and demand fluctuation in order to manage supply continuity and availability for consumers
- Presure the government to build adequate facilities and infrastructure not only in the cities but also in the villages as production center
- Improve market integration, supply chain, value chain
- Improve competitive advantages for horticultural products





Common Horticultural Chains





Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian



Strategy to foster the developme nt of horticultur e products in domestic and global market

Improve quality and continuity of horticultural products (inventions)

- Research on high yielding varieties
- Seed Management
- Improvement of the horticultural technologies
- Improvement of the post harvest technologies
- Improvement of the efficiency of supply chain management



Increase of adoptions of horticultural innovations domestic and internationally

- Increase efficiency and effectivity through use research resources optimally
- Increase use and accelerate disseminations of horticulture technologies through *litkajibangdiklatluhrap*



Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian



R&D Priorities of IAARD on Fruits and Vegetables

- R&D in breeding, biotechnology and genetic resources for shallots, chilies, potatoes, onions, citrus, mangoes, mangosteen, bananas
- Research on socio-economics and policy for horticulture for priorities commodities related to the farming system, market integration (exports and imports), price volatility, supply and demand
- Development of horticulture agribusiness model based on technology innovation – PKAH, particularly for mangoes -Cirebon, chillies - Ciamis, citrus - Tuban
- Development of seed systems for priorities commodities





Invention to Innovation: ICHORD - IAARD



Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian



Commodities Priorities

- Vegetables (Indonesian Vegetables Research Institute): potato, shallot, chili, indigenous vegetables
- Tropical Fruit (Indonesian Tropical Fruits Research Institute) : durian, mangosteen, mango, banana, papaya
- Citrus and Sub tropical fruits (Indonesian Citrus and Sub Tropical Fruits Research Institute): citrus, grapes, longan





Invention - Innovation (Kencana Chili)

Research	Developments	Adoption
High Yield Variety of Kencana. Minister of Agriculture Decree No. 4704/kpts/SR.120/11/2011	 Production of SS and FS through UPBS (20 kgs) Disseminations through KRPL and KAH Licences: PT. Fajar Seed, PT. Agrindo Hartha Mekar 	10 Ha in West Java



Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian



Invention - Innovation (True Shallot Seed)

Research

High Yield Variety of TSS (2 varieties) with productivity 11-20 tons/ha TSS-1-S4 and TS-KL80-S3 (2012)



Seedless varieties





Developments

- Production of SS TSS (8 kg) Pro for *demfarm* – (2012)
- Demfarm : in North Sumatera Utara and East Java --- (2013)









Adoption

Proposed in 2014

Invention - Innovation (Mangoes)



Arumanis

Gedong gincu





Garifta Kuning

Garifta Gading

KHIRSAPAT

Garifta Orange





Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian



THE DIVERSE OF CITRUS (KEPROK), INDONESIA



THE DISTRIBUTION OF CITRUS SEEDS IN 22 PROVINCES





Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian





II. CHALLENGES OF HORTICULTURAL VALUE CHAINS



Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian



REDUCING GAP BETWEEN FOOD SUPPLY AND DEMAND



Kementerian Pertanian



Challenges of Horticultural Value Chains

- Inefficiency supply chains (high transportation and transaction costs, inefficient distribution channels)
- Unfair market share
- Changes of consumer preferences and purchasing habits
- Consumers' ability and willingness to pay
- Simple Processing
- Single market, competition from imports
- Limited knowledge on crop management, post-harvest pest and disease management
- Phytosanitary regulations in some regional markets
- Limited access to the input market (High Yielding Varieties) and output market



Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian



Challenges of Horticultural Value Chain (cont.)

- Seasonal production patterns, short harvesting season
- Domestic regulation on import
- Competition in export markets
- Price volatility







III. OPPORTUNITIES OF HORTICULTURAL VALUE CHAINS



Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian



Emerging Opportunities Horticultural of Value Chains





Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian



IV. CONCLUSION

- Horticultural supply chains and value chains in Indonesia need to be improved in order to meet the requirements of the consumers as well as increase the farmers' welfare
- Thus, it could increase bargaining power of horticulture farmers for having access to modern markets (in domestic market) and single market (in regional market) as agreed in AEC 2015
- Some problems such as price volatility, product continuity, and finding the niche markets could be addressed



Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian









