

## Strategy for Agrimart Development of Bali's Superior Agricultural Products

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### Abstract

Sub-Theme: (3)  
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In anticipating and handling the free market especially with regard to imported agricultural products, it was necessary to increase the competitiveness of local agricultural products of Bali through Agrimart development of Bali's agricultural product. Every product should be marketed in Agrimart was a superior product under the guidance of product development by various parties in Bali. The objectives of this study was as follows. To identify the priority of local superior agricultural products for Agrimart, along with the mapping to center location and potential of production in Bali. To identify the factors of strengths and weaknesses, as well as the opportunities and threats and so to articulate the strategy for Agrimart development. The data were obtained through survey in several production centers and the market of superior products in Bali, and survey to secondary data from related documents. The strategy was as follows. Increasing the quantity and quality of Bali's superior agricultural products through using partnership pattern, implementing biosecurity management, optimizing and dissemination of environmentally friendly cultivation technology, as well as involvement and incorporating of supporting agribusiness institutions. Prevention the altering function of agricultural land through formal and informal policy, as well as improvement of the farmer's agribusiness behavior. Increasing market share and connectivity of producers to potential market. To improve product quality and product standardization to augment the competitiveness of local products to imported products. To develop local component to substitute the import of several production inputs for the cultivation of agricultural superior products. To enhance the role of traders in promotion of local product. To maintain price stability at the consumer level. With regards to Agrimart's product distribution through retail business, in developing outlets of Agrimart, it required observing and optimizing: consumer loyalty, loyalty program, outlet location, human resource management, distribution and information systems, and (6) unique product specifications.

**Keywords:** Agrimart, Bali's superior agricultural product, Strategy, Development, Cultivation

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### 1. Introduction

The province of Bali had geographical and climatic conditions as well as land quality those were very distinctive and fertile, leading to the growth of biodiversity of some food crops, fruits, and marine biodiversity. The wealth of this germplasm was very supportive for the development of tropical commodities Bali's flagship product. The taste of some of Bali's

superior agricultural products was not inferior to similar products from other countries. Among them were Bali rice (*CicihGondrong* rice, Red rice); Kani durian fruit; Salak Bali; Mangosteen, White Mango (*Wani*), Grouper and Snapper (sea cultivated fishes). These agricultural products were not only economically valuable for food fulfillment needs, but also as export commodities, inter island trade, tourism needs, as well as social and cultural ritual needs.

The handling of these superior products had not been optimal yet, both on productivity, quality and continuity. The agribusiness of Bali's superior agricultural products had not been well developed due to some obstacles, such as the lack of organized farmers which 85% are small holders with an average cultivation land of less than 0.5 ha. Weak production systems and technological applications that support market needs, lack of infrastructure and logistics support, long and less integrated supply chains from production systems to marketing systems, lack of market information, and lack of institutional support of agribusiness institutions (Rai et al., 2016).

Therefore it was necessary to improve the technology of farming, post-harvest, exotic promotion, modern marketing and others. The optimization of all stages of the commodity's flagship business was expected to increase its trade value and increase the income and level of satisfaction of all its business stakeholders. In addition to anticipating and facing the free market especially with regard to imported agricultural products, it was necessary to increase the competitiveness of local agricultural products of Bali (Mayadewi, 2011). This condition was very possible to be realized given the potential of germplasm of agricultural products in each district and city in Bali was very supportive. In this case, it was necessary to develop Agrimart strategy of Bali's superior agricultural products in an effort to increase marketing and consumer satisfaction, and income of the producers. This Agrimart development must first be supported by standardization of products, health and safety of products when consumed, good cultivation techniques and environmentally friendly, post-harvest handling and promotion and development of distribution channels.

Agrimart was one model of the retail market. In order to succeed in a competitive retail market, agrimart must be able to offer the right product both on quality and quantity, with the right price, time and place as well. Therefore, the agrimartist's understanding of the characteristics of the market target or the consumers to be served was very important. The

main role undertaken by agrimart to be developed in this study was the fostering and development of superior agricultural products of Bali. Every product should be marketed in Agrimart was a superior product produced under the guidance of product development by various parties, UNMAS Denpasar, BPTP Bali Province, Association of Buleleng Coastal Fish Cultivation (P4B), Tropical Fruit Farming Association of Sudaji-Buleleng, and several Subak. Finally, through agrimart it was expected that Bali's superior Agricultural products could enter the national and international market. Therefore the purpose of this study was as follows.

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- 1) Identify and select the priority of local superior agricultural products for Agrimart, along with the mapping to center location and potential of production in Bali.
  - 2) Identify the factors of strengths and weaknesses, as well as the opportunities and threats of Agrimart of Bali's superior agricultural products.
  - 3) Formulate the strategy for Agrimart development

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## **2. Research Methods**

The Agrimart development of Bali's superior agricultural products used a comprehensive and integrated approach to the study and was based on existing potentials and problems, both within the regional planning and in the regional constellation. The essence of Agrimart development was the utilization of the potential of Bali's superior agricultural product to improve the marketing to be more competitive. It was by integrating intergovernmental and local government activities, among local governments, among sectors of business communities, and accommodating various sciences and principles of management, as well as the development of regional activities and arranging regional spatial.

Three major groups of product were identified and had priority in trade of superior agricultural products, namely: fruits; food; and cultivated fishes. Bali with a strategic location and had a unique cultural wealth, to be great attraction for domestic and foreign tourists. Food products (local rice in Bali) and aquaculture products (groupers and snapper) had no heavy competitors in domestic and international trade. However, local Balinese fruits have serious problems in their trade. Actually the need of fruit in the tourism sector, for religious ritual activities in Bali was quite high, but most of fruit consumption ruled out the use of local fruit in the sense of prioritizing imported fruit.

On the basis of this phenomenon, this study was conducted in some of Bali's superior agricultural production centers. The data was obtained through survey in several production

centers and the market of superior products. In addition, it also comes from the study of secondary data from related documents. Survey of aquaculture product was conducted in Gerokgak District. Survey of Bali rice product in Penebel and Sawan District. Survey of fruit products in Buleleng, Tabanan and Badung regency. The data analyze was primarily description on qualities and quantities.

### 3. Result and Discussion

#### 3.1 Identification and selection of priorities of superior agricultural products for Agrimart

In the context of developing Bali's superior agricultural products, especially for Agrimart development in an effort to improve the marketing of superior products and customer satisfaction, there were three groups of superior products identified and had priority in trade, namely: 1) fruit products; 2) food products; and 3) aquaculture fishery products. Each commodity of these three groups of superior products will be presented in cultivation aspects (intensive cultivation, non-serious cultivation, wild), utilization aspect (A: local consumption, B: inter island trade, C: exports, D: custom and religious rituals, D: tourism).

Table 1. Description of some Bali's superior agricultural products for Agrimart

No	Type of product	Level and area of cultivation	Utilization				
			A	B	C	D	E
1	Grouper	Intensive cultivation: from hatchery in a tub of water circulation. Fish ranching using floating net cages in sea. The types of feed : natural and artificial/pellets. Not optimal integrated mariculture. The production center was located in Gerokgak District	√	√			
2	Snapper	Intensive cultivation: from hatchery in a tub of water circulation. Fish ranching using floating net cages in sea. The types of feed : natural and artificial/pellets. Not optimal integrated mariculture. The production center was located in Gerokgak District	√	√			
3	Milkfish (seeds)	Seeding/ hatchery in a tub of sea water circulation with natural and artificial feed type. The production center was in Gerokgak District	√	√			

4	<i>Cicih Gondrong</i> Bali Rice	Intensive organic based rice farming. Non chemical pest and disease control. Production center was in Sawan district, Buleleng regency	√		√	√
5	Red Rice	Intensive organic rice farming. Non chemical inputs in rice farming. Production center was in Penebel district, Tabanan regency.	√		√	√
6	Grape Processed products: Bali Indico Wine for drink	All types of grapes cultivated in Bali were only one species of the <i>Vitis vinifera</i> (Ashari, 2004). Intensive non-organic cultivation. Production centers were District of Banjar, Seririt and Gerokgak in Buleleng regency. Total production of Grape in Buleleng regency 2016 was 8640 ton.	√	√	√	√
7	Durians: Kani, Monthong, Bestala	Semi-intensive cultivation. The cultivation of Durian Kani and Monthong was more organic. While the Durian Bestala more wild. Production center of Kani and Monthong durians was in district of Sawan, Buleleng and Baturiti. Durian Bestala center was in District of Seririt. Total production of excellent durian in Bali 2016 was 2160 ton.	√	√		√
8	Strawberry	Strawberry production center in Bali was located in Bedugul tourism area, namely in Pancasari Village Buleleng regency and Candikuning Village Tabanan regency, which is located side by side. The cultivation of strawberries: done intensively, not only in open land conventional, but also in greenhouses or plastic houses with hydroponic cultivation systems and vertical placement to save land use. Varieties those planted were Rosalinda and Sweet Charlie. Total production of Strawberry in Bali 2016 was 870 ton	√	√		√
9	<i>Wani</i> (White Mango)	<i>Wani</i> was still produced from plants grown naturally in yards, mixed cultural garden or around the forest (more wildly). The diversity of <i>wani</i> in Bali was quite high, that was found 22 cultivars with each characteristic. The 22 cultivars can be grouped according to the color of the fruit skin, the taste of fruit	√	√		√

flesh, the shape of the fruit, the weight of the fruit, the thickness of the fruit flesh, and the presence or absence of stone in the fruit. The cultivars were found in almost all areas in Bali, but the production centers are in some districts in Tabanan, Karangasem, Buleleng and Klungkung regency. Especially for wani *Ngumpen* (Wani without stone), only found in several places, namely: in district of Sawan, Busungbiu, Pupuan, Selemadeg Barat, and Dawan (Rai et al., 2004).

1 0	Mangosteen	Mangosteen Production in Bali has become an inter-island trade and export commodity. The plants can be found in all areas of Bali, but the center of production was mostly from the cool area. Among them Lemukih Village, Galungan, Sekumpul and Sudaji in Sawan district. District of Selemadeg Barat, Penebel, Pupuan, Busungbiu and Pekutatan. Excellent mangosteens were cultivated semi-intensive both monoculture and intercropping with fruit plants that produce more rapidly such as Banana and Papaya. The deep Mangosteen plants (not excellent) were kind in mostly wild life.	√ √ √ √ √
1 1	Mango	Some types of mangoes in Bali are cultivated commercially by controlled cultivation techniques (but still use chemical pesticides in pest controlling), namely: Mango Arumanis and Lalijiwa. The area of mango planting is almost in all districts in Bali. But the production center with its unique Arumanis fruit flavor is Depehe Village, Kubutambahan district, Buleleng regency. Total production of Mango in Bali 2016 was 42392 ton.	√ √ √ √ √

### 3.2 Factors of strengths and weaknesses, as well as opportunities and threats in developing Agrimart of Bali's superior products

#### Strengths

- 1) Bali's superior agricultural products were available with high quantity and various types
- 2) Every farming of superior product was a source of family income
- 3) Superior commodity production activities were guaranteed for their sustainability because they were mass produced by controlled cultivation techniques and were mostly environmentally friendly (Arsana, et al., 2013)
- 4) The strong institutional in agricultural development from technical, social and economic aspects supported production activities (subak for rice fields/*sawah* and for gardens/*abian*, research center, technology assessment center, small holder/*seke*, local wisdom, corporation of farming)
- 5) Management of biosecurity for agricultural products was strongly and had been institutionalized
- 6) Facilities and infrastructure for crops transportation were easily
- 7) Land / coastal / marine areas and climates in Bali that were very suitable for superior agricultural production activities and were not owned by the importer countries of these products.

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#### Weakness

- 1) Agricultural land for leading farming commodity on land, coastal and marine was decreasing due to rushed conversion of agricultural land. The conversion of paddy fields to non rice fields occurred in all areas of Bali, either in large or small around the city and even in villages. Conversion of farmland mainly rice fields not only caused food production capacity was diminished, but it was one form of investment losses, agro ecosystem degradation, degradation of agricultural tradition and culture. It was one of the reasons the decreasing of the farmer's arable lands and the decline in the welfare of farmers so that the farmers conducted farming activities could not guarantee a decent level of life for themselves. To inhibit the rate of land conversion, the Ministry of agriculture had published four Government Regulations as a follow up of the Law No.41 in the year 2009 on the protection of sustainable agricultural food land, namely, Government Regulation No. 1 in the year 2011 regarded the determination and control of agricultural land functions, Government Regulation No.12 in the year 2012 regarded the incentives for the protection of agricultural land for sustainable food security,

Government Regulation No. 25 in the year 2012 regarded the information system of agricultural land for sustainable food security and Government Regulation No.30 in the year 2012 regarded the expenditure for protection of sustainable food lands (Mayasari, 2016). The all of government regulations, in practice required local regulations (PERDA). In the absence of local regulation by the head of the region, law and government regulation could not be implemented, even the predicted loss of rice field of 390 ha per year in the next years due to land conversion for non farm interests.

- 2) The market share was still limited and somewhat less explicitly
  - 3) Connectivity of producer / producer farmers with potential markets was still weak
  - 4) Guidance to create products with excellent quality and appearance was still weakly
  - 5) Promotion and market intelligent both online and offline are weak
  - 6) The weak quality assurance either in product standardization, ecolabeling and nutrientlabeling
  - 7) The mechanism of product price formation was less transparent and tends to make the producer only as price taker.
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#### Opportunities

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- 1) Bali was a global tourism business destination
  - 2) Awareness of domestic and abroad people of consuming Bali's superior agricultural products was very high
  - 3) Government policy intensively encourages domestic marketing and international trade (export) of local agricultural products
  - 4) The existence of capital / banking institutions that support the activities of cultivation and agroindustry
  - 5) The development of environmentally friendly cultivation and processing technology
  - 6) The development of communication and information technology to support promotion and marketing
  - 7) The existence of various parties acting as partner companies with various partnership patterns that support the agribusiness of Bali's agricultural superior products
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### Threat

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- 1) The economic state was still sluggish
  - 2) The rampantness of fresh commodities and processed products those imported from other countries, especially fruit production
  - 3) The dependence on import of several production inputs for the cultivation of agricultural superior products.
  - 4) Consumers were sensitive to higher prices of agricultural superior products
  - 5) Taxes and retributions those were still burdening production activities.
  - 6) Black campaign from the competitors using internet media was too easy to drop the image of Bali's superior agricultural products
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### **3.3 Qualitative strategy for Agrimart development of Bali's superior agricultural products**

#### Strategy SO

Increasing the quantity and quality of Bali's superior agricultural products through using partnership pattern, implementing biosecurity management, optimizing and dissemination of environmentally friendly cultivation technology, as well as involvement and incorporating of supporting agribusiness institutions.

#### Strategy WO

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- 1) Prevention the altering function of fertile and productive agricultural land through formal policy (PERDA) and informal policy (strengthening customary rule/*awig-awig* of subak and *desa adat*), as well as improvement of the farmer's agribusiness behavior
  - 2) Increasing market share and connectivity of producer/farmers to potential market, Promotion and market intelligent both online and offline.
  - 3) Implementing guidance to quality assurance (product standardization, ecolabeling, nutrientlabeling)
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#### Strategy ST

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- 1) To improve product quality and product standardization to augment the competitiveness of local products to imported products
  - 2) Socialize the variety of Bali's local food products both online and offline.
  - 3) To develop local component to substitute the import of several production inputs for the cultivation of agricultural superior products.
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#### Strategy WT

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- 1) To enhance the role of traders in promotion of local products
  - 2) Development of coolstorage for superior agricultural products
  - 3) To maintain price stability at the consumer level
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### **3.4 How to build outlets of Agrimart**

With regards to Agrimart's product distribution through retail business, in developing outlets of Agrimart, in order to have competitive advantage, it required observing and optimizing: (1) consumer loyalty; (2) loyalty program; (3) outlet location; (4) human resource management; (5) distribution and information systems; and (6) unique product specifications. Consumer loyalty means customer loyalty and dependence on shopping at Agrimart outlets. Having a loyal customer was an important method of maintaining profit among competitors. This consumer loyalty concept should be realized, understood and implemented in depth by the all crew of Agrimart outlet. Agrimart officers and managers must formulate a comprehensive consumer loyalty development program in various aspects ranging from offering services, transactions and after sales service. Agrimart outlet must implement a loyalty program, for example by providing customer card and storage of customer basic data, providing voucher for consumers who had done big buying at certain time, voucher for new consumer in anniversary and so on. Organize a membership program.

The location of Agrimart outlets should be strategic. Location was one of the competitive advantages that were not easily imitated. The decision on location determination

should take into consideration on the community with regard to economic growth, social and political stability, culture, geography and demographics. The work satisfaction of Agrimart crew determined the quality of service performed to consumers. Provision of salary and incentives that were fairly and appropriate performance, education and exercises to improve work behavior, as well as the creation of a comfortable working atmosphere were factors those caused job satisfaction.

Distribution systems and information of inventory control, as well as the attention to consumers from competitors by offering better services, goods and visual presentation could be beneficial for outlet development. Developing labeled brands those were products those were developed and marketed and only available at those outlets. Agrimart outlets should be able to provide and sell products that had uniqueness than other retails. The uniqueness can be seen from the corner of the product, the availability of many products, competitive product prices, unique and attractive product packaging, unique and satisfying service.

### 3.5 References

- Arsana, D., et al. (2013). *Transformation of Rice Technology Innovation with Approach Eco-farming on Subak Ecosystem in Bali*. Technology Assessment Center Agriculture Bali. Denpasar.
- Ashari, S. (2004). *Biological Reproduction of Commercial Fruit Plants*. Malang: Bayumedia Publishing.
- Mayadewi, A. (2011). *Development of Local Fruit Agribusiness in Provindi Bali: As an Idea*. DwijenAGRO.Vol.3 No.2, pp. 1979-3901. Denpasar.
- Mayasari, K. (2016). *Urban Farming Concept as Green City Solution*. Assessment Center Agricultural Technology Jakarta. Jakarta.
- Rai, I N., et al. (2016). *Bali Local Fruits: Types, Utilization and Development Potential*. Denpasar: Pelawa Sari Publishing.