
Palm Sugar Agribusiness Development Strategy In Tasikmalaya Regency

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ABSTRACT

Sugar palm (Arenga Pinnata, MERR) is one of the most valuable commodities in the plantation sector; thus, they have enormous potential to be developed. The agribusiness development of sugar palm should start from the upstream to the downstream. Therefore, a study on the strategies to develop agribusiness of palm sugar is necessary to be conducted. This research is conducted to: 1) identify the internal and external factors, 2) formulate palm sugar agribusiness development strategies, and 3) determine the priority of palm sugar agribusiness development strategies. The method employed in this research is descriptive qualitative approach. The research area, Tasikmalaya regency, is chosen using the purposive sampling. The method used to collect the data is non-probability sampling (Non-random). The analysis applied here are SWOT and AHP. The result shows that the priority orders of strategies are: (1) Cultivation development with certified parent stocks (0,3); (2) The institutional arrangements of agribusiness system by involving the relations with the stakeholder (0,27); (3) The assistance provisions to the facilities and infrastructures of the processing (0,14); (4) strengthening of product diversification and packaging innovation (0,13); (5) the Technology Development with the value 0,09; and (6) the improvement of marketing mechanism and market information with the value 0,07. The results of the study suggest that the strategic priority is the development of certified parent seed cultivation.

Keywords: Palm Sugar, AHP, SWOT, Agribusiness, Tasikmalaya Regency

INTRODUCTION

Plantation sector is one of the agricultural sectors that are traditionally able to generate foreign exchange for the country through the export of agricultural products. Most of the plantations belong to smallholders, while the rest is large plantations that belong to the government and private companies. To add value to the commodities, agroindustry should be established. Thus, an approach to the agribusiness of plantations has an important role to play. The system of plantation agribusiness consists of production subsystem, processing subsystem, marketing subsystem, and supporting system, or is a complex and dynamic

system. Therefore, the development of plantation agribusiness ideally employs an agribusiness system, including the upstream and the downstream subsystems, in order to add value to the commodities; one of which is sugar palm trees.

Sugar palm trees are a plantation commodity that has agro-climatic suitability with the condition of Indonesia and high economic value. In other words, palm trees have prospects and opportunities to be developed to increase the economy of a region. The agribusiness development of palm sugar should be thoroughly performed from the upstream to the downstream.

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Palm-based agribusiness produces palm sugar or crystal sugar as the main product that can be an alternative source of sugar. Besides, palm saps can be used as a renewable energy source called ethanol. On top of that, sugar palm trees can produce palm sugar fruits and high quality wood and can be used to make sticks and leaf fibers for the roof of the house. Therefore, sugar palm trees have a huge number of benefits, such as economic improvement, income distribution, poverty reduction, and environmental preservation. Similarly, palm sugar has enormous potential to be developed. The reasons are 1) the government has a program for the diversification of national sugar industry, which refers to the development of palm sugar and coconut sugar as the alternative sources of natural and non-cane sugar, 2) palm sugar and coconut sugar contain higher nutrients than cane sugar, 3) palm sugar and coconut sugar have distinctive taste and aroma so they can compete with other sweeteners, 4) palm sugar and coconut sugar are processed without chemical substances so they are in great demand by the export market, and 5) coconut sugar and palm sugar have huge potential to be produced as granulated sugar (Sulisto, 2015).

The increase of palm sugar demand has been seen in recent years. Regarding domestic demand, the biggest demand for granulated sugar comes from food and medicine industries across Tangerang and from people to welcome the holy month of Ramadan. The foreign demand for granulated sugar, however, comes from Germany, Switzerland, and Japan (BI, 2009). The rise in demand for natural materials and innovative products has positively influenced the palm sugar market. Global food industries have shifted to use natural or organic sweeteners. This phenomenon is caused by the growing awareness of physical health among people who used to consume artificial sweeteners. Therefore, palm sugar has been recognized as an effective alternative. Consumers from Asia-Pacific

regions, such as Indonesia, India, and the Philippines, prefer palm sugar. People from these countries have begun to realize that palm sugar benefits their health. Due to the health reasons, the manufacturers and suppliers of food and beverage products have optimized the product offering in accordance with the consumer demand. Some manufacturers have successfully paved the way to palm sugar markets in the Asia-Pacific regions because they can obtain high profit margin. These factors are predicted to push the growth of global market income for palm sugar.

The global market of palm sugar consists of local and regional market players. 70% to 75% local players are estimated to dominate the market. The main target markets are North America and Western Europe because the increasing number of people from those continents is getting more aware of the importance of health. As a result, organic and healthy foods are in greater demand. Indonesia is the biggest producer of palm sugar so that it is capable of becoming the regulator of market prices, along with the regional market players. On the other hand, the market share of multinational players is very low, only around 5% to 10% due to the high price of palm sugar.

Based on the explanation above, it can be concluded that farmers, businessmen, and government cannot avoid opportunities and challenges in the effort to improve the production of palm sugar. The future of palm sugar commodity is determined by the development of agribusiness system that should balance between agriculture, business, and supporting services (Krisnamuthi & Fausia, 2009).

West Java is the largest area of palm sugar distribution in Java Island with the total area of 13,878 hectares. Tasikmalaya Regency has considerable potential for palm sugar because it has geographical condition that is suited for the growth of sugar palm trees. The agribusiness of palm sugar in Tasikmalaya has developed rapidly as the program of sustainable forest

management on the forest lands of the local community that are the members of the Community Forest Management Unit (UMHR) is spread in several sub-districts, especially in 3 (three) sub-districts with 1,800 farmers: 1) Bantarkalong sub-district (7 villages, 300 farmers), 2) Bojong Gambir sub-district (5 villages, 1,300 farmers), and 3) Pageurageung sub-district (2 villages, 200 farmers).

The explanation above suggests that Tasikmalaya has the opportunities to develop its natural resource. This is proven by the study conducted by Sugiyowati, et al., (2014). Her analysis on the business feasibility showed that the value of R/C ratio was 1.2 and B/C ratio was 0.2, indicating that sugar agroindustry was profitable. Based on the results of the analysis on marketing aspects that were marketing margin, farmers' share, and the value of marketing efficiency in all marketing channels in Kendal Regency suggested that palm sugar agribusiness was efficient. The analysis on strategy of business development, however, showed that the palm sugar production was in quadrant I. An alternative strategy that can be used to develop the agribusiness of palm sugar is to use the S-O strategy to foster the aggressive business growth by developing the product diversification, strengthening markets, expanding marketing networks and export orientation, increasing production capacity, doing promotion through exhibitions, applying product quality standards, strengthening the valuable products of a region, and optimizing location-specific research. This research was conducted by Djoni (2013), The agro industrial business of the crystal palm sugar has been done efficiently and the income of sugar sugar household industry made the income distribution of sugar sugar producer more balance (Rianse, 2018).

Challenges are inevitable in the development and marketing of palm sugar. Compared to oil palm, coconut, and sugar cane, cultivation technology and industry of sugar palm are still less optimal. Thus,

sugar palm farmers should take actions to achieve product diversification in order to produce more various and quality products which can compete in the global market and meet the global market demand.

To be able to raise the competitiveness of palm sugar, strategies to develop the agribusiness of granulated palm sugar need to be formulated. Therefore, the current study aims to investigate the environmental factors of sugar palm industry that should be taken into account in examining the strategies of development of palm sugar agribusiness in Tasikmalaya Regency. Besides, alternatives and strategic priorities that can be implemented in the development of palm sugar agribusiness are also evaluated.

This study is hoped to be a useful reference for the government of Tasikmalaya Regency in the establishment of policies and strategies to develop and improve small industries that have been formed, especially palm sugar agroindustry. Financial institutions can also refer to the current study when drawing up financing plans for the development of palm sugar agribusiness. The current study also personally benefits the writer in the improvement of insights and analytical abilities. Consequently, the study aims to 1) analyze the internal and external factors, including strengths, weaknesses, opportunities, and threats, of the development of palm sugar agribusiness, 2) formulate strategies and policies for the development of palm sugar agribusiness, 3) decide the strategic priorities based on the existing potential, abilities, and obstacles.

METHODOLOGY

Determination of Research Area

The area of this research, Tasikmalaya regency, is chosen using the purposive sampling. This area is selected because it is one of the areas that has the largest distribution of palm trees in West Java province for 1.998 Ha.

Samples of the Research

Purposive sampling technique was used to choose respondents based on the importance level of the problems being studied and on their knowledge and experiences regarding the problems. The purpose of the study is to gather information as to the strategies of agribusiness development from the experts. Therefore, the respondents were chosen based on their expertise (Soeratno & Arsyad, 2003). The respondents of the study were the government of Tasikmalaya Regency, agribusiness actors of palm sugar, and academic experts in plantation institutions.

Analysis Method

Method of the analysis employed in this study was the combination of SWOT analysis (Strength, Weakness, Opportunity, and Threat) and AHP method (Analytical Hierarchy Process). SWOT analysis was selected because this analysis was useful in the process of strategy planning. After the strategy options were gained, the next process to select the best strategy was conducted by using the AHP. AHP was employed because it could help determine the best choice that can involve many criteria based on the intuition and perception of the experts by still paying more attention to consistency

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SWOT analysis was performed by identifying the internal and external factors to determine the supporting factors and the obstacle factors in the agribusiness development of palm sugar through the selection of policy strategy by experts.

1. IFAS (Internal Factor Analysis System)-EFAS (Internal Factor Analysis System) techniques were used together with related elements to generate alternative strategies to achieve relevant targets.
2. The AHP approach was applied by solving complex problems and organizing them into a hierarchy, which was later assessed by experts.
3. Data were analyzed using a software called Expert Choice.

RESULTS AND DISCUSSION

The approach used in order to choose the palm sugar agribusiness development strategy in Tasikmalaya regency was SWOT and AHP analysis.

SWOT analysis was employed to select the strategies of palm sugar development so that the internal factors and external factors could be formulated, and the assessing and weighting could be done furthermore to those factors. From the weighting of IFAS – EFAS as SWOT elements, the results of the value assessment on IFAS-EFAS SWOT can be seen in Figure 1.

Based on the matrix of IFAS – EFAS, various alternatives of strategy, such as SO, WO, ST, and WT, were obtained. These strategies were then chosen by the expert respondents through FGD. The result of FGD conducted show that six strategies were considered the most important ones and represented the whole alternatives of strategy to develop the agroindustry of palm sugar. Those six alternatives of strategy were: (1) The development of cultivation with certified parent stocks; (2) the institutional strengthening of agribusiness system that involves the stakeholders; (3) giving some assistance for the facilities and infrastructure of the process; (4) the strengthening of product diversification and packaging innovation;

(5) technology development; and (6) the improvement of marketing mechanism and market information.

The Selection of Strategy Priority with AHP

The strategy was determined by doing the AHP approach. The first step of AHP analysis is the preparation of hierarchy. By using hierarchy, the complex problem is hoped to be simpler and easier to be understood. With AHP model used in this research, hierarchy consists of three levels, with the top level as the focus/goal of the hierarchy, “The Policy Strategy of Palm Sugar Agribusiness Development in Tasikmalaya Regency”. In the second level, hierarchy is

the target of the agriculture development in Tasikmalaya regency that refers to the vision and mission of the local government in Tasikmalaya Regency and Agriculture Service of Tasikmalaya Regency. In the strategy level, the alternatives of policy strategies are from SO, WO, ST and WT. Moreover, the selection of strategy priority is conducted using AHP analysis. Then, the strategic priority was chosen using AHP analysis. The hierarchy is shown in the chart below.

Based on the AHP analysis result, the ranking of strategy alternative or the priority of the goal that can be done to develop the palm sugar agribusiness is:

<p style="text-align: center;">IFAS</p> <p style="text-align: center;">EFAS</p>	<p>Strength</p> <ol style="list-style-type: none"> As one of the leading commodities. The availability of land is still wide/land resources. Appropriate climate and agro climate. Supports from the local government. Every part of the tree can be utilized so that it has high sale value, and it leads to have a great economic value. Conducting the expansion of palm sugar cultivation. High productivity 	<p>Weakness</p> <ol style="list-style-type: none"> Land ownership and limited number of trees. Weak financial condition. Ability and skills of the farmer Low Quality of Human Resources. Traditional facility and tools There is no formal legal status for the certified parent tree. Traditional process of palm production. There is no support from the banks. Limited information about the market.
<p>Opportunity</p> <ol style="list-style-type: none"> Bigger market demand. Can substitute white sugar for patients with diabetes. The price of the produce that increases and has a good prospect. There is high additional value from the process of palm into palm sugar. Promotion supports from the province government. The institution level for palm sugar in province. 	<p>Product diversification and packaging</p> <p>Conducting the research and development to improve the quality and quantity</p>	<p>Strengthening the institution from upstream and downstream.</p> <p>Assisting the facilities and infrastructure for the processing</p> <p>Human Resource Training for the that relate to the cultivation and production</p> <p>Promotion improvement.</p>
<p>Threat</p> <ol style="list-style-type: none"> The absence of national program toward plantation especially in developing the commodity. The marketing network that is undeveloped. There is a competition between palm sugar and other sugar (white sugar) The demand of exported product standardization. 	<p>The development of agribusiness through the expansion of certified area.</p> <p>Giving some assistance regarding the technology of agribusiness and the process that is appropriate with the exported product standardization.</p>	<p>Developing the information market and the improvement market mechanism.</p> <p>Cooperate with the stakeholder.</p>

Figure 1
The Interaction Matrix of IFAS-EFAS SWOT

Source: Primary Data, 2018

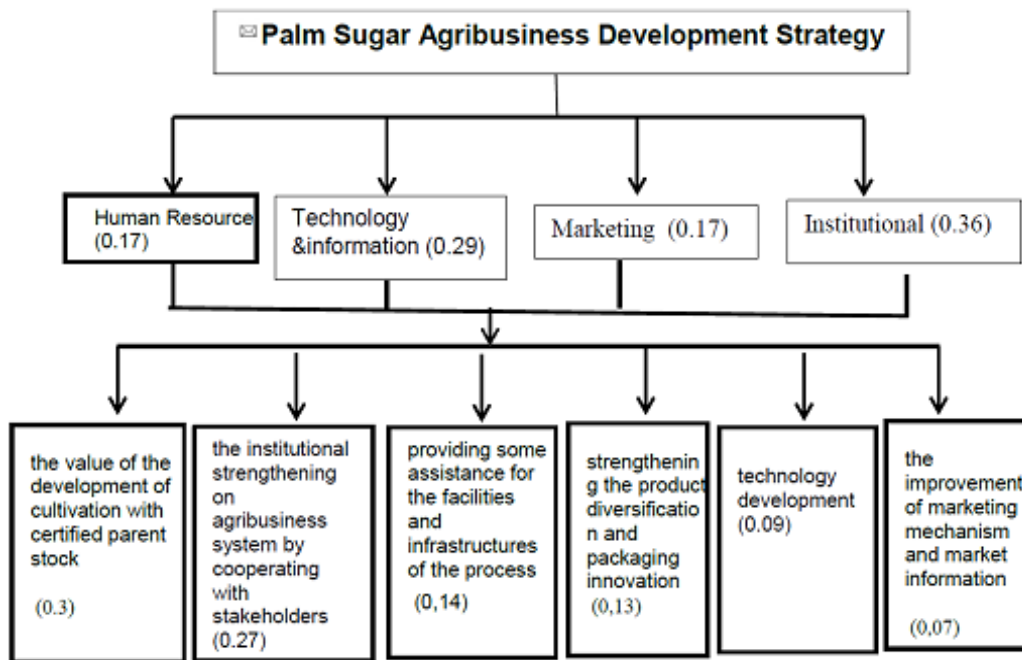


Figure 2
Hierarchy of Strategic

Source: Primary Data, 2018

First, the value of the development of cultivation with certified parent stock was 0.3. This strategy was the first step as the effort to develop the agribusiness of palm sugar with the special target for the development of palm plant cultivation with the certification for parent stock. This is based on the Regulation of Agriculture Minister of Republic Indonesia Number 50/Permentan/Kb.020/9/2015 about Production, Certification, Distribution, and Monitoring the Plantation Seeds.

Second, the score for the institutional strengthening on agribusiness system by cooperating with stakeholders was 0.27. This institutional strengthening was done as the efforts to develop, empower, and strengthen the farmers, process, marketers, capital, and others, which were hoped to be able to become the protectors for the bargaining position of the farmers. Institutionalization on the agribusiness system is the important thing because it relates the farmers with the processors/industry or between the farmers & industry and marketers. Therefore, it can increase the additional value of the product

or the economic value for the parties involved in the agribusiness system.

Third, providing some assistance for the facilities and infrastructures of the process had the value of 0.14. The facilities and infrastructures used in the process were still conventional. It is supported with the capital condition that is still weak, and it needs some assistance from many parties. Therefore, hopefully it can give the good additional value and improve the quality and quantity of pam sugar.

Fourth, strengthening the product diversification and packaging innovation had the score of 0.13. The strategy of product diversification and packaging innovation hopefully can be the strategy of palm sugar enterprise that relates to the products by adding various kinds of the product to expand the market target to gain some profits for the farmer and industry.

Fifth, the score of technology development was 0.09. Technology is the important factor in the development of palm sugar, but there are many other factors that are more important. The technology development is the development in various

subsystem levels or from the upstream to the downstream. Palm trees are annual crops that do not need an intensive treatment like in other food plants. Furthermore, palm sugar production is an easy process to conduct.

Sixth, the score of the improvement of marketing mechanism and market information was 0.07. Marketing is the last strategy because the demand for palm sugar is still high. Hence, the market still has an opportunity.

CONCLUSION

Based on the results of this research, the strategy priorities with AHP analysis were: (1) the development of cultivation with certified parent stocks (0.3); (2) the institutional strengthening of agribusiness by cooperating with the stakeholder (0.27); (3) assistance provision for the facilities and infrastructures of the process (0.14); (4) the diversification strengthening of the product and packaging innovation (0.13); (5) technology development (0.09); and (6) the improvement of marketing mechanism and market information (0.07). Based on the results of the study, recommendations can be given to develop the agribusiness of palm sugar as follows: (1). The strategic priority is to develop the cultivation system of certified parent seeds. This can be done by establishing a certification body of parent seeds. This certification body is expected to be able to contribute to the improvement of agribusiness system from the upstream to the downstream so that a commodity with the quality of an international competitiveness can be produced. (2). A synergy between stakeholders should be built in order to strengthen the agribusiness system of palm sugar. (3). The government should formulate a policy to protect and to improve the palm sugar production and business income so that a conducive environment for the small-scale businesses can be created.

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