Policy Analysis and Development Strategy of Cocoa Agribusiness in Lebak District, Banten

Andjar Astuti and Ratna Mega sari*

Department of Agribusiness
University of Sultan Ageng Tirtayasa
Serang, Indonesia
*ratna.megasari@untirta.ac.id

Abstract - **More than 70 percent of cocoa plantation in Banten Province is smallholder farming. Most of them are located in Lebak district. The aims of this study is to analyze and formulate the best development strategy of cocoa agribusiness in Lebak District, Banten Province. Data used is primary and secondary data (quantitative and qualitative) which was processed by SWOT and QSPM analysis. The results of analysis (IFE analysis) concluded that good cocoa seed provided by government is the main strength of cocoa development in Lebak District (0.64). Meanwhile based on EFE analysis, the highest score (0,51) of opportunity is Illumination of good cultivation that can be practiced by cocoa farmers. There are some main strategies that can be conducted by Lebak district government to develop of agribusiness cocoa based on SWOT analysis, namely (i) Providing good cocoa seed and educating farmers how to cultivate cocoa well with agronomy technology and plant protection, (2) Minimizing price fluctuation by increasing cocoa quality (3) Developing processing industry to increase the commodity value; and (4) Providing the capital access for farmers to develop their cocoa farming; (5) Creating the best market system ese instructions give you the basic guidelines for preparing papers for IEEE conference proceedmmings.**

Keywords: cocoa, development strategy, policy, Lebak District

I. INTRODUCTION

Plantations are one of the agricultural sub-sectors that have an important role in Indonesia. This sub-sector has the potential to become a mainstay replacing the oil and gas sector which has limited availability and is depleting. The plantation industry has contributed Rp 429 trillion to national GDP in 2016. This amount exceeds the contribution of the oil and gas sector whose value is only Rp 365 trillion (JPP, 2018). The contribution of the plantation sub-sector to national GDP is in the second position compared to other agricultural sub-sectors with a trend that continues to increase from year to year. The contribution of the plantation subsector compared to other agricultural sub-sectors can be seen in the following table:

Sector	contribution towards Indonesian GDP (%)				
	2010	2011	2012	2013*	2014**
Crops	3,69	3,46	3,55	3,49	3,26
Horticulture	1,61	1,60	1,45	1,44	1,51
Plantation	3,91	3,87	3,75	3,76	3,77
Animal Husbandary	1,58	1,50	1,52	1,55	1,58
Agrriculture Services	0,21	0,20	0,20	0,20	0,19

Sumber: PUSDATIN, 2015
*temporary number
**very temporary number

One of the plantation commodities that has great potential to be developed in Indonesia is cocoa. Cocoa plants have been known in Indonesia since 1560 but have only become an important commodity since 1951. Cocoa has an important role in the national economy, especially in terms of absorption of the country's labor and foreign sources.

Banten is one of the provinces that make cocoa as a regional superior commodity. Based on the 2014 Fixed Figures (ATAP) the area of plantations in Banten Province is 165,040.18 Ha consisting of the People's Plantation covering an area of 143,123.30 Ha, State Plantation (PTPN) covering 9,657.71 Ha and Large Private Plantation covering 12,259, 17 Ha. The area of cocoa plantations covering an area of 8,162.31 hectares is spread in four districts / cities, namely Lebak, Pandeglang, Serang and Serang Districts. Most of the cocoa plantations are managed by the people covering an area of 7,139.31 Ha or 87.47 percent and 12.53 percent or an area of 1,023 Ha managed by private large plantations in Lebak District (Banten Province, 2016).

Banten is one of the provinces in Indonesia that began to make cocoa as one of the regional superior commodities. Banten Cocoa even began to explore the international market, especially Europe because it has quality advantages compared to other cocoa, namely the low quality of water which only reaches 6-7 percent.

Cocoa commodities are the mainstay of farmers in Lebak, Pandeglang and Serang Regencies. Banten cocoa production in 2015 even increased to 2,324, 12 tons with a planted area of 165,040.18 hectares in line with the high domestic and foreign demand. The area of consists of smallholder plantations covering an area of 143,123.30 hectares, state estates covering

an area of 9,657.71 hectares and large private estates covering an area of 12,259.17 ha (Bantenprov.go.id).

More than 70 percent of cocoa plantations in Banten are managed by smallholder plantations, most of which are in Lebak Regency. In an effort to support its success, the development of community cocoa in Banten has carried out various programs including the provision of assistance packages for production facilities, capacity building of farmers and extension workers and the management of harvest and marketing. However, cocoa management still faces various problems. Therefore it is necessary to formulate a paradigm for the development of a strong and highly competitive cocoa agribusiness system, so as to improve the welfare of farmers and be able to contribute to regional development and national development.

Based on the background and formulation of the problems that have been explained previously, the purposes of this study are

1. Identify strengthens, weaknesses, opportunities and threats policies in Lebak Regency, Banten
2. Formulate cocoa development strategies based on SWOT analysis and QSPM analysis in Lebak Regency,

II. RESEARCH METHODS

The study was conducted in Lebak Regency, Banten Province. The study was conducted from March to July 2018. The data used for the study consisted of primary data and secondary data. Primary data was collected through direct interviews with parties related to cocoa agribusiness in Lebak Regency by asking several questions in interviews and filling out questionnaires to complete data regarding internal and external environmental factors. The filling out of the questionnaire was carried out using a list of questions previously prepared regarding the internal and external state of cocoa agribusiness in Lebak Regency. Filling in the questionnaire was also done to fill the weighting and rating of strengths, weaknesses, opportunities and threats. Especially for granting weight and rating to strengths, weaknesses, opportunities and threats. Especially for the granting of weight and rating, four respondents were used. Secondary data is collected from the literature that has to do with research, both from Banten provincial government, Lebak Regency, Ministry of Agriculture and others.

`   Methods of data processing and data analysis using qualitative and quantitative analysis. Qualitative analysis is used to formulate strategies with approaches to strategic management concepts. While quantitative analysis is used to determine the calculation of the influence between and between internal and external factors to determine priority strategy.

External Analysis

External analysis is done by analyzing the general or macro environment, namely demography, economics, politics or law, social culture and technology. General environmental analysis tools are included in several segments, namely demographic segment, economic segment, political / legal segment, socio-cultural segment, technology and ecology segment.
As for the industrial environment using the analysis of the five power porters. Five competitive forces in the industry can be identified by observing industrial or micro environments

Internal Analysis

Internal analysis aims to understand the strengths and weaknesses of the company. The internal analysis used is functional analysis. Internal analysis tools include marketing functions, operations production functions, financial functions, research and development functions and human resource functions

EFE and IFE matrices

EFE Matrix (External Factor Evaluation), is used for decision making in summarizing and evaluating all external environmental information including opportunities and threats, while the IFE (Internal Factor Evaluation) matrix is used to summarize and evaluate the main strengths and weaknesses faced by the company (David, 1998). David (1998) mentions five steps needed to compile an EFE and IFE matrix, namely:

1. List all identified external and internal factors, including opportunities, threats, weaknesses and strengths that affect cocoa agribusiness. Try to be specific by using comparative percentages, ratios or numbers
2. Give weighting for each factor that shows the relative importance of each factor. Weighting ranges from 0.0 (not important to 1.0 (very important). Weights indicate the relative importance of these factors to succeed in the industry. The sum of all given weights must be equal to one. Weighting is done by proposing identification of internal and external strategic factors with using pairwise comparison method, this method is used to provide an assessment of the weight of each internal and external determinant, the comparison method starts from the variable in the row (left / down) compared to the column variable (top / right) and must be consistent. Each variable uses a scale of 0.1, and 2 to determine the weight. The scale used is
   a. A on the row / left variable is less important than B in the column / top variable, then in the meeting box between A (left) and B (above) value = 0
   b. A in the row variable / left is as important as C in the upper variable, then in the meeting box between A (left) and C (above) the value = 2

3. Determine the rating of each factor to show the effectiveness of the company's strategy in responding to these factors. For EFE, the rating is to give a rating of 1 to 4 on each critical success factor to show how effective these factors affect the company, answering this factor with note 4 = main opportunity, 3 = opportunity, 2 = threat, 1 = main threat. The ratings are based on the effectiveness of the company's strategy or on the state of the company. As for IFE, the rating is ranked 1 to 4 in all

The definition of strategy and strategy management is extended by Mintzberg, Ahlstrand and Lampel (1998) known as 5P, namely:

1. Strategy as plan: strategy is a plan or something in the form of direction, directions for future activities taken in the present. Strategy is a plan that looks forward (looking ahead) or something expected in the future.
2. Strategy as pattern: strategy is a pattern or something that is consistent at all times.
3. Strategy as position: strategy is a position that is placing a special product on a special market as well.
4. Strategy as perspective: Strategy is a perspective that is things that are fundamental in the organization to do something.
5. As ploy strategy: strategy is a way that is a special maneuver that is expected to defeat an opponent or competitors is a real plan.

The definition of a strategy based on another approach is focused on bringing together the internal strengths and weaknesses of the company with competitive opportunities and threats or called a joint definition as shown in Figure 2:

SWOT analysis

Environmental identification is the process of monitoring, evaluating, and gathering information from the external and internal environment which aims to identify strategic factors. One method used to identify the environment is a SWOT analysis. SWOT is an acronym for Strength, Weakness, Opportunities and Threat. The external environment consists of opportunities and threats, namely things that are outside the organization. The internal environment consists of strengths and weaknesses, namely things that are within the scope of the organization include structure, culture and resources (Wheelen and Hunger, 1998).

Kotler (1997) adds that SWOT analysis is based on the assumption that an effective strategy is to maximize strengths and opportunities, and minimize weaknesses and threats. The identification of SWOT is as follows:
• Strength (Internal Strength)
  Strength is a resource, skill or other advantage relative to competitors and the needs of the market served. with financial resources, image, leadership, market,.
• Weakness (Internal Weakness)

Weakness is a limitation or lack of resources, skills and abilities that seriously hinder the effective performance of an industry.
• Opportunities (External Environmental Opportunities)
  Opportunity is a key advantageous situation in a company / industry environment. Identification of market segments, changes in competitive conditions, technological changes, and buyer-supplier relationships shows an opportunity.
• Threats (External Environment Threats)
  Threats are the main situation that is not profitable in a company environment. Threats are the main obstacles to the current or desired position.

III. RESULTS AND DISCUSSION

General Description of Lebak Regency

Lebak Regency is an original part of the Banten Sultanate region as well as Serang Regency and Pandeglang Regency. Therefore, the history of Lebak Regency cannot be separated from the history of the sultanate in Banten itself.

Lebak Regency has an area of 3,044.72 km2 or 304,472 Ha or about 32% of the Banten province. Lebak Regency is the widest Regency in Banten Province. Administratively

Because of the wide area and diverse geographical conditions, the Lebak District Government divides its territory according to the area of development. This division is artificially based on the similarity of characteristics, in the sense of regional homogeneity. There are four development areas in question, namely:

1. North Lebak development area. This area includes the Rangkasbitung, Cibadak, Warunggunung, Cikulur, Cimarga, Maja and Curugbitung sub-districts as trading and industrial areas, both in the huu and downstream industries and processing agricultural products.
2. The South Lebak development area. This region includes Malingping, Wanasalam, Cijaku, Panggarangan, Bayah, Cilograng, and Cibeber sub-districts which have unique geographical characteristics, which are some of the mountainous regions (Gunung Gede and Sanggabuana) and some are coastal areas. This region is designated as a potential development area in the fields of food crops, marine fisheries, mining and tourism
3. East Lebak development area. It is a hilly area and is located in the Kendeng Mountains, so that this region has great potential as a plantation area, both large plantations and small plantations. This area includes Cipanas, Muncang, Sobang, Sajira, Leuwidamar and Bojongmanik Districts.
4. Lebak Barat development area. This region only consists of three sub-districts, namely Banjarsari, Gunung Kencana, and Cileles Districts. In this region there are protected forests and are prioritized as large plantation areas and smallholder plantations.

Lebak has the potential to become a developed region due to its economic potential and natural resources. The agricultural sector is an advanced sector and is growing rapidly in Lebak Regency. This is due to geographical conditions and supported by a good climate in farming. Agricultural development continues to be pursued in order to develop people's welfare.

Increased production and productivity in both the agricultural sector and the plantation sector have always been pursued by the local government of Lebak Regency through the Lebak District Agriculture and Plantation Office so as to improve the welfare of its people.

The Lebak District Agriculture and Plantation Agency through the Plantation Development Sector has made efforts to increase production and productivity by conducting development activities of superior commodities of plantation crops, activities to develop superior seeds of plantation crops and valuation and development activities of plantation businesses.

1. Development activities of superior commodities of plantation crops including palm sugar, cacao and clove commodities. These three commodities are the leading commodities in Lebak Regency. The target of developing superior commodities for plantation crops is the farmer group for sugar palm, cacao and clove commodities. The results achieved from the development of superior commodities of plantation crops are the increasing area of plantation crops. Palm commodity with an area of 150 ha, cocoa commodity with an area of 50 ha, clove commodity with an area of 100 ha, and the implementation of a 5 ha organic sugar demonstration plot and the maintenance of a 4 ha organic sugar demonstration plot.

2. The activity of developing superior agricultural / plantation seeds is an effort to increase the availability of superior seeds of plantation crops. The availability of superior seeds include palm sugar, cocoa and cloves. The results achieved from the development of superior agricultural / plantation seeds are the increasing availability of superior seeds of plantation crops

3. The assessment and development of plantation business activities is an effort to evaluate the performance of plantation businesses in large state and private companies in Lebak Regency. Target of assessment and development activities for plantation business is 9 large private plantation companies and 1 PTPN

Internal Factor Evaluation and External Factors

Based on the results of the IFE analysis, a strength factor was obtained in the form of providing superior seeds from the local government with a score of 0.64. The biggest weakness factor is the low quality of people's cocoa and the limited capital of farmers for cocoa business development with a score of 0.12 respectively

Internal factors that have the highest weight and are strengths that must be utilized in the development of community cocoa. Thus the development of community cocoa can be developed by developing cocoa with superior seeds in Lebak Regency. The existence of quality weakness factors in the people's cocoa production is generally still low and the limited capital of farmers will hamper the development of community cocoa commodities in the future. If this weakness is not addressed immediately, it will reduce cocoa production and community interest in Lebak Regency to develop cocoa commodities.

The total score of the internal factor where strength (1.7) has a greater score than weakness (0.87) shows that the internal factor conditions for the development of community cocoa commodities in Lebak Regency are still relatively high strength factors and low weakness factors to support the development of community cocoa in the Regency Lebak.

Evaluation of External Factors for Cocoa Development in Lebak Regency

Based on the results of the EFE analysis, the first opportunity factor was obtained, there was an extension of good cocoa farming methods such as spacing and care with a score of 0.48. With this counseling on cocoa cultivation, it guarantees the cocoa production that is cultivated by the people as expected. This situation will increase the production and income of cocoa farmers. Thus this opportunity factor can be used as a strategy for community cocoa development in Lebak Regency.

The development of community cocoa commodities in Lebak Regency can be done by minimizing or at least reducing the threat of these factors to inhibit the development of cocoa. External factors that must be minimized are the challenges or threats with the lowest value, namely the threat of farmers' lack of knowledge of market information with a score of 0.12. Development of community cocoa commodities in Lebak Regency can be done by minimizing these challenges by increasing farmers' knowledge with market information.

The results of the SWOT analysis have identified internal and external factors with the following weighting scores: 1) strength factor = 1.71; 2) weakness factor = 0.87; 3) opportunity factor = 1.6; and 4) threat factor = 1.32. From the intersection of the four lines of factors of strength, weakness, opportunity and threat, coordinates are obtained (0.84; 0.28). Based on the SWOT analysis stage, from the coordinates obtained, the position of the organization is in quadrant I (positive, positive). According to Rangkuti (2005), this position indicates that the strategy that can be applied is to support aggressive growth policies because they are in quadrant I. This is a very favorable situation for the development of community cocoa in Lebak Regency.

Analysis of the QSPM matrix

There are nine relevant strategies applied by the local government of Lebak Regency for cocoa development. The nine strategies are the provision of good cocoa seeds to improve the quality of production, increase the use of PBK pest technology, provide counseling and training to farmers on cocoa cultivation and crop protection from pests, the development of cocoa quality by developing processing and marketing systems, empowering cocoa farmers through groups farms, improve counseling to cocoa farmers, increase cocoa productivity with the right cultivation technology, increase capital access for cocoa farmers and develop cooperation with exporters.

Based on the QSPM matrix analysis the five strategies can be ranked as follows:

1. Providing good cocoa seed and educating farmers how to cultivate cocoa well with agronomy technology and plant protection,
2. Minimizing price fluctuation by increasing cocoa quality
3. Developing processing industry to increase the commodity value
4. Providing the capital access for farmers to develop their cocoa farming;
5. Creating the best market system

IV. CONCLUSION

The Lebak District Agriculture and Plantation Agency through the Plantation Development Sector has made efforts to increase production and productivity by conducting development activities of superior commodities of plantation crops, activities to develop superior seeds of plantation crops and valuation and development activities of plantation businesses. One of the superior commodities of plantation crops is cocoa. The good cocoa seed provided by government is the main strength of cocoa development in Lebak District (0.64). Meanwhile based on EFE analysis, the highest score (0,51) of opportunity is Illumination of good cultivation that can be practiced by cocoa farmers. There are some main strategies that can be conducted by Lebak district government to develop of agribusiness cocoa based on QSPM analysis, namely (i) Providing good cocoa seed and educating farmers how to cultivate cocoa well with agronomy technology and plant protection, (2) Minimizing price fluctuation by increasing cocoa quality (3) Developing processing industry to increase the commodity value; and (4) Providing the capital access for farmers to develop their cocoa farming; (5) Creating the best market system.

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