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MSME DEVELOPMENT STRATEGY BASED ON CASSAVA AGROINDUSTRY IN DELI SERDANG REGENCY

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Abstract

Commodity cassava as a raw material for agroindustry has the potential to be developed and has a profitable market potential for MSMEs. The purpose of this study was to analyze the feasibility of processing cassava into opaque, the added value of cassava and its development strategy. This study used the census method, all respondents of cassava agroindustry craftsmen became opaque as many as 35 people. Methods of data collection using questionnaires and field observations. The analytical tool used is R/C ratio analysis, product added value and its development strategy. The results showed that the value of the R/C ratio of 1.08 means that the cassava agro-industry is feasible to develop, the added value of making the opaque industry received by the respondents is profitable. The strategy to increase its income is an aggressive strategy, namely using power to take advantage of existing opportunities, by increasing production and optimizing the availability of raw materials in order to increase its income.

Keywords: Added value, Revenue, MSME, Strategy

INTRODUCTION

Deli Serdang Regency is one of the largest regencies in North Sumatra Province with the capital city of Deli Serdang Regency being in Lubuk Pakam, known as one of 33 regencies/cities in North Sumatra which has a large diversity of natural resources so that it is an area that has sufficient investment opportunities. Promising. The main commodities in Deli Serdang Regency are from the Food Agriculture, People's Plantations, Large Estates, Marine Fisheries, Aquaculture, Poultry Farming and Tourism sectors. For the Food Crops sub-sector, cassava is one of the main commodities in Deli Serdang Regency (Deli Serdang Regency in Figures, 2021).

Every part of the cassava plant has been used, from tubers, skin, stems, to leaves. Almost all parts can be utilized. Seeing the various potentials of cassava commodities to be developed into various kinds of processed products, cassava is a superior commodity that is worthy of development in North Sumatra. In addition to the wide availability of land, North Sumatra also has a suitable climate and soil for developing cassava commodities, moreover this plant is able to grow in the highlands and lowlands and knows no seasons (Salim, 2011). Micro, Small and

The Seybold Report
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Medium Enterprises (MSMEs) have an important role in economic development. Due to the relatively high level of employment absorption and the small investment capital requirements, MSMEs can flexibly adapt and respond to changing market conditions. This makes MSMEs is less vulnerable to various external changes. MSMEs are actually able to quickly seize various opportunities, for example to carry out production that is import substitution and increase the fulfillment of domestic needs. Therefore, MSME development can support economical diversification and accelerate structural change, which is a prerequisite for stable and sustainable long-term economic development (LPPI and BI, 2015). However, these micro-enterprises also have challenges or constraints, namely from the aspect of capital, business management, the quality of managing human resources, minimal access to information and productive resources (capital and technology), thereby limiting the business's growth. It is known that the turnover of MSME players for cassava raw materials requires assistance in processing cassava products as superior products that have added value for sale (Deli Serdang UKM Cooperative Office, 2019).

Empowerment of small businesses is carried out by the government, the business world, and the community. By empowering small businesses, it is hoped that small businesses will become tough, independent, and can also develop into medium-sized businesses. Small businesses should be strong, independent, and self-developing will increase national product, employment opportunities, exports, and the distribution of development results, which in turn will make a greater contribution to state revenues. Furthermore, empowering small businesses will increase the position and role of small businesses in the national economy so that a healthy and strong national economic order will be realized (Hanim, 2018).

Deli Serdang Regency is also one of the areas facing these obstacles, so this research was conducted to identify an increase in MSME income in Deli Serdang Regency through the role of production and market by involving the development of UMKM in Deli Serdang Regency. MSMEs do not yet have a business plan and marketing strategy which has an impact on the low bargaining position of cassava farmers and entrepreneurs so that their income is also low. The condition of infrastructure and infrastructure also does not yet support the existence of a cassava agro-industry business. Based on the background that has been described, the following problems can be formulated: (1) How much business feasibility by cassava agroindustry-based SMEs, (2) How much added value is received by cassava agroindustry-based SMEs, (3) What is the development strategy MSME business model based on cassava agroindustry.

RESEARCH METHODS

Population and Sample

Research in the Deli Serdang Regency area focuses on increasing the income of MSME actors, by developing superior products for cassava commodities, so that the population in this study is all micro, small and medium enterprises that use superior cassava products as the main commodity for the business they run in the District. Pancur Batu Deli Serdang Regency.

The population for this study were 35 MSME actors in Pancur Batu District, Deli Serdang Regency, by processing superior cassava products into Opak businesses. In this study, the

The Seybold Report
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determination of the sample size is the same as the population size, where the entire population is taken as a sample.

Data analysis method

Production cost is one of the production inputs used during production, which can be in the form of goods or services. In carrying out the production process to completion, the owners of production inputs will receive compensation from production costs. Revenue in the cassava agro-industry can be calculated by multiplying the total production by the selling price of the product.

Analyzing business feasibility done by following formula:

R/C = TR/TC > 1, then the MSME agro-industry business is feasible to be developed

R/C = TR/TC < 1, then the MSME agro-industry business is not feasible to develop.

To analyze added value using the formula, namely:

NT = NP – (NBB + NBP)

Information:

NT : Product Added Value (Rp/kg)

NP : Processed Product Value (Rp/kg)

NBB : Raw Material Value (Rp/kg)

NBP : Value of Supporting Materials (Rp/kg)

Test criteria:

High Added Value if NP > NBB+NBP

Low Added Value if NP < NBB+NBP

To formulate a MSME development strategy using the SWOT method. SWOT analysis (Strength, Weakness, Opportunity and Threat) is used to understand internal conditions (strengths and weaknesses) and external situations (opportunities and obstacles), so that the position of an organization or issue can be obtained in the context and carried content. From the results of the SWOT analysis the scope of developing a cassava-based MSME development strategy.

RESULTS AND DISCUSSION

The Process of Making Opak Crackers

In making opaque crackers in the study area, all respondents used yellow cassava. This because according to respondents, yellow cassava has quite a lot of starch and a lower water content than white cassava so that it can produce greater production of opaque crackers.

The Seybold Report
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The process or work stages of making opaque crackers in the research area are as follows:

a. Peel the cassava skin then wash it thoroughly
b. Cut the cassava into pieces and then steam in the boiler until cooked (approximately 2.5 -3 hours to steam 50 kg of cassava)
c. Grind the ripe cassava using a grinding machine
d. Pressed (flattened) opaque cracker dough that has been ground with a press machine
e. The opaque cracker dough is printed using an opaque printer covered with a plastic sheet. Opaque prints are round or rectangular depending on consumer demand
f. Dry the opaque crackers in the hot sun until dry (about 5 hours)
g. The opaque crackers are removed one by one from the plastic mat after they are dry and then they are ready to be packed

In short, how to make opaque crackers, namely steamed cassava and salt which are pounded until smooth and then molded into a container, then dried in the sun. after drying, the opaque can be fried in sufficient oil until cooked.

Analysis of Business Feasibility in the Opak Cracker Manufacturing Industry

Analysis of the feasibility of the opaque cracker manufacturing industry business was carried out to determine the feasibility of the opaque cracker manufacturing business run by respondents in the study area. To determine the financial feasibility of the opaque cracker manufacturing industry in the study area, the eligibility criteria for the Revenue Cost Ratio (R/C Ratio) were used. Following are the results of the R/C ratio values in the opaque cracker manufacturing industry.

Table 1: R/C Value in the Opak Cracker Manufacturing Industry

No	Description	Total (Rp)	Average (Rp)
1	Reception	11.130.000.000	318.000.000
2	Production cost	10.257.502.885	293.071.510
3	Income	872.497.115	24.928.490
4	R/C	38	1,08

(Source: Primary Data, Processed, 2022)

Table 1, of the 35 respondents, the R/C ratio value received by the opaque cracker agro-industry was below the average, amounting to 7 respondents or 20.20 percent, while the remaining 28 respondents or 80.00 percent. Overall, the opaque cracker agro-industry business has economic feasibility because the value of the R/C ratio is greater than 1. However, there are opaque cracker agro-industry businesses that have greater profits than other farming businesses, because the greater the value of the R/C ratio, the greater the revenue earned compared to production costs incurred. The value of the R/C ratio is an indicator of the productivity of capital used by cassava agro-industry actors in the production process. The value of the R/C ratio can also be a determining factor for farmers' decisions to carry out their business. Where the results of the analysis of the R/C ratio are not too high for agro-industry players but the

The Seybold Report
ISSN 1533-9211
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amount of production volume processed is large enough so that the income of cassava agro-industry players will also be even greater.

The average R/C ratio per month is 1.08. This means that every capital of Rp. 1000 issued will generate Rp. 1080, of which Rp. 1000 is capital that has been able to be returned and Rp. 80 is the profit obtained by respondents in the opaque cracker manufacturing industry per kilogram. Based on the investment criteria which states that a business is feasible to be cultivated if it has an R/C ratio of ≥ 1, then the opaque cracker manufacturing industry in the research area is feasible to be cultivated or run. So, the purpose of carrying out the feasibility of the opaque cracker agro-industry business is to avoid spending too much money on activities that turn out to be unprofitable. In the agro-industrial business of making opaque crackers, it is still profitable so that the business is feasible to be continued or developed.

This research is in line with Ilham (2013) who said that the MSME industry with fried onions in Bolupountu Jaya Village, Sigi Biromaru District, Sigi Regency is worth cultivating or developing because the revenue value is greater than the production costs, this is indicated by the R/C value greater than One.

Added Value to the Opak Cracker Manufacturing Industry

The definition of added value for the opaque cracker manufacturing industry is the value of the processed product (receipt) minus the total value of raw materials and supporting materials. Where the value of raw materials is obtained from multiplying the amount of raw materials needed and the purchase price of raw materials, while the value of supporting materials is obtained from the number of supporting materials used multiplied by the price of supporting materials.

Table 2: Added Value of Opak Cracker Manufacturing Industry (Rp/Month)

No	Description	Total	Average
1	Processed Product Value (NP)	Rp. 11.130.000.000	Rp. 318.000.000
2	Raw Material Value (NBB)	Rp. 7.780.875.000	Rp. 222.310.715
3	Value of Supporting Materials (NBP)	Rp. 335.893.400	Rp. 9.596.954
4	Product Added Value (NT)	Rp. 3.013.231.600	Rp. 86.092.331

Source: Primary Data, Processed, 2022

Table 2 above shows that the average added value of industrial opaque production received by respondents is Rp. 86,092,331/month or an average added value per kilogram of Rp. 898.13/kg, where the average value of processed products is Rp.318,000,000/month, the average value of raw materials is Rp.222,310,715/month and the average value of supporting materials is Rp. 9,596,954/month.

Opak Cracker Industry Business Development Strategy

Based on the results of the evaluation of internal factors in the cassava agro-industry business in Pancurbatu District, Deli Serdang Regency, the following is obtained:

The Seybold Report
ISSN 1533-9211
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Table 3: Strengths and Weaknesses in Cassava Agro-industry Business

No	Internal Strategy	Weight	Rating	Score
	Strength:			
1	Abundant availability of raw materials	0,13	4	0,52
2	Strategic business location	0,12	3	0,36
3	Skilled and experienced workforce	0,13	4	0,52
4	Have a legal brand or a halal product	0,12	3	0,36
	Sub Total	**0,50**	**14**	**1,76**
	Weakness:			
1	Financial management that has not perfect	0,12	1	0,12
2	Limited working capital	0,13	2	0,26
3	Simple production technology	0,13	2	0,26
4	There is no cooperative relationship with investors	0,12	1	0.12
	Sub Total	**0,50**	**6**	**0.76**
	Total	**1,00**	**20**	**2,52**

(Source: Primary Data, Processed, 2022)

Information:

The rating is determined as follows:
4: Great power
3: The power is small
2: Minor weakness
1: Major weakness

Based on Table 3. It is shown that the results of the strengths (strengths) are greater than the weaknesses (weaknesses), that is, with a score of 1.76 greater than 0.76.

Table 4: Opportunity and Threat Factors in Cassava Agro-industry Business

No	Eksternal Strategi	Weight	Rating	Score
	Opportunity:			
1	Affordable product sales prices	0,17	4	0,64
2	The population continues to increase so that the need for opaque crackers also increases	0,17	3	0,51
3	Adequate transportation facilities so that inter-regional trade can be carried out	0,16	3	0,48
	Sub Total	**0.50**	**10**	**1,63**
	Threat:			
1	Competition between product competitors kind	0,16	1	0,16
2	Unstable raw material prices	0,17	2	0,34
3	The extreme rainy season makes it difficult to dry the opaque crackers	0,17	1	0,17
	Sub Total	**0,50**	**4**	**0,67**
	Total	**1,00**	**14**	**2.30**

(Source: Primary Data, Processed, 2022)

Information:
The rating is determined as follows:
4: Great opportunity
3: Small opportunity
2: The threat is small

The Seybold Report
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1: A big threat

Based on Table 4. It is shown that the results of opportunities are greater than threats, with a score of 1.63 greater than 0.67.

Table 5: SWOT Matrix Strategy Combination Formulation

	Oppurtunties (O)	Threats (T)
Strenghts (S)	Strategy (SO): 1,76 + 1,63 = 3,39	Strategy (ST): 1,76 + 0,67 = 2,43
Weaknesses (W)	Strategy (WO): 0,76 +1,63 = 2.39	Strategy (WT): 0,76 + 0,67 = 1.43

(Source: Primary Data, Processed, 2022)

Table 5 shows the highest score for the Strengths Opportunities (SO) strategy of 3.39, the Strengths Threats (ST) strategy of 2.43, the Weaknesses Opportunities (WO) strategy of 2.39 and the Weaknesses Threats (WT) strategy of 1. 43. Next, an explanation of the strategy that must be carried out by MSMEs in the opaque cracker agroindustry in the SO strategy.

Internal External (IE) Matrix Analysis

Analysis of Table 3 shows that for the strength factor the score is 1.76 and for the weakness factor the score is 0.76. While the opportunity factor is in Table 4. The score is 1.63 and the threat factor is 0.67. From the results of the calculation of the sum in Table 3 it shows, internal factors have a total score of 2.52 and in Table 4 it shows, external factors with a total score of 2.30. Furthermore, the IE matrix is used to find out how the position of MSMEs in the opaque cracker agroindustry in their efforts to maintain their business from year to year. The matching stage is the second stage in the process of formulating the opaque cracker agroindustry strategy which functions to combine the strengths and weaknesses found in the company's internal environment with the opportunities and threats to the company's external environment to formulate alternative strategies for the company. The tools used at this stage are the use of the IE (Internal-External) matrix and SWOT analysis. The following is an IE matrix based on the grouping of internal and external factors shown in Table 6 of the Internal External (IE) matrix as follows:

Table 6: Internal and External Matrix

IFAS / EFAS	Strong 4,00 - 3,00	Currently 2,99 – 2,00	Weak 1,99 – 1,00
Tall 4,00 – 3,00	I	II	III
Currently 2,99 – 2,00	IV Internal: 2,52 External: 2,30	V	VI
Low 1,99 – 1,00	VII	VIII	IX

(Source: Primary Data, Processed, 2022)

Table 6. Is an internal external matrix (IE), the result of grouping the IFAS and EFAS matrices? The value score is used as a determinant of the value of the IE matrix. Based on this position, it can be determined that the position of the opaque cracker agro-industry MSME is in cell IV.

The Seybold Report
ISSN 1533-9211
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This position indicates that the opaque cracker agro industrial SMEs are in a position of growth and development (grow and built). Strategies that can be implemented include the Strengths Opportunities (SO) strategy by maximizing the strengths and paying attention to all market opportunities. This strategy needs to be supported by efforts to increase human resources, product development and market development.

Grand Strategy Matrix Analysis

The SWOT matrix, which is the strength of the opaque cracker agro-industry business in the study area, shows that strength factors are more dominant than weaknesses and opportunity factors are more dominant than threats. This places the position of the opaque cracker agro-industry on a strategy to support an aggressive growth policy.

Table 7: Strategic Design for Opak Cracker Agroindustry Business in Research Area

IFAS / EFAS	**Strength**	**Weakness**
	1) Abundant availability of raw materials 2) The location is strategic enough to be close to the city of Medan 3) Skilled and experience workforce 4) Have a legal brand or a halal product	1) Financial management is not perfect 2) Limited working capital 3) Limited production technology 4) There is no cooperative relationship with investors
Opportunities 1) Affordable product sales prices 2) The population continues to increase so that the need for opaque crackers also increases 3) Adequate transportation facilities so that inter-regional trade can be carried out	**SO Strategy** a) Increasing human resources in the context of product development b) Increase customer loyalty and efforts to improve product quality c) Expanding the distribution channel network and establishing cooperation with partners in marketing more modern products	**WO Strategy** a) Improving the use of technology to increase business productivity and efficiency b) Increasing sales promotion by utilizing market share from outside the region c) Improving financial management in recording receipts and expenses and increasing profits
Threats 1) Competition among competitors of similar products 2) Unstable raw material prices 3) The extreme rainy season makes it difficult to dry the opaque crackers	**ST Strategy** a) Carry out HR innovation in order to create quality products to face competing companies b) Utilization of the number of workers in the production process in order to achieve optimal business efficiency c) Maintain and improve the quality and quantity of products in the face of competition in the market.	**WT Strategy** a) Seeking loan funds (banks) or establish cooperative relationships with investors b) Developing technology in optimizing product continuity and quality c) Opening partnerships and cooperation with the Government, Banks, Cooperatives or other institutions that can support business progress.

The Seybold Report
ISSN 1533-9211
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Decision Making

After obtaining several alternative strategies through the matching stage, namely by using the IFAS/EFAS matrix and the SWOT matrix, the final stage of the strategy formulation analysis is the selection of the best strategy. The following describes the results of the SWOT matrix analysis:

1) The first strategy is to increase human resources in the framework of product development. This strategy is carried out by companies in increasing the use of products to existing market segments with the assumption that customers want new elements regarding products, such as opak in large form, opak has a spicy taste and others. With product development it means that the company already understands the needs and wants of the market. One way is to strengthen the abilities, skills and attitudes of agroindustry entrepreneurs so that they are more effective and efficient in achieving program targets.
2) The second strategy is to increase customer loyalty and efforts to improve product quality. This strategy rearranges several aspects that are considered important, such as improving service quality which is the main factor influencing customer loyalty because customers who are satisfied with their personal values and experience a positive mood towards service will have high loyalty to the cassava agroindustry.
3) The third strategy is to expand the distribution channel network and establish cooperation with partners in marketing more modern products. This strategy is carried out to increase distribution channels in delivering goods from producers to consumers. One way is to continue to work with other vendors or government agencies to improve branding image.

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