

FORMULATION OF STRATEGY FOR SMALL CHOCOLATE PROCESSING INDUSTRY BASED ON SWOT ANALYSIS : CASE STUDY CV. PUTRA MATARAM

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ABSTRACT

West Sulawesi Province ranks fourth in cocoa production in Indonesia in 2020 with a total production of 71,543 tons. . The use of domestic cocoa beans as raw material for domestic industries is still very low since most of the beans is exported in the fram of dry beans. Indonesia government has established cocoa processing industry as one of the sectors that is prioritized for development. CV. Putra Mataram is a small chocolate processing industry located in Polewali Mandar Regency which can be developed into a medium scale cocoa processing industry considering the availability of raw material. The purpose of this study was to identify and analyze the internal and external factors affecting the development of small scale chocolate industry and to determine the appropriat development strategy for CV. Putra Mataram. Qualitative data analysis was carried out by identifying the internal and external factors affecting the chocolate industry based on the results of the interview. The information obtained was reformulated and entered into the SWOT matrix. From the results of the SWOT analysis, there are 9 alternative development strategies that can be applied by CV. Putra Mataram, they are promotion of macoa chocolate as a superior product, adding production aquipment, increase production capacity, improving the quality of human resources through coaching, training and mentoring, expanding marketing using traditional channel and social media, improved business management (production planning and control), increase product competitiveness through price and quality, improve local people aworeness about the quality and uniqueness of the macoa chocolate, creating and expanding distribution networks to enter new markets, and partnering with local businesses. These strategies might also relevant to other small scale chocolate processing industries.

Keywords: Chocolate industry, SWOT analysis, Industrial development strategy.

INTRODUCTION

Indonesia is the third largest cocoa producer in the world after the Ivory Coast and Ghana. Cocoa is one of the mainstay commodities of Indonesian plantations which is quite important for the national economy and plays a role in encouraging regional development and agro-industry (Hadinata and Marianti, 2020). Cocoa production in Indonesia reached 774.2 thousand tons in 2019 an increase of about 0.9% compared to the previous year which amounted to 767.3 thousand tons. A total of 768.77 thousand tons or 97.29% of the total cocoa production in 2019 came from smallholder plantations. A total of 3.81 thousand tons or 0.49% of the total cocoa production came from large private plantations and 1.62 thousand tons or 0.21% of the total cocoa production came from state-owned plantations (BPS, 2020).

Sulawesi Island is the largest cocoa production area in Indonesia with about 857,757 hectares of cocoa plantation, and 538,059 tons of cocoa productions in 2013. Specifically, West Sulawesi Province ranks fifth in Indonesia's cocoa production in 2015 and it ranks fourth in Sulawesi (Direktorat Jenderal Perkebunan, 2015).

The cocoa processing industry plays an important role in to national economic growth. The government has designated the cocoa processing industry as one of the sectors prioritized for development according to the 2015-2035 National Industrial Development Master Plan (RIPIN). In 2018, the majority of cocoa products were exported, amounted to 328,329 tons (85%) and contributed foreign exchange of up to USD1.13 billion. Processed cocoa products marketed domestically amounted to 58,341 tonnes (15%). According to data from the International Cocoa Organization (ICCO), Indonesia ranks sixth as the largest cocoa bean producer in the world after Ivory Coast, Ghana, Ecuador, Nigeria and Cameroon with a production volume of 220,000 tons throughout 2018.

In 2006, the number of cocoa and chocolate industry was about 21 units, and this number has increased to 39 units in 2013 (Kementerian Pertanian, 2013). The factors affecting the slow development of the small and medium scale cocoa processing industry needs to be identified. One of the factors that need to be analyzed is processing added value. The large added value as a measure of the gross profit of producers is a factor that can trigger the development of Small and Medium Enterprises (SMEs) in the development of chocolate (Asheri, 2013).

CV. Putra Mataram is a small scale chocolate industry located in Polewali Mandar which was founded in 2015. This company buys dry or wet cocoa beans from small holder by farmers in West Sulawesi, especially those from Polewali Mandar and Majene Regencies. The dry beans were fermented by farmers while the wet beans were fermented by the company. The cocoa beans were then processed into several products such as chocolate bars, cocoa powder, cocoa butter, nibs and liquor. The effort to develop the chocolate industry is the right choice considering the availability of raw materials. This potential will be stronger if it is supported by internal and external factors which are conducive to the development and growth of small scale cocoa processing industry.

Business development strategy, namely an integrated plan regarding the efforts of an industry that is needed to develop its business in order to achieve its goals effectively and efficiently. To achieve the goal, the industry must pay attention to existing resources and environmental conditions at hand. Resources that exist in an industry in the form of strengths and weaknesses, as well as environmental conditions can be in the form of opportunities and threats for the industry itself (Agus et al, 2020).

The technique that can be used to determine the strategy for developing the chocolate industry in Polewali Mandar Regency is to use SWOT analysis.

SWOT analysis is an analysis of the internal and external conditions of an organization which is used as a basis for designing strategies for developing economic potential and work programs for SME products (Mahyarni et al. 2015). SWOT is a system or process of considering the internal and external factors affecting the performance of an organization in relation to competitor or market situation (Abubakar and Bello, 2013). The results of a study by Chan (2011), as cited by Abubakar and Bello (2013) indicate that SWOT assists businesses in developing feasible strategies, and simultaneously provides an in-depth understanding of the “global” strategy of the future as one of the most successful enterprises in China.

SWOT analysis method has been widely used as a tool for planning and analyzing strategic actions over the past decade (Ramavanavar et al, 2012). SWOT is an acronym of strength, weakness, opportunities, and threats (Oreski, 2012). Purnomo and Hadi (2018) stated that SWOT analysis is a comparison between internal conditions of strengths and weaknesses with external conditions of opportunities and threats. According to Setyorini et al (2016), the four strategies can be described as follows: SO strategies (strengths-opportunities) are strategies that take advantage of internal strengths to seize opportunities. WO strategies (weaknesses-opportunities) are strategies that reduce existing weaknesses by taking advantage of existing external opportunities. ST strategies (strengths-threats) are strategies that will use the strengths of the organization to deal with external threats. WT strategies (weaknesses-threats) are strategies aimed at reducing internal weaknesses while avoiding external threats.

Internal factor analysis of entrepreneurial competency here refers to the individual person in the form of cognitive and affective aspects, to the individual characters in running the organization's business that covers the team, strategy planning, structure

organization, culture and the products and services offered. While the external factors of entrepreneurial competency here refers to the individual personal form of cognitive and affective aspects of the action conditions or changes that occur on environmental factors affecting their organization's business, the influence of the environment such as; conditions of competitors, customers, suppliers, investors, bankers, lawyers, resources and government policy. Environmental conditions are very uncertain, so it can create opportunities and threats simultaneously (Nassif et al, 2009).

Other another indicate that SWOT analysis is carried out based on the identification of internal and external conditions from the company and consumer's point of view (Rahman and Rahmah, 2018). Strategic formulation process conducted through three stages of analysis, the input stage, analysis stage, and decision stage. The final stage is used to formulate a decision on action to be taken (Machmud and Sidharta, 2014). With this analysis, it is hoped that ways will be found to develop and exploit strengths and to sustain or reduce weaknesses in order to take advantage of opportunities and reduce threats. When applied appropriately, this simple assumption has important implications for designing a successful strategy (Retnawati and Nia, 2020).

Therefore, in order to formulate appropriate strategies for development of small scale chocolate processing industries it is necessary to conduct research to identify and analyze internal and external factors which effect the development of the small scale chocolate industry and to analyze the importance of these factors in determining the success of the chocolate industry in Polewali Mandar Regency.

The objectives of this study were to determine and analyze the internal and external factors affecting small scale chocolate industry and determine the appropriate development strategy for small scale the chocolate industry.

RESEARCH METHODS

This research was conducted from March to December 2020 at CV. Putra Mataram in Wonomulyo Subdistrict, Polewali Mandar Regency. This research used a qualitative approach. In this study, researchers identified factors that support and hinder the development of small scale chocolate processing industry. Data collections were carried out by conducting observations and interviews. Observations were carried out through direct observations of the object of this research (CV. Putra Mataram) and direct interviews were done with industry owners and several related respondents using questionnaires. The data were then analyzed for internal and external factors and entered into the SWOT matrix to determine strategies for further development of the chocolate industry.

RESULTS AND DISCUSSION

Finding and analyzing the resources and core competencies of an organization are conducted through the concept of Strength, Weaknesses, Opportunities and Threats (SWOT) analysis, which provides an understanding that an organization must adapt its various internal activities to external realities in order to achieve the objectives is expected (Tambunan, 2020).

Alternative strategies for developing small scale chocolate processing industries were determined using SWOT analysis in order to maximize strengths and opportunities, but simultaneously minimize weaknesses and threats. The formulation of alternative strategies was carried out using the SWOT matrix.

SWOT Analysis

Result of the direct observations and interviews provide important data as outlined below.

Strength Factor Analysis

The location of this industry is close to the source of raw materials. This decision was made by the owner in order to minimize production costs. Based on the results of interviews with the owner, apart from its proximity to the source raw materials, this industrial building also belongs to one of the industry founders, such that there is no need for investment for building construction.

Chocolate products in this industry are made from cocoa beans produced locally Polewali Mandar Regency West Sulawesi, therefore the products produced are from single origin beans. This is important since the taste of the products produced from cocoa beans is influenced by climate, soil type and condition and altitude.

Table 1. SWOT Matrix

	<i>IFAS</i>	<i>STRENGTH (S)</i>	<i>WEAKNESSES (W)</i>
<i>EFAS</i>			
<i>OPPORTUNITIES (O)</i>		<i>STRATEGI SO</i> Strategies that take advantage of strengths and take advantage of opportunities	<i>STRATEGI WO</i> Strategies that minimize weaknesses and take advantage of opportunities
<i>TREATS (T)</i>		<i>STRATEGI ST</i> Strategies that use strength to overcome threats	<i>STRATEGI WT</i> Strategies that minimize weaknesses and avoid threats

Source : Freddy Rangkuti, 2004.

By using single origin beans, it is hoped that the taste of chocolate produced are different from chocolate from other brands. Polewali Mandar is one of the largest cocoa producing areas in Sulawesi. Therefore, the availability of raw materials are abundant and there is no shortage during harvest season. This is one of reasons the owners were interested in processing cocoa beans, thereby increasing the value of the cocoa commodity.

Based on the results of interviews with the head of production at CV. Putra Mataram, it was found that the chocolates they made did not use preservatives and coloring agent so that their products have strong chocolate taste and aroma. This also makes this chocolates product were sought after the customer.

Weakness Factor Analysis

The low production capacity of this chocolate processing industry is an obstacle for the industry to meet consumer demands. This is mainly due to inadequate machine capacity. The capacity of each machine used in production process is only about 25 kg. This industry mostly produces chocolate bar, couverture chocolate, compound chocolate and cocoa powder, while nibs and liquor are only produced on order basis.

The lack of labor is an obstacle in production process. This is because this industry has not been able to hire more workers due to economic calculations.

The marketing network for Macoa chocolate is still small due to the lack of promotion efforts by the company. This company promotes its products to consumers only through social media and word of mouth. This also causes local people less familiar with the chocolate products, thus making the marketing process ineffective at local level.

Limited capital and liquidity of this company brought about in efficient operation. This was also the reason that this company was unable to recruit enough employees and add or upgrade production equipment.

Opportunity Factor Analysis

This industry has not experienced competition in procuring raw material due to the abundance of and proximity to raw materials in Polewali Mandar.

In the current era of globalization, science and technology are experiencing rapid development so that they can also have an impact on the patterns and lifestyles of society. With the development of science and technology, it can make it easier for industries to promote and market their products through print and social media. In addition, the development of science and technology also facilitates financial and logistical administration management using application-based recording.

Local government provides support to this industry in the form of training and guidance and production facilities.

The growth of tourism sector can potentially have positive impact on the growth of small industry sector. This is due to the fact that visitors are likely to buy gifts or souvenirs when they visit a place. This is an opportunity for the Macoa chocolate industry.

Threat Factor Analysis

Lack of public knowledge about the health benefits of chocolate, causing local people to be less interested in chocolate. Based on the results of interviews with local communities, many do not yet know about the health benefits of eating chocolate and the existence of this chocolate processing industry. Apart from that, the community is less interested because the price of chocolate products is still quite expensive.

SWOT Strategy

Based on the results of the analysis of strengths (S) and weaknesses (W) as well as opportunities (O) and threats (T), a common ground can be found in response to the four dimensions. The meeting between SO and WO as well as ST and WT is a strategy in developing the chocolate industry, as presented in the SWOT analysis matrix of the chocolate industry development strategy.

Table 2. SWOT Analysis Strategy to Internal and External Factors

Internal	Strength 1. Industrial locations near raw materials 2. Single origin 3. Abundant raw materials 4. Preservative and artificial coloring free products	Weakness 1. Low production capacity 2. Lack of human resources 3. Small marketing network 4. Ineffective financial management 5. Limited capital fierther development
External	Opportunities 1. There is no competition for raw materials 2. Development of technology 3. Government support 4. The growth of tourism sector	Threath 1. Lack of interst of local people for chocolate 2. Competition with other products 3. Commercial chocolate product from more established companies

Source: Primary Data Processed, 2021.

Table 3. SWOT Strategy

Internal Environment Internal Environtment	Strength 1. Industrial locations near raw materials 2. Single origin 3. Abundant raw materials 4. Preservative and artificial coloring free products	Weakness 1. Low production capacity 2. Lack of human resources 3. Small marketing network 4. Ineffective financial management 5. Limited capital fierther development
	Threath 1. Lack of interst of local people for Chocolate 2. Competition with other products 3. Commercial chocolate product from	<u>S-T strategy</u> 1. Increase product competitiveness through price and quality (S1, S2, S3, S4, T1, T2) 2. Improve local people aworenens about the quality and uniqueness of the Macoa Chocolate (S1, S2, S3, S4, T1, T2, T3)
Opportunities 1. There is no competition for raw materials 2. Development of technology 3. Government support 4. The growth of tourism sector	<u>S-O strategy</u> 1. Promotion of macoa chocolate as a superior product (S2, S3, S4, O2, O3, O4). 2. Adding production aequipment (S3, O2, O3)	<u>W-O strategy</u> 1. Increase production capacity (W1, W5, O2, O3) 2. Improving the quality of human resources through coaching, training and mentoring (W2, W3, W4, W5, O2, O3). 3. Expanding marketing using traditional channel and social media (W3, O1, O2, O3, O4). 4. Improved business management (production planning and control) (W1, W2, W3, W5, O1, O2, O3, O4)

SO strategy is a strategy that uses strength to take advantage of opportunities. Based on the results of the SWOT matrix formulation, SO strategy alternatives are obtained, namely:

Promoting macoa chocolate as a regional superior product

This alternative strategy is obtained from the formulation between strength and opportunity (S2, S3, S4, O2, O3, O4). The implementation of this strategy may include participation in exhibitions at provincial and national levels, portuering with local communities and government in promoting, socializing the benefits of chocolate consumption maintaining good health such as heart health, blood pressure, cholesterol levels, and tringgering a sense of happiness. These efforts are intended to open access to markets both within and outside the region.

Adding production quipments

This alternative strategy is obtained from the formulation between strengths and opportunities (S3, O2, O3). By adding production quipments, production volume will increase and revenues can potentially be increased.

ST strategy uses strength to overcome threats. Based on the results of the SWOT matrix formulation, the ST strategy alternative is obtained, as follows :

Improve product competitiveness.

This alternative strategy is obtained from the formulation between strength and threat (S1, S2, S3, S4, T1, T2). Competitiveness is a product attribute that can be used to attract more markets and investors. To increase product competitiveness, producers need to pay attention to product quality and product packaging in order to attract consumers.

Improve local people aworeness about the quality and uniqueness of the Macoa Chocolate

This alternative strategy is obtained from the formulation between strengths and opportunities (S1, S2, S3, S4, T1, T2, T3). By disseminating information to thr

surrounding community about chocolate macoa proceducts and their health benefits, it can increase public awareness and interest in consuming chocolate.

WO strategy is a strategy developed to overcome weaknesses and to take advantage of opportunities. Based on the results of the SWOT matrix formulation, the WO strategy are as follows:

Increase production capacity

This alternative strategy is obtained from the formulation of weaknesses and opportunities (W1, W5, O2, O3). With the existence of small business loans from various state-owned or private financing institutions and the opening of ways to partner with them, small industries can add production facilities and equipment to increase production capacity/volume to meet consumer demand.

Improve the quality of human resources through coaching, training and mentoring.

This alternative strategy is obtained from the formulation of weaknesses and opportunities (W2, W3, W4, W5, O2, O3). This effort was made to improve the skill and knowledge of human resources to enable them to work more effectively and efficiently. With proper coaching, training and mentoring it can improve the performance and quality of workforce can be improved.

Expanding marketing through traditional channel and social media

This alternative strategy is obtained from the formulation of weaknesses and opportunities (W3, O1, O2, O3, O4). Product marketing can be developed by utilizing the existing traditional channels and through the use of information technologys. The use of information technology in marketing and promotion can be very effective and efficient if they are designed appropriately. Marketing through electronic media can help in spreading product information quickly and the information can reach like number of potential consumers.

Improved business management (Production Planning and Control)

This alternative strategy is obtained from the formulation of weaknesses and opportunities (W1, W2, W3, W4, W5, O1, O2, O3, O4). Improving business management by planning and controlling production, implementing good working procedures and handling of raw materials and products, implementing a production scheduling system and product distribution to minimize damage to raw materials and products, improving production and marketing managerial.

The WT strategy is developed to overcome weaknesses and to avoid threats. Based on the results of the SWOT matrix formulation, the WT strategy alternatives are as follows:

Creating and Expanding Distribution Networks to Enter New Markets

This alternative strategy is obtained from the formulation of weaknesses and threats (W3, T1, T2). The Macoa chocolate industry does not yet have an extensive distribution network. Products are marketed directly to consumers through local Macoa outlets and resellers. Expanding the product distribution network is a good strategy to take advantage of the chocolate market, which is still wide open to get new customers. One way is to open new outlets in strategic places such as around housing complex or through collaboration with supermarkets and minimarkets.

Partnering with various parties

This alternative strategy is obtained from the formulation of weaknesses and threats (W1, W3, W5, T1, T2). Cooperation in the form of business partnerships can be done to rapidly develop micro and small businesses by taking advantage of the existing marketing channel own by the partners. This partnership can be established with various parties such as farmers, other industries, banks, cooperatives and others. The synergy of partnerships will increase productivity because each party

concentrates on activities that are in their expertise to achieve the same goal.

This should highlight the results and the significance of the results and place them in the context of other work. Point out the importance of the results and place them in the context of previous studies-only discussion that illuminates significant areas should be presented. The literature should be cited.

CONCLUSION AND RECOMMENDATIONS

Internal factors possessed by the chocolate industry in terms of strength are the industrial locations near raw materials, single origin, abundant raw materials and preservative and artificial coloring free products. Meanwhile, its weaknesses, include low production capacity, lack of human resources, small marketing network, ineffective financial management and limited capital for further development. The external factors in form of opportunities, were identified as follow: there is no competition for raw materials, development of information technology, government support, and the growth of tourism sector. The threats faced by the industry include lack of interest of local people for chocolate, competition with other products and competition with commercial chocolate product from more established companies. Strategies that can be applied in the development of the chocolate industry include promotion of macoa chocolate as a superior product, adding production equipment, increase production capacity, improving the quality of human resources through coaching, training and mentoring, expanding marketing using traditional channel and social media, improved business management (production planning and control), increase product competitiveness through price and quality, improve local people awareness about the quality and uniqueness of the macoa chocolate, as well as creating and expanding distribution networks to enter new markets and partnering with local businesses.

REFERENCES

- Abubakar, N., & Bello, G. B. (2013). *Strengths , Weaknesses , Opportunities and Threat (Swot) Analysis on Globacom Ltd.* International Journal of Information Technology and Business Management. **16**(1): 83–91.
- Agus., Muhammad, S., Hartijo, 2020. *Modernisasi Produk Gula Aren di Desa Tango Kecamatan Sekongkang Kabupaten Sumbawa Barat.* J. Tambora. **4** (2A) : 134-135.
- Asheri, Vitalia Putri And Amzul Rifin. 2013. *Analisis Nilai Tambah Cokelat Batangan (Chocolate Bar) Di Pipiltin Cocoa, Kebayoran Baru, Jakarta Selatan.* Institut Pertanian Bogor. Bogor.
- Badan Pusat Statistik Sulawesi Barat. 2019. *Produktivitas Tanaman Perkebunan Menurut Kabupaten.* BPS Provinsi Sulawesi Barat. Sulawesi Barat.
- Badan Pusat Statistik. 2020. *Statistik Kakao Indonesia 2019.* Badan Pusat Statistik/BPS – Statistics Indonesia. Jakarta.
- Chan, X. 2011. *A SWOT Study of The Development Strategy of Haier Group as One of The Most Successful Chinese Enterprises.* International Journal of Business and Social Science. **2** (11): 147–153.
- Direktorat Jenderal Perkebunan. 2015. *Statistik Perkebunan Indonesia Komoditas Kakao 2014-2016.* Jakarta: Direktorat Jenderal Perkebunan.
- Hadinata, S and Marianti, M.M. 2020. *Analisis Dampak Hilirisasi Industri Kakao di Indonesia.* J. Maranatha. **12** (1) : 99-108.
- Ho W. 2008. *Integrated analytic hierarchy process and its applications – a literature review.* J. Oper Res. **186** (1): 211-228.
- Kementerian Pertanian. 2013. *Laporan Data Kinerja Kementerian Pertanian 2004-2012.* Jakarta: Kementerian Pertanian.
- Machmud, S and Sidharta, I., 2014. *Business Models For Smes In Bandung: SWOT Analysis.* J. of Economics, Business & Entrepreneurship. **8** (1): 51-61.
- Mahyarni, Meflinda A, Bustam N, and Tanjung H. 2015. *Mapping dan Strategi Pengembangan Potensi Ekonomi Berbasis Budaya Lokal di Provinsi Riau.* J. Aplikasi Manajemen. **13** (4) : 620-633.
- Nassif, V.M., Ghobril, A.N. and Siqueira da Silva, N. (2009). *Understanding the entrepreneurial process: A dynamic approach.* Brazilian Administration Review. **7** (2) : 213-226.
- Oreski, D. (2012). *Strategy development by using SWOT-AHP.* TEM Journal. **1** (4) : 283–291.
- Purnomo and Hadi, Y. 2018. *Analisis SWOT dan Strategi Pemasaran untuk Meningkatkan Daya Saing UKM Es Puter di Kota Malang.* J. Teknologi, Informasi, dan Industri. **1** (1).
- Rahman, J. F., and Rahmah, D. M. 2018. *Identification of Business Processes and Strategies in Kadatuan Koffie Using SWOT Analysis.* Industria: J. Teknologi Dan Manajemen Agroindustri. **7** (3) : 161–169.
- Ramavanavar, Gomesh M.; Charantimath, P. M. (2012). *Strategic Formulation Using TOWS Matrix- A Case Study.* International Journal of Research and Development. **1**(1): 2–9.
- Rangkuti, Freddy. 2004. *Manajemen Persediaan Aplikasi di Bidang Bisnis.* Jakarta: PT Raja Grafindo.

- Retnawati, L and Nia, S. 2020. *Perumusan Strategi Pengembangan Universitas Menggunakan Metode AHP dan SWOT pada Universitas XYZ*. J. Teknik Informatika. **8** (2).
- Setyorini, H., Effendi, M., and Santoso, I. 2016. *Analisis Strategi Pemasaran Menggunakan Matriks SWOT dan QSPM (Studi Kasus: Restoran WS Soekarno Hatta Malang)*. Industria: J. Teknologi Dan Manajemen Agroindustri. **5**(1) : 46 – 53.
- Tambunan, T, S. 2020. *SWOT Analysis for Tourism Development Strategy of Samosir Regency*. The International Journal of Applied Business. **4** (2). 90-105.