

# **MARKETING AND DEVELOPMENT STRATEGY OF SIGER RICE FROM CASSAVA IN WAY KANDIS VILLAGE, DISTRICT TANJUNG SENENG-BANDAR LAMPUNG**

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## **Abstract**

The use of cassava is still dominated by large industries into tapioca and animal feed. Whereas consumption is still limited. Utilization of cassava as an alternative staple food can be done by changing it into siger rice. This study aimed to identify and determine the appropriate marketing and development strategies for siger rice in Way Kandis Village, Bandar Lampung. Analysis was carried out on internal aspects such as aspects of human resources, facilities and infrastructure, institutions, production, availability of raw materials, business locations and management and funding as well as external aspects such as technology and information, government policies, competitors, consumers and climate and weather. The results showed that siger rice produced in Way Kandis Village had characteristics of white colour, the texture was rather sticky, the aroma was not typical of cassava, and was favored by panelists. The nutritional content of siger rice: water content (10.19%), ash (0.31%), fat (0.56%), protein (2.69%), crude fiber (4.50%), and carbohydrate (81.75%). The right marketing and development strategy for siger rice in Way Kandis Village was an aggressive growth strategy. Siger rice industry had a very favorable situation, has the power to overcome threats, and had the opportunity to overcome weaknesses so that it can expand the marketing area. As for the strategy for developing siger rice in Way Kandis, namely by conducting a diversification strategy, which mean that the Siger rice industry was in a good position but still faced several challenges. Improved strategies can be achieved by increasing the amount of production offset by expanding the marketing network and improving the quality of products produced and increasing cooperation with the government to further increase production.

**Keywords:** Siger rice, marketing, Way Kandis, Tanjung Seneng, cassava

## **I. INTRODUCTION**

Food security of a country is good if the community need on food has been fulfilled in terms of the quantity and quality, even in affordable prices. However, in reality, community in Indonesia as general, especially in Lampung Province, has not been able to achieve conditions of food security due to the huge number of people depended on rice consumption. Dependency the community is due to public perception that considers rice as the only staple food with the highest carbohydrate content.

One alternative to achieve food security is a program food diversification. Food diversification not just produce products which can reduce dependence the community will rice,

but it is necessary product innovations that have more nutritional value to improve public health and reduce high degenerative disease. One form of diversification food is by using sweet potatoes wood as an alternative to rice. Cassava can be used as an alternative food not only because of having womb good nutrition, but also have many availability in some regions, especially in Lampung Province. One food product from cassava which can be used as an alternative food is analog rice.

Analog rice is food functional derived from the cassava experience processing so that it is shaped granules like rice (Halim, 2012). Meanwhile, according to Mishra et al, (2012) analog rice is a processed product that can made from part or all of the material non-rice. Budijanto and Yuliyanti (2012) declare analog rice shaped like rice grains can be made from all non-rice flour. One small rice industry analogues in Lampung Province that can produce rice analog with color white and or yellowish white is small analog rice industry in KWT Toga Sari Desa Way Kandis District Tanjung Seneng Municipality of Bandar Lampung. In the implementation of rice production activities analog, KWT Tirtaria is still experiencing obstacles. There are several obstacles happens both internal constraints comes from within the business and constraints external namely the obstacles that come from outside the scope of business that can affecting the development of rice business the analog.

Based on the background of the problem this research was conducted to collect information that can used as a basis for analysis for make decisions in damaging the right development strategy appropriate to be applied to the KWT Tirtaria.

The aim of this study to identify and determine appropriate development strategy KWT Tirtaria.

## **II. MATERIALS AND METHODS**

### **2.1. Place and time of research**

This research was conducted at KWT Tirtaria Desa Way Kandis District Tanjung Seneng Municipality of Bandar Lampung in April-July 2017.

Research methods The research method used is a survey and interview method. Technique Data collection is done by method descriptive research conducted survey.white The analytical method used in this study is a skinative method and quantitative by analyzing good corporate environment environment internal and external environment. Results of analysis of external and internal factors this is then made as a matrix, namely the external strategy factor

matrix (EFAS / External Factor Analysis Strategic) and strategy factor matrix internal (IFAS / Internal factor Analysis Strategic) The next stage is make use of all that information to formulate a development strategy and the right marketing strategy according to using matrix SWOT.

### **III. RESULTS AND DISCUSSION**

#### **3.1. Analysis of the Internal Environment of Siger Rice**

Based on the survey results in the field with focus group and brainstorming methods it is known that the internal factors of siger rice in Way Kandis Bandar Lampung Village include aspects of product, price, place or distribution, promotion, human resources, management, and facilities and infrastructure. Furthermore, from each of these aspects detailed into points, determinants that can be the strength or weakness of siger rice in the village of Way Kandis.

##### **3.1.1. Product Aspects**

Based on the definition of the Kotler Philp product is everything that can be offered to the market to be considered, owned, used or consumed so that it can satisfy the desires or needs (Kasmir, 2003). Meanwhile, according to the Indonesian Big Dictionary, the definition of products is goods or services that are made and added to their use or value in the production process and become the end result of the production process.

The products produced by KWT Tirtaria in Way Kandis have a much better quality compared to products produced by other producers. In terms of color, Siger rice produced by KWT Tirtaria has a white to yellowish white color. Siger rice is white and or yellowish white is siger rice with much better quality than other types of siger rice (Ariesta, 2016). In terms of aroma, siger rice produced has a distinctive aroma of cassava. Because the raw material used is cassava without the addition of other ingredients. In addition, in terms of shape, the resulting siger rice has resembled the form of rice rice. So that psychologically people when consuming siger rice is the same as eating rice (Halim, 2012).

Packaging is a factor that is sufficient to support the quality of siger rice produced. Siger rice produced by KWT Tirtaria consists of 3 sizes, 250 g, 500 g and 1 kg. All products produced by KWT Tirtaria use pouch packs flipped as primary packaging which is then sealed using a sealer. The type of packaging material used is very influential on the products produced, thus the function of packaging can be achieved, namely to protect products, facilitate distribution and attract consumers. This primary packaging is labeled as product information that contains the

product name (brand), logo, composition, presentation suggestions, nutritional information, product benefits, net weight and production permits. However, there are still deficiencies in label, namely the lack of information on product halal, customer service, No. registration of the Ministry of Health of the Republic of Indonesia as well as information regarding product expiration. Whereas for secondary packaging, KWT Tirtaria uses cartons.

Based on the explanation above, it is obtained the strengths and weaknesses of the aspects of the products that exist in the Tirtaria KWT. The strength of the product aspect is that the quality of the siger rice product produced is good, namely yellowish white color similar to rice rice and has a nutritional content and good benefits for health, especially for diabetics. As for the weakness of KWT Tirtaria from the product aspect, that is still not complete information on the label.

### **3.1.2. Price Aspect**

Price is an exchange rate of goods and services products expressed in monetary units. Price is one of the determinants of a company's success because the price determines how much profit the company will get from selling its products in the form of goods and services. Setting prices too high will cause sales to decrease, but if the price is too low it will reduce the profits earned (Sari, 2011). Indonesian society in general still believes that product prices have a strong correlation with product quality. On the other hand consumers always want products with prices that are relatively cheap but have good quality. Therefore, KWT Tirtaria must be careful in determining product prices.

Siger rice produced by KWT Tirtaria is priced at Rp. 20,000 / kg while competitor products are priced at Rp. 17,000. The price offered is in accordance with the quality of the product produced in terms of color, aroma and shape better than other siger rice producers. Besides that, the form of siger rice produced also resembles rice rice while siger rice produced by other producers is still in the form of round granules like tiwul. In terms of packaging, siger rice produced using pouch packaging is more attractive than other siger rice packaging and the label is designed to be more attractive so that consumers are interested in reading and buying products. At KWT Tirtaria, good and right market segmentation has not been implemented. One of them is price segmentation. This price segmentation is needed because one's economic strength must vary from one another. There are consumers who are able to buy products at high or high prices and there are also consumers who are able to buy at low prices or cheap. This price segmentation is needed so that KWT Tirtaria can reach all ranges of users or consumers of siger rice produced

from the weak economy to strong economy. So that the benefits of consuming siger rice can be felt by all consumers.

Based on the explanation above, it is obtained strength and weakness from the aspect of the prices that exist in the Tirtaria KWT. The strength of the price aspect is that the price offered is relatively affordable and in accordance with the quality of the product, packaging and label produced. While the weaknesses resulting from the price aspect is the absence of market segmentation, namely price segmentation.

### **3.1.3. Place or Distribution Aspects**

A place or distribution is a company activity that makes a product available to the target customer (Kotler and Armstrong, 2008). Distribution can be interpreted as marketing activities that seek to expedite and facilitate the delivery of goods and services from producers to consumers, so that their use is in accordance with what is needed such as type, quantity, price, place and when needed (Tjiptono, 2008). Distribution is the activity of delivering products to the hands of consumers at the right time. Therefore, distribution policy is one of the integrated marketing policies which includes the determination of marketing channels and physical distribution. Both of these factors have a very close relationship in the success of the distribution and at the same time the success of product marketing. Distribution channels are needed to guarantee product availability in each channel chain (Assauri, 2004).

The distribution system conducted by KWT Tirtaria is direct marketing channel. The resulting siger rice product is offered and sold directly through KWT Tirtaria's shop. KWT Tirtaria shop sells products in retail directly to consumers both in the size of 250 g, 500 g or 1 kg. The store is located in the production area so that the product transportation process can be carried out quickly and without the need for distribution costs. In addition to being distributed around the production site, Siger rice produced by KWT Tirtaria is also distributed to Bandar Lampung City through the Lampung Province Food Security Office. However, this distribution is not routine or unscheduled. This distribution is carried out if there is a request from the provincial Food Security Service.

KWT Tirtaria does not have cooperation with retailers who buy siger rice products for resale to consumers outside the production location. This causes the distribution area to be limited. However, in marketing its products, KWT Tirtaria strives to serve all market segments. This is done because KWT Tirtaria realizes that the products produced are functional food products that have health benefits to reduce risk and prevent diabetes and obesity. So that in

creating its products, KWT Tirtaria does not carry out specializations aimed at certain market segments, namely for diabetics. But KWT Tirtaria continues to strive to provide products that have the best quality for consumers.

Based on the explanation above, it is obtained the strength and weakness of the aspect of the place or distribution in the Tirtaria KWT. The strength of the aspect of the place or distribution is a strategic place or distribution because it does not require distribution costs. While the weaknesses that result from the aspect of the place or distribution are the limited distribution of siger rice products.

#### **3.1.4. Promotion Aspects**

The promotion is an effort to increase the company's sales to carry out various things such as improving and expanding the distribution of its products and improving services to consumers (Sari, 2011). Meanwhile, according to Suhendro (2007), promotion is one of the variables of the marketing mix used by companies to communicate with the market. According to Ie et al. (2015) Promotion is one of the marketing mix variables used by companies to communicate with the market.

In marketing siger rice products, KWT Tirtaria has not held a large-scale promotion. The promotional activities that have been carried out by KWT Tirtaria are participating in exhibitions and participating in bazaars organized by related agencies. KWT Tirtaria has not carried out the activity of distributing leaflets or brochures on the resulting siger rice products so that the siger brand or product produced by KWT Tirtaria has not been widely known by the public because of the promotion that has not been so intense. The existence of promotional assistance from the Food Security Service has a positive impact on KWT Tirtaria. Because the products produced at least began to be known by the public even though not yet extensive.

Based on the explanation above, it was obtained the strength and weakness of the aspect of promotion that existed at the Tirtaria KWT. The strength of the aspect of promotion is the promotion assistance from the Food Security Service. While the weaknesses resulting from the promotion aspect are the limited promotional activities carried out by KWT Tirtaria.

#### **3.1.5. Human Resources Aspect**

Human resources are one of the production resources, and are one of the factors of dynamics in long-term economic development. The availability of human resources in sufficient quantities, knowledge and skills and motivated to do work is a strength. Because it will improve

the performance of a business or business. But on the contrary, human resources that are weak both physically and mentally will become a point of weakness for a business or business.

Employees or workers are subject to factors of production that are very important in supporting the success of business ventures in various industrial activities. In fact, the success or failure of a business, whether or not a business is efficient, whether or not a business is effective is determined by human resources who participate in the business itself. Therefore, human resources must receive careful attention so that they can make optimum contributions in their work (Hutomo, 2015).

In essence, labor can be divided into three types, namely:

1. Trained workforce; usually the form of work that is occupied is not too need "theoretical skills"
2. Educated workforce; including the classification of workers who obtain theoretical education to a certain level and field / discipline. Can be divided into 2 types, namely experienced educated workforce and uneducated / uneducated workforce
3. Uneducated labor; including workers who did not obtain theoretical skills, so the main thing for them is "practical work KWT Tirtaria has been established since 2010 until now. The number of KWT Tirtaria employees is 25 people, consisting of 23 women and 2 male employees. The majority of KWT Tirtaria employees' final education is 16 junior high school graduates. Education is one of the factors that is sufficient to determine the level of skill possessed by the workforce in the Tirtaria Women's Farmer Group. So that the absorption of knowledge and information is much easier for the workforce to accept.

In addition to carrying out production activities, the workforce on this Siger rice also received training carried out by the relevant agencies. The training followed by KWT Tirtaria employees had a positive impact on the Siger rice. The benefits obtained are:

1. Working more efficiently, after participating in the training, of course the employees increase their knowledge, making it easier to complete a task.
2. Less supervision, after participating in training, the mistakes in working on the task can certainly be suppressed. If only a few mistakes are made, the level of supervision given is minimal.
3. Growing faster, employee development can indeed be left naturally in accordance with its capabilities. However, this development will be faster if employees attend training.
4. Stability of employees and a decrease in turn over, employees who have received training successfully so that they can grow certainly have a tendency to survive in the company.

Based on the description above, obtained strength and weakness from aspects of human resources on. Strengths from the aspect of human resources, namely the ability and skills that are quite good that have been owned by the workforce in the area and the training of related agencies. So that the ability and skills of KWT Tirtaria employees are growing. While the weaknesses of the aspect of human resources is the limited number of workers, which is only 25 workers. So that it is not yet possible to produce siger rice in larger quantities. For now, KWT Tirtaria is capable of producing 100-200 Kg / week of siger rice.

#### **3.1.6. Management aspects**

Management aspects are very vital aspects of a business. Because businesses that will or are being pioneered may fail if management in the business or organization is not going well. The management process itself also has rules so that businesses can run easily. The rules themselves can be clearly illustrated through the following management functions:

1. Planning, is a process to determine where and how a business will be run and started to achieve a goal that has been determined.
2. Organizing, is a process for grouping activities in certain units to be clear and orderly in accordance with the responsibilities and authority of the unit holder.
3. Actuating is a process where all planned things have been started by all units. Like a manager who directs all of his subordinates to start work in accordance with the tasks that have been assigned to him.
4. Controlling, is a process for measuring, evaluating and evaluating workers' results in order to remain in accordance with the initial plan and correcting various irregularities during the process of carrying out work (Alenta, 2017).

In the Tirtaria KWT the management aspect has not been implemented optimally. Not yet optimal implementation of management at KWT Tirtaria because of the limitations of various parties and the number of workers at that. However, for organizing activities, implementation and supervision are sufficiently implemented. This is evidenced by the existence of direct directives during the implementation of production activities, a mutual agreement in determining the timing of production activities, a clear coordination system either by telephone or direct coordination with the workforce, working together and directing the workforce in production activities for production steps that have not been understood and the existence of mutual agreement in providing production profits.



In addition, the entry and exit of costs and data on siger rice production at KWT Tirtaria have been regularly recorded. This is evidenced by the bookkeeping regarding the clear and written income and expenditure that is carried out in full by the head of the KWT as well as the business owner. Siger rice production data in the Tirtaria KWT can be seen in Table 7.

Based on the explanation above, the strengths and weaknesses of the management of Tirtaria KWT are obtained. Strengths in the management aspect are the implementation of clear and written books regarding income and expenditure and siger rice production data. While the weaknesses of the management aspect are that most management functions have not been implemented optimally this is due to the limitations of various parties and the limited number of employees.

### **3.1.7. Aspects of Facilities and Infrastructure**

Facilities and infrastructure are the means of success of a business or organization. Because if these two things are not available then all activities carried out will not be able to achieve the expected results in accordance with the plan. The existence and availability of adequate facilities and infrastructure will greatly support the success of the business as well as the siger rice business in Way Kandis Village.

The Tirtaria Women Farmer Group has a number of processing equipment in the manufacture of siger rice which comes from the assistance of the related Dinas. Equipment obtained from related agencies is an extruder machine (siger rice forming machine). With the help of these machines, the siger rice production process becomes more effective and efficient. In addition, with the help of machinery from the relevant agency, KWT Tirtaria was able to produce analog rice with a shape resembling rice rice. Other supporting equipment such as scales, press tools, basins and hands to dry the siger rice after leaving the extruder machine. KWT Tirtaria also has a large yard for drying siger rice.

Based on the description above, obtained the strengths and weaknesses of the aspects of facilities and infrastructure. Strengths in terms of facilities and infrastructure are ownership of adequate production facilities and infrastructure so that they can support production activities. While the weaknesses in the aspect of facilities and infrastructure are if the facilities and infrastructure owned cannot be utilized and used optimally.

The explanation of the seven internal aspects of Siger rice at the Tirtaria KWT at Way Kandis Bandar Lampung used in this study has produced some of these strengths and weaknesses.

The strengths and weaknesses obtained are then determined and weighted by the rating which will produce an IFAS matrix before the development strategy is obtained.

Determination of the weight of each internal component to obtain strengths and weaknesses using the method of degree of relative importance. The determination of this weight involves one of the research respondents, namely the owner who is considered to be better understood and knows all production operational activities and knows the business constraints or obstacles. The internal factor matrix framework for strengths and weaknesses is presented in Tables 1 and 2.

Table 1. Framework for internal strategy factor matrix for strengths

Component	Strength	Weight	Rating	Score	Ranking
Product	The quality of the siger rice product produced is good	0,21	4	0,84	1
Price	The price offered is relatively affordable and in accordance with the quality of the product	0,12	3	0,36	3
Place or distribution	Strategic place or distribution because it does not require distribution costs	0,17	2	0,34	2
Promotion	Promotional assistance from the Food Security Service	0,07	3	0,21	4
Human Resources	Good workforce skills and skills	0,12	3	0,36	5
Management	Clear and written bookkeeping regarding income, expenditure and data on siger rice production	0,17	3	0,34	7
Facilities and infrastructure	Ownership of adequate production facilities and infrastructure	0,14	3	0,42	6
Total				2,87	

Information on rating (strength): 4 (Strength that is very strong), 3 (: Strength that is strong), 2 (Strength that is low), 1 (Strength is very low).

Table 2. Matrix framework for internal strategy factors for weaknesses

component	Weaknesses	Weight	Rating	Score	Ranking
Product	Still not complete label info	0,10	3	0,30	2
Price	The absence of price segmentation	0,10	2	0,20	1
Place or distribution	The limited distribution area of Siger rice	0,02	2	0,04	4
Promotion	Promotional activities are still limited	0,21	2	0,42	3
Human Resources	Limited number of workers so that production is limited	0,19	3	0,57	5
Management	Not yet optimal implementation of management functions	0,21	3	0,63	7
Facilities and infrastructure	Not optimal in utilizing facilities and infrastructure	0,17	3	0,51	6
Total				2,67	

Rating information (weakness): 4 (Weaknesses are very easy to solve), 3 (Weaknesses are easy to solve), 2 (Weaknesses are difficult to solve), 1 (Weaknesses are very difficult to solve).

### 3.2. Analysis of the External Environment of Siger Rice

The external environment analysis of siger rice is the identification of factors that are outside the KWT Tirtaria. These factors are opportunity and threat which can influence the existence and actions of both the direct and indirect performance of the KWT. Based on the survey results in the field, it is known that KWT Tirtaria's external factors include consumers, competitors, technology and natural resources. Furthermore, from this aspect it is detailed into a section that can be used as a determinant of opportunity or a threat to KWT Tirtaria.

#### 3.2.1. Consumer Aspects

A consumer is someone who uses a product or service that is supplied. Consumers are divided into two, namely personal and organizational consumers. Personal consumers are individuals who buy goods or services for their own use, for use in the household, family members and friends. While the organizational consumer is a company, government agency or profit agency or other non-profit that buys goods or services and other necessary equipment used so that the organization can run well.

Many or no consumers of Siger rice can be influenced by consumer knowledge (product knowledge, purchasing knowledge and usage knowledge). Consumer knowledge of the product you want to buy is one of the important factors that can affect consumers. With complete information on the product, the consumer will be easier in determining which product to buy. Purchasing knowledge is one of the most important knowledge. Because with the knowledge of

the purchase, the consumer can determine and decide to buy a product with the right, certain volume and frequency. In addition, knowledge of use is also important for consumers. Knowledge of use is applied post-purchase, namely knowledge to use or use a product to meet needs. Every consumer who buys siger rice, has a different way of consumption, namely as a main food, support or companion, consumed with additional ingredients (side dishes) or only consumed without additional ingredients.

Siger rice consumers at KWT Tirtaria have knowledge and information about the products produced by it. In addition, KWT Tirtaria also has consumer trust and satisfaction on the quality of the Siger rice products produced. If the consumer has been satisfied with a particular product, if it stops production then the consumer who has been satisfied with the product will choose not to consume the same product with another brand.

This consumer purchase decision is also influenced by the price of the product to be purchased. Siger rice produced by KWT Tirtaria is priced at Rp. 20,000 / kg while competitor products are priced at Rp. 17,000. The price offered is in accordance with the quality of the product produced in terms of color, aroma and shape better than other siger rice producers. In addition, the form of siger rice produced also resembles rice rice while siger rice produced by other producers is still in the form of granules such as tiwul. However, prices are also very influential on the number of consumers even though the quality of the products produced is in accordance with the price of the products offered.

Based on the explanation above, then obtained opportunities and threats from the consumer aspect. Opportunities obtained from the consumer aspect are the knowledge and information that consumers already have about the siger rice products produced by KWT Tirtaria as well as consumer confidence in the siger rice products that have been consumed. While the threat obtained from the consumer aspect is that the price of siger rice is still high. This affects the number of siger rice consumers around.

### **3.2.2. Competitor Aspects**

Competitors are companies or organizations that produce or sell goods and services that are the same or similar to the products offered. In the world of competition, the main task of entrepreneurs is to attract as many customers as possible both new customers and old customers and also how to turn off the pace of the development of competitors. Things that need to be known and continuously monitored are competitor products. Both in terms of quality, packaging, labels or other. Comparing the advantages of products owned by competitors and their

weaknesses with their own products. In addition, producers must also be able to capture opportunities in the market before being captured by competitors.

Siger rice in the City of Bandar Lampung is only in Way Kandis Village. This is an opportunity because there are no actors or similar business producers around the region. Thus, consumers who want to consume Siger rice can only obtain or buy from KWT Tirtaria.

In addition to competitors such as competitors from others can be a threat to Siger rice, namely rice rice business. The reason that underlies rice rice business as a competitor for the siger rice business is that the community is still dependent on rice. Besides that another reason is the selling price of Siger rice which is much higher than the selling price of rice rice with almost the same quality. The reason that underlies the community prefers to consume rice rice than siger rice. However, not a few people who want to buy Siger rice after knowing the benefits of Siger rice even with a high selling price.

### **3.2.3. Technology and Information Aspects**

Technology is a scientific method for achieving practical goals or the overall means to provide goods needed for the survival and comfort of human life. The application of science and expertise is the core of the use of technology in the production process. The challenge now is how far the use of equipment as human power will increase productivity and quality. A product is not only affected by the quality of the raw material used but also influenced by the technology of the manufacturing process. This means that the machine to process the manufacture of raw materials into finished goods will affect the quality of the goods (Hutomo, 2015). Generally, more sophisticated machine technology always produces better quality of goods.

Technological aspects include production equipment, production support infrastructure, means of mobility and information networks. The existence of technology in the Tirtaria KWT is reflected in the presence of assistance in the form of production machines that facilitate the production of siger rice. However, in the information aspect of KWT Tirtaria still has not implemented an IT-based communication network and information system. By implementing an IT-based communication network and information system, it is expected to expand the marketing area of Siger rice. Marketing is not only done from mouth to mouth or through bazaars and exhibitions but can also be done with the help of the WEB. So that buyers can purchase Siger rice not only offline but also can purchase online.

Based on the explanation above, there are opportunities and threats from the technology and information aspects of the Siger rice. The opportunity is the existence of technological

assistance in the form of production machines that can affect production time faster and produce higher quality siger rice. While the threat from the aspect of technology and information is not yet applied by other technologies other than production machines such as the application of information systems or technology in the form of computer operations that can help production operations.

#### **3.2.4. Natural Resource Aspects**

The availability of natural resources, either raw materials or supporting materials, greatly influences the sustainability of a business or organization. Raw materials are materials used for production purposes. Raw materials are tangible items that will be used in the production period. These items can be obtained from natural sources, purchased from suppliers, or made alone to be used in the next process (Hutomo, 2015). Planning for raw material requirements is a process to ensure that raw materials are available when needed. When an effort to ascertain the demand for its products in the future, the time for new raw materials to arrive can be determined to reach the level of production that meets the predicted demand.

KWT Tirtaria gets cassava as raw material for making siger rice obtained from farmers, cassava traders or communities around Siger rice production houses. During the course of the KWT Tirtaria there was no difficulty in obtaining raw material for cassava only if a prolonged dry season the availability of cassava was limited and the price of cassava became higher. In addition to raw materials, the supporting materials used in the process of making siger rice are easy to obtain. Like water used for washing and helping the separation between starch and onggok obtained from around the production site. In addition, other supporting ingredients such as palm oil, salt, mono stearic glycerol and baking powder are easily available.

Based on the explanation above, the potential of large raw materials and guaranteed continuity can be a reliable force for KWT Tirtaria. However, the availability of raw materials can be a weakness for a business if continuity is not guaranteed in the dry season. Business failure can occur due to the problem of continuity of raw materials that are not guaranteed. So that the existing siger rice stock is limited and results if at any time the consumer demand increases, siger rice cannot fulfill in full demand.

Explanation of some external aspects of Siger rice production at KWT Tirtaria in Way Kandis Village in Bandar Lampung shows several opportunities and threats. Opportunities and threats obtained are then determined and rating weight that will produce an EFAS matrix before

the development strategy is obtained. The matrix framework for external factors for opportunities and threats is presented in Tables 3 and 4.

Table 3. The matrix framework for external strategy factors for opportunities

Component	Opportunities	Weight	Rating	Score	Ranking
Consumer	Knowledge and information that consumers have	0,23	2	0,46	1
Competitor	The absence of actors or similar business producers around the region	0,20	2	0,40	2
Information Technology	Technology assistance in the form of production machines	0,27	3	0,81	4
Natural resources	The potential of large raw materials and continuity is guaranteed	0,30	3	0,90	3
Total				2,57	

Information on rating: 4 (Opportunities that are very easy to achieve), 3 (Opportunities that are easy to achieve), 2 (Opportunities that are hard to achieve), 1 (Opportunities that are very difficult to achieve)

Table 4. Framework for external strategic for threats

Component	Threats	Weight	Rating	Score	Ranking
Consumer	The price offered is still high retail	0,23	3	0,69	3
Competitor	The selling price of siger rice is higher, affecting the number of consumers	0,30	2	0,60	2
Information Technology	Not yet implementing an IT-based information communication network	0,32	2	0,64	1
Natural resources	Continuity of raw material is not guaranteed during the dry season, which affects the stock of siger rice	0,15	3	0,45	4
Total				2,47	

Information on rating: 4 (threats that are very easy to overcome), 3 (threats that are easily overcome), 2 (threats that are difficult to overcome), 1 (threats that are very difficult to overcome).

Based on the description of the internal and external conditions of Siger rice production at KWT Tirtaria in Way Kandis Village, Bandar Lampung, the IFAS and EFAS metrics were obtained. Furthermore, the difference between the IFAS and EFAS metrics is presented in the SWOT analysis diagram. This SWOT analysis diagram will illustrate the condition of siger rice

in what diagram. Weighting for SWOT diagram analysis of internal and external factors can be seen in Table 5.

Table 5. Weighting of SWOT diagrams of internal and external factors

Description	Internal		External	
	Strength	Weakness	opportunities	threats
Weight x rating	2,75	2,49	2,57	2,47
Difference	0,20		0,10	

Table 5 shows the difference between internal factors (strengths and weaknesses) and external factors (opportunities and threats). In the internal factor, the difference is +0.20 while the external factor is the difference of +0.10. Furthermore, the selisisih value between internal and external factors of siger rice will be described on the x axis for internal factors and the y axis for external factors. After analyzing the external and internal environment, it can be formulated into a SWOT analysis that describes every strength, weakness, opportunity, and challenge that exists (Afrillita, 2013). The meeting of the difference values of the two axes will produce a coordinate point on the SWOT diagram. The SWOT diagram of internal and external factors can be seen in Figure 1.

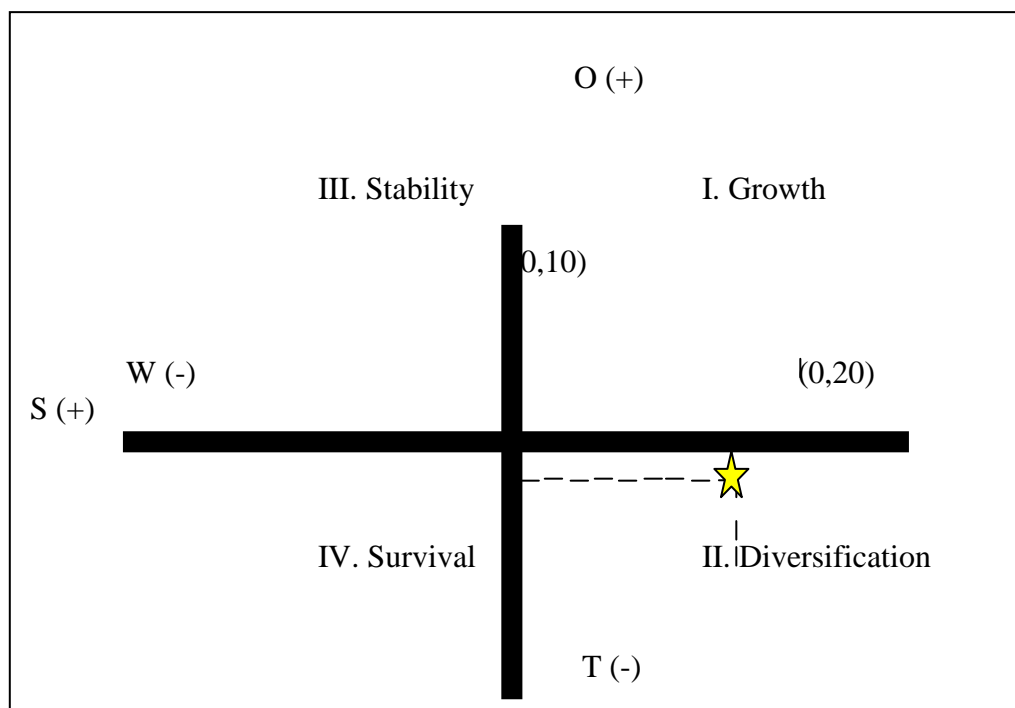


Figure 1. SWOT diagram of internal and external factors



Figure 1 describes that siger rice in Way Kandis Village, Bandar Lampung is in the first consciousness, namely aggressive growth. This means that siger rice has a very favorable situation, the company has the opportunity and strength so that it can take advantage of the opportunities that exist. The strategy that must be implemented in this condition is to support an aggressive growth policy (growth oriented strategy). A business or organization in this quadrant makes it possible to continue to expand, expand growth and achieve maximum progress.

KWT Tirtaria in Way Kandis Village, Bandar Lampung can use the existing opportunities and strengths such as the quality of the Siger rice products produced is good, the prices offered are relatively affordable and in accordance with the quality of the product, place or strategic distribution because it does not require distribution costs, there is promotion assistance from Food Security Service, the ability and skills of human resources that are quite good that have been owned by the workforce, clear and written bookkeeping regarding income and expenditure as well as data on siger rice production, ownership of adequate production facilities and infrastructure, knowledge and information already owned consumers, the absence of actors or similar business producers around the region, the existence of technological assistance in the form of production machinery, and the potential of large raw materials and guaranteed continuity. In addition, KWT Tirtaria continues to collaborate with local governments, universities, banks and entrepreneurs so that the production and quality of Siger rice can be guaranteed and a wider marketing network.

## **VI. CONCLUSION**

The siger rice produced by KWT Tirtaria has the characteristics of white rice such as rice grain, pulen texture, cassava aroma, panelists' preference, and contains water content (10.19%), ash (0.31%), fat (0, 56%), protein (2.69%), crude fiber (4.50%), carbohydrate (81.75%), and glycemic index 31. Siger rice quality assurance by applying SOP for making siger rice and clinical trials of rice siger in diabetic patients. Marketing strategies based on existing opportunities and strengths such as the quality of siger rice products that have been produced are good, the prices offered are relatively affordable and in accordance with the quality of products, places or strategic distribution because they do not require distribution costs, the promotion assistance from the Food Security Service, ability and skills quite good human resources that have been owned by the workers, clear and written bookkeeping regarding income and expenditure as well as siger rice production data, ownership of adequate production facilities and infrastructure, knowledge and information that have been owned by consumers, absence of actors

or producers similar businesses around the region, the existence of technological assistance in the form of production machines, as well as the potential of large raw materials and guaranteed continuity, as well as collaborating with local governments, universities, banks, and entrepreneurs so that the production and quality of siger rice can be guaranteed broader marketing style.

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