

Development Model of Sago Agroindustry Small and Medium Enterprises (SMEs) In Southeast Sulawesi Province: Income and Strategy Analysis

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ABSTRACT

Sago plants are the main staple food in Southeast Sulawesi. Sago plants have various economic value for bioethanol, roofs, and carbohydrates. Community managed sago plantations by using an agro-industrial model. Although, sago processing has long been developed, but the community is still living in a low socio-economic condition. The allocation of sago agro-industry production factors is still not optimal, resulting in a fluctuative production, quality and productivity. This study analyzed the income of the sago agroindustry and formulated a strategy for the sago agroindustry development. The study was conducted in Konawe Regency, Southeast Sulawesi Province. Sampling in this study was carried out by purposive sampling and total sampling. The analytical methods used include income analysis to analyze the income of the sago agroindustry, SWOT analysis to formulate strategies for the development of the sago agroindustry. The results showed that the income level of Konawe Regency's sago agroindustry in a monthly sago processing was Rp. 14,205,770. The analysis results of sago agroindustry development strategy in Konawe Regency obtain five core strategies, focusing on packaging and labeling, production and marketing, training in seedling and management of the sago agroindustry, land conversion policy and sago price policy, and the sago agroindustry partnership program.

Keywords: sago; agroindustry; income analysis; SWOT analysis; SMEs

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1. Introduction

Sago is one of the main staple foods in Southeast Sulawesi. The sago planting area in this province reaches 12,000 ha with a production of 6,000 tons. Most parts of the sago plant have economic value, including bioethanol, thatch for roofs and wood (TNI, 2019). As a source of carbohydrates, sago powder can be processed into foods, such as sinonggi and other snacks (Purbaningsih et al., 2019). Sago processing agro-industry is one of the economy pillars for

people living in rural areas whose life depends on sago cultivation (Nursalam, 2018).

Agroindustry position in the agribusiness system is very important because agroindustry is one of the subsystems along with other subsystems form an agribusiness system consisting of input subsystems (upstream agroindustry), farming (agriculture), output (downstream agroindustry), marketing and support (Sulistiowati et al., 2017; Arianti & Waluyati, 2019). Thus, the discussion about agro-industry development cannot be separated from the overall agribusiness development. The agro-industry development will be able to increase the demand for agricultural products so as to increase production, agricultural products prices and

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farmers' income (Gumbira and Prastiwi, 2005; Heizer et al., 2017).

Agroindustry has bright prospects in the agribusiness system, considering that it is closely related to natural resources (agriculture), available human resources and large market opportunities both domestically and for exports (Kumar et al., 2017). The hope for agro-industry development is (1) increased demand in agricultural sector output, this is a strong incentive for farmers to increase efficiency, especially in improving crop cultivation through the adoption of appropriate technology. If farmers can achieve the economic benefits of these improvements, their net income will increase, which in turn will increase farmers' demand for industrial goods and services, so that in the early stages, the industrial sector will encourage the agricultural sector development and furthermore agricultural sector development will encourage the industrial sector development, and (2) increased workforce (Astoko, 2019). If the agro-industry development occurs in rural areas, part of the surplus labor in the agricultural sector can be absorbed (Fadhil et al., 2017). This can be considered that the industrial sector utilizes the agricultural sector output, hence; the difference in work norms between the agricultural sector and the industrial sector will not be too much of a problem, specifically the role and function of agro-industry development in national economic development is to increase the added value of agricultural products (Benton et al., 2020).

Agroindustry as a form of company that processes agricultural products aims to make a profit, the size of profit shows the success of management in managing the company (Chen et al., 2016; Gultom & Sulistyowati, 2018). Company management can be said to be successful if it is able to plan and achieve large profits. The company's success in managing large profits depends on the size of the production costs, selling prices, production volumes, and sales volume levels (Fred, 2010; Wardana et al., 2022). Thus, these factors are interrelated with each other which mean that production costs determine the selling price, selling prices affect sales volume, sales volume influence production volume and finally production volume will affect production costs (Mulyadi, 2007; Fakhurrizi et al., 2018).

Konawe Regency is one of the new autonomous regions in Southeast Sulawesi which

agricultural land as one of the regional development assets is highly reliable for local revenue. This land has long been used for agricultural activities, such as food crops, horticulture, plantations and forestry as well as for non-agricultural activities. These activities have directly or indirectly caused changes in the ecological and socio-economic systems of the local area. The main cause of these changes is driven by population growth rate accompanied by uncontrolled land use (Timisela et al., 2020).

Although efforts to develop the agricultural sector in this area have been carried out for a relatively long time, the development is still relatively limited compared to other areas in Southeast Sulawesi. However, farmers with the local government support continuously working on agricultural development (Nursalam, 2018; Purbaningsih et al., 2019). As a region that continues to develop the agricultural sector, priority planning is needed to maintain community life sustainability as a whole. Therefore, the regional agricultural development planning program has placed the agricultural sector as a priority focus of driving economic development for the community, with the hope of improving the welfare of people's lives in a fair and equitable manner (BPS Kabupaten Konawe, 2019).

Agricultural development in general aims to make the agricultural sector stable, competitive and support the growth and development of advanced agro-industry and agribusiness in order to achieve the goal of improving people's living standards through increased production (Rosmawaty et al., 2017). Increased production and productivity is necessary as the foundation and prerequisite for the industrialization process. In agriculture, plantation and forestry production, production is obtained through quite long and full of risks process, the time required is various depending on the type of commodity being cultivated (Polnaya et al., 2016). Not only time, the adequacy of production factors is a determinant to achieve higher production. In terms of time, plantation business requires a longer period than food crops and some horticultural crops. The production process can be carried out if the required requirements can be met, these requirements are better known as production factors (Soekartawi, 1995).

In order to obtain sustainable maximum production of sago plants, the pattern of sago cultivation which is still in the category of natural

sago forest needs to be directed to the pattern of sago plantation concessions. The initial step that can be taken is to improve the number, distribution, and age composition of the sago plant population through a community sago forest arrangement activity, in addition, in increasing sago productions, expansion of sago planting must be carried out in potential areas.

Sago processing business is one type of agricultural sector business that has considerable potential to support people well-being. Based on statistical data, the potential land that can be developed as sago planting land reaches 3,107.70 Ha. Of the total potential for sago cultivation development, 1,710.14 Ha has been used for sago plantation with a production of 2,971.62 tons/year and a productivity of 1,737.29 kg/Ha (BPS Kabupaten Konawe, 2019).

Although sago processing has been developed for a long time by some processors, the population engaged in this sector is ironically still living in low socio-economic condition, due to several things, including suboptimal allocation of production factors utilization or agricultural resources in the sago processing business. The results of such sago processing greatly affect the fluctuations or declines in production, quality and productivity as well as farmers' income.

In the implementation of sago processing business, each processor expects success in their business, one of the parameters that can be used to measure a business success is the level of profit obtained by utilizing production factors efficiently. The combination of production factors utilization in every business is an absolute requirement for profit (Yamin et al., 2018).

According to the description above, challenges occupied based on the technical and socio-economic aspects are the quality and quantity of production improvement in the sago processing business to achieve maximum income for sago processors (Suharsono & Rusdin, 2010). On the other hand, sago processing activities can expand business opportunities and employment opportunities ranging from the production process to the marketing of sago starch. Considering these, attention needs to be directed to increase sago starch production, income and efficiency in carrying out sago processing.

Every entrepreneur running business has a goal to get the maximum profit by maximizing revenue, minimizing costs and maximizing sales (Sari et al., 2017). The sago agroindustry in Konawe Regency is generally a household scale

industry which should also pay attention to these things. However, in reality, entrepreneurs often lack.

Based on the background and problem formulation stated, this study aimed (1) to determine the level of income of the Sago Agroindustry Business in Konawe Regency and (2) to analyze development strategy for sago agroindustry in Konawe Regency.

The urgencies of this study were to evaluate the level of income and establish development strategy for sago agroindustry in one of the largest producers in the regency. This research supports the Research Strategic Plan of the Sembilanbelas November Kolaka University in the field of economics and food self-sufficiency.

2. Theoretical Underpinning

The development of agro-industry is believed to have an impact on the creation of the widest possible employment opportunities as well as creating equitable development. Admit it or not, the Indonesian economy now has a crucial problem in terms of unemployment and poverty. The weak point of our economy is the immobility of the real sector so that job opportunities are limited (Hidrawati et al., 2020; Sasmita et al., 2022). In fact, most of the poor are in this sector, especially agriculture in a broad sense. To overcome this, it takes courage to make a strategic breakthrough, namely to make agro-industry as an economic locomotive to attract other sectors. As is known, the comparative advantage of the Indonesian economy is the huge potential of renewable natural resources and the experience of agro-industry as the savior of our economy during the crisis

According to Prasetya et al. (2019), agro-industry development needs to begin with the preparation of competent human resources in accordance with their respective positions and functions, including elements of the agricultural community at the most basic strata, namely farmers who will supply the raw materials. The conception of agro-industry development with the people (or inclusive) places this stage as the foundation. Therefore, it must be made sturdy so that the agro-industry building on it can stand stably and can continue to grow. The next step is to increase the adoption of technology in the production process and other agro-industrial activities. This step means that the development agency must be able to supply the technology

according to the needs and the user agency needs to increase its adoption capacity. Human capital that has been prepared in the previous stage will be an important capital for the success of this technology adoption stage. The increased adoption of technology is expected to increase the productivity and quality of Indonesian agro-industry products, so that they are ready to compete in the free market, so that in the next stage it is necessary to increase sensitivity or sensitivity to market demand. Indonesian agro-industry at this stage is already market-oriented.

In order for the sago agroindustry to survive and develop, strategies are needed that are prepared by taking into account the internal and external environment of the company. To analyze the prospect of a company, the SWOT analysis approach will be used. SWOT is an acronym for strengths, weaknesses, opportunities, and threats (threats). The SWOT analysis contains an evaluation of the company's internal factors in the form of strengths and weaknesses and external factors in the form of opportunities and threats. The results of the analysis obtained will map the company's position to its environment and provide an appropriate general strategy choice, as well as be used as the basis for setting organizational goals for the next 3-5 years to meet the needs and expectations of stakeholders (Kurnia & Al-Irsyadsyah, 2017; Sasmita et al., 2022; Prihantini et al., 2022).

SWOT analysis is a qualitative analysis and identification of various factors systematically to formulate company strategy. This analysis is based on logic that can maximize strengths and opportunities, but at the same time minimize weaknesses and threats. The strategic decision-making process is always related to the development of the company's mission, goals, strategies and policies (Herdhiansyah & Asriani, 2018). Thus the strategic must analyze the company's strategic factors (strengths, weaknesses, opportunities and threats) in the current conditions. This is called situation analysis. The most popular model is the SWOT analysis (Rangkuti, 2007).

3. Research Methods

The selected research location is in Konawe Regency, Southeast Sulawesi Province. The determination of research location was carried out purposively based on the consideration that the Ameroro Region in Konawe Regency is one of the largest sago-

producing centers in the regency. The research was conducted from January to July 2022.

3.1. Data and Information Collection

The data collected are primary data and secondary data. Primary data were obtained directly through observation and interviews with respondents using a list of questions (questionnaires) that were made beforehand. Determination of respondents was done by census. The census research method is a research method in which data is collected from the entire population in the research area (Sugiyono, 2010). The respondents were all sago agroindustry entrepreneurs in Ameroro Village, Konawe Regency, with a total of 50 people. The questionnaire method is a way of collecting data by providing a list of questions to respondents to fill in with the aim of obtaining information relevant to research with high validity. The questions list can be open-ended questions, if the answers are not predetermined and respondents are given full freedom to provide answers, or closed questions, if alternative answers have been prepared (Kusnandar et al., 2016).

Meanwhile, secondary data collection was carried out by means of documentation, namely collecting the necessary records or data according to the research conducted at the relevant service/office/agencies or institutions. The data collected was obtained from the Central Bureau of Statistics of Konawe Regency, the Office of Industry, Trade, Energy and Mineral Resources of Konawe Regency, and other institutions and agencies related to this research.

3.2. Sampling Method

Sampling in this study was performed by using purposive sampling and total sampling. Purposive sampling is a technique for determining samples with certain considerations or taking samples that are adjusted to answer the aims and objectives of the study by considering certain criteria. The sampling method used is total sampling that means the sample used is the total population. This method is allowed for small population so that all can be used as study sample. The use of the total population is expected to represent the existing facts (Sugiyono, 2010).

3.3. Data Processing and Analysis

3.3.1. Analysis of Sago Agroindustry Revenues

Level of income or profits obtained by the sago agroindustry is calculated following the bellow formula (Soekartawi, 1995).

$$\pi = TR - TC \quad (1)$$

$$T = P \times Q \quad (2)$$

$$T = T_{fixed} + T_{variable} \quad (3)$$

Description:

- π = Income earned (IDR)
- TR = Total farmer income (IDR)
- TC = Total cost (IDR)
- TFC = Total fixed cost (IDR)
- TVC = Total variable cost (IDR)

3.3.2. SWOT analysis

SWOT analysis was used to create Konawe Regency sago agroindustry development strategy. SWOT analysis is a classic strategic planning instrument. Using a framework of strengths and weaknesses along external opportunities and threats, this instrument provides a simple way to estimate the best way to implement a strategy. This instrument helps planners to realize what can be achieved, and what things need to focus on. An estimate of internal capacity can be used to help identify the position of project or organization currently in: resources that can be utilized immediately and problems that have not yet been resolved. By doing this we can identify where/when new resources, skills or new partners will be required. While estimates of the external environment tend to focus on what happens outside the organization. SWOT analysis only describes the situation that occurs not as a problem solver as shown in Table 1.

Table 1. SWOT Matrix

	Strength (S)	Weakness (W)
Opportunity (O)	S-O Strategy Creating strategies that use strengths to take advantage of opportunities	W-O Strategy Creating strategies that minimize weaknesses to take advantage of opportunities
Threat (T)	S-T Strategy Creating strategies that use strengths to address threats	W-T Strategy Creating strategies that minimize weaknesses and avoid threats

SWOT analysis is a method to describe the conditions and evaluate a problem, project or business concept based on internal (inside) and external (external) factors, namely Strengths, Weaknesses, Opportunities and Threats. This method is often used in business evaluation methods to find strategies that can be possibly carried out.

4. Results and Discussion

4.1. Sago Processing Business Income Analysis

The sago processing business income is derived from the difference between revenue and costs, namely fixed costs and variable costs. Revenue from the sago processing business is calculated from the sale of sago starch to consumers in a month. Income analysis aims to describe a business condition in the present and

in the future from an activity that has been planned whether its implementation is successful or not. An overview of sago processing business income is presented in Table 2.

Table 2 shows that the average monthly income of sago processing business is IDR 24,154,240 by multiplying the average sago production quantity by 7,520 kilograms and the average price of sago of IDR 3,212 per kilogram. Total costs (fixed costs + variable costs) are IDR 9,948,470, so that the sago processor receives IDR 14,205,770 a month for processing sago.

Table 2. Average Monthly Income of Sago Agroindustry, 2021

No	Income Structure	Value
(1)	Revenue (IDR/month)	24,154,240
a	axb Average Sago Production	7,520
b	Quantity (Kg)	3,212

No	Income Structure	Value
	Average Price of Sago (IDR /Kg)	
(2)	Cost (IDR/month)	
a	<i>Variable cost</i>	9,291,523
b	<i>Fixed cost</i>	656,947
	Total cost a + b	9,948,470
(3)	Income 1-2 (IDR/month)	14,205,770

4.2. SWOT Analysis

SWOT analysis is an analytical tool that describes how to formulate alternative strategies by synchronizing external opportunities and threats combined with internal strengths and weaknesses, so that a strategy that is relevant to internal and external conditions can be created. According to Chan (2011) SWOT analysis uses strengths in overcoming weaknesses, and takes advantage of every opportunity by removing all threats so that the company will obtain alternative strategies. The stages of sago agroindustry business development strategy formulation using SWOT analysis include:

a. Input Stage

The input stage is the first stage in the strategy formulation process. This stage analyzes the strengths, weaknesses, opportunities, and threats of the sago agro-industry business which are extracted from the internal and external environment analysis. Furthermore, quantitative analysis is carried out on these factors to determine the company's ability to utilize internal strengths and external opportunities, as well as the company's ability to minimize the impact of internal weaknesses and external threats. The quantitative analysis tool used is the Internal Factor Evaluation (IFE) matrix for the strength and weakness factors, and the External Factor Evaluation (EFE) matrix for the opportunities and threats factors.

1) Identification of Strengths and Weaknesses

Internal factors identification will provide strengths and weaknesses of the sago agroindustry. Strengths and weaknesses determine whether the sago agroindustry is able to take advantage of existing opportunities while avoiding threats. An internal factor is called a strength if it provides a competitive advantage for the sago agro-industry business compared to other agro-industry businesses in the same industry. An internal factor is called a weakness

if there is something that the sago agroindustry could not manage well or does not have the capacity to perform it while competitors already have the said capacity. The factors of strength and weakness of sago agroindustry are:

Strengths:

- 1) Extensive Sago Land
- 2) Age of Productive Sago Processors
- 3) Plenty of water sources
- 4) High availability of raw materials
- 5) High Demand for Sago Flour

Weaknesses:

- 1) Complicated sago nursery
- 2) Using Semi Mechanical Equipment
- 3) Unmaintained hygiene
- 4) Conventional packing
- 5) Production and Financial Management has not been maximized

2) Identification of Opportunities and Threats

External environment identification of the sago agroindustry will show the opportunity and threat factors. Opportunity is a desired or preferred situation in the organizational environment. Threats are barriers to the position expected by the organization and are the most disliked situations in the organizational environment.

Opportunities:

- 1) Local Government Policy
- 2) Government Assistance Program
- 3) Wide market share
- 4) Product diversification
- 5) University Assistance
- 6) Development of kapurung home business

Threats:

- 1) Land conversion
- 2) Price fluctuation
- 3) Weather changes
- 4) Switch profession
- 5) Substitution of processed sago products

3) Internal Factor Evaluation (IFE) Matrix

Internal factors identification of the Sago Agroindustry Business resulted in a number of strategic internal factors in the form of company strengths and weaknesses. After that, each of these factors is weighted and rated by each respondent. The weight of questionnaire answer is formulated in the Internal Factor Evaluation (IFE) matrix. The total IFE obtained is 3.24, indicating the internal condition of the Sago Agroindustry Business in Table 3.

Table 3. Matrix Analysis of Internal Factor Evaluation (IFE)

Key Internal Factors	Weight (A)	Rating (B)	AxB
Strength			
1. Extensive Sago Land	0.13	3.75	0.49
2. Age of Productive Sago Processors	0.10	3.50	0.35
3. Plenty of Water Sources	0.10	3.50	0.35
4. High Availability of Raw Materials	0.09	3.00	0.27
5. High Demand for Sago Flour	0.09	3.25	0.29
Weakness			
1. Sago nurseries are complicated	0.12	3.00	0.36
2. Using Semi-Mechanical Equipment	0.11	3.00	0.33
3. Hygiene has not been maintained	0.10	3.00	0.30
4. Conventional packing	0.08	3.10	0.25
5. Production and Financial Management has not been maximized	0.08	3.20	0.26
Total	1		3.24

4) External Factor Evaluation (EFE) Matrix

The results of external factors identification are formulated to External Factor Evaluation (EFE) matrix. The EFE matrix

produces a total EFE score of 2.89. This indicates that the situation that occurs outside the Sago Agroindustry Business still tends to have a moderate impact on the Business and can be seen in Table 4.

Table 4. Analysis of the External Factor Evaluation (EFE) Matrix

Key External Factors	Weight (A)	Rating (B)	AxB
Opportunity			
1. Local Government Policy	0.11	3.20	0.35
2. Government Assistance Program	0.11	3.00	0.33
3. Wide market share	0.10	3.00	0.30
4. Product Diversification	0.08	2.75	0.22
5. University Assistance	0.07	2.70	0.19
6. Development of <i>kapurung</i> home business	0.06	2.50	0.15
Threat			
1. Land conversion	0.09	3.00	0.27
2. Price fluctuation	0.08	3.00	0.24
3. Changes in the weather	0.08	3.00	0.24
4. Change profession	0.08	2.60	0.21
5. Substitution of processed sago products	0.07	2.80	0.20
Total	1.00		2.89

b. Matching Stage

The matching stage is the second stage of the strategy formulation process. The results obtained from the input stage are used as the material for the matching stage. The results of the IFE and EFE matrices analysis was weighted total value that were matched with the Internal-External (I-E) matrix analysis, while the internal and external strategic factors were matched with a SWOT analysis. The result of the matching stage can be used as alternative strategy by the Sago Agroindustry Business.

1) Internal-External Matrix (I-E)

The I-E matrix is used to determine the position of the Sago Agroindustry Business. By knowing this position, it will facilitate the process of choosing a strategy that refers to internal strengths and external opportunities. Based on the IFE matrix, Sago Agroindustry has a total weighted value of 3.24, while based on the EFE matrix of 2.89. The I-E matrix can be seen in Figure 1.

The I-E matrix above shows that the current position of the Sago Agroindustry Business is in cell/quadrant IV, namely Grow and

Build. The most suitable strategy in this cell is an intensive strategy to improve the company's competitive position with existing products. This intensive strategy group includes: 1) market penetration strategies to increase the market share of existing products in the current market through more aggressive marketing efforts, 2) market development to introduce existing products to new market, and 3) product development to increase sales by improving or modifying existing products. In addition, in cell IV there is an integrative strategy, namely 1) forward integration is a strategy carried out by gaining control over distribution channels, 2) backward

integration is used by gaining ownership or increasing control over the supplier companies, and 3) horizontal integration leading to a strategy that gain ownership of or increase control over a competing firm. These strategies can be an option for the Sago Agroindustry Business. The Sago Agroindustry Business must analyze the choice of these strategies in order to obtain the most appropriate strategy to achieve the objectives which suitable with the internal and external conditions of the Sago Agroindustry Business. The strategies that have been mentioned are general strategies, so to obtain more specific strategy, a SWOT analysis is used.

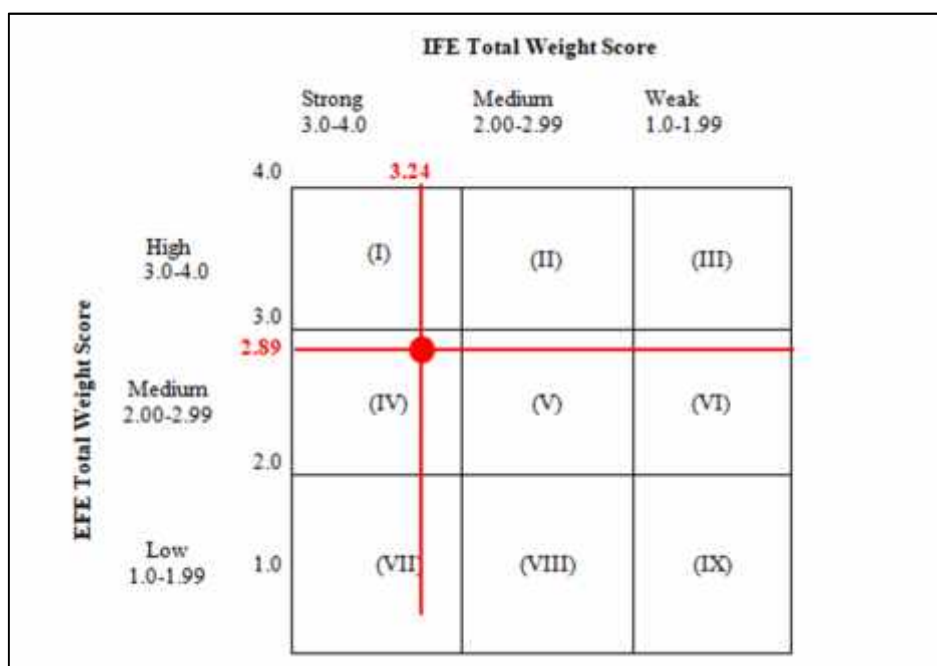


Figure 1. I-E Matrix with the Position of the Sago Agroindustry Business

2) **SWOT Matrix**

SWOT analysis is an analytical tool that describes how company management can formulate alternative strategies by matching external opportunities and threats with the company's strengths and weaknesses. Thus, a strategy will be formed in accordance with the company's internal and external conditions. There are four alternative strategies in SWOT

analysis, namely a strategy that matches strengths with opportunities (SO), strengths with threats (ST), weaknesses with opportunities (WO), and weaknesses with threats (WT). Based on a SWOT analysis of the strengths, weaknesses, threats and opportunities of the Sago Agroindustry Business, the SWOT matrix to formulate Sago Agroindustry Business strategy is described in Table 5.

Table 5. Sago Agroindustry SWOT Matrix

STRENGTHS (S)		WEAKNESSES (W)	
1.	Extensive Sago Land	1.	Sago nurseries are complicated
2.	Age of Productive Sago Processors	2.	Using Semi-Mechanical Equipment
3.	Plenty of water sources	3.	Unmaintained hygiene
4.	High availability of raw	4.	Conventional packing

	STRENGTHS (S)	WEAKNESSES (W)
	materials 5. High Demand for Sage Flour	5. Production and Financial Management has not been maximized
OPPORTUNITIES (O)	SO STRATEGY	WO STRATEGY
1. Local Government Policy 2. Government Assistance Program 3. Wide market share 4. Product diversification 5. University Assistance 6. Development of <i>kapurung</i> home business	1. Increased production of sago raw materials (S1;S2;S3=O1;O2;O5) 2. Increased production of Processed Sago (S2;S4;S5=O2;O3;O4;O5) 3. Expansion of the marketing area for Processed Sago (S4;S5=O3;O4;O6)	1. Technical Guidance Program for Sago Breeding (W1=O1;O2;O5) 2. Modernization of sago production and packaging equipment (W2;W3;W4=O1;O2;O5;) 3. Packaging and labeling of processed sago products (W3;W4=O2;O3;O4;O5) 4. Production management and financial training program for sago agroindustry (W5=O2;O5;O6)
THREATS (T)	ST STRATEGY	WT STRATEGY
1. Land conversion 2. Price fluctuation 3. Weather changes 4. Switch professions 5. Substitution of processed sago products	1. Policy making on sago land conversion (S1=T1) 2. Formulation of Lowest and Highest Price Policy for sago processed products (S2;S4;S5=T2;T3;T5)	1. Preparation of Partnership Programs between Sago Agroindustry, Local Governments and Universities in solving sago agroindustry problems (W1-W5=T1-T5)

Based on the Sago Agroindustry SWOT Matrix Table, the strategy formulation resulted in 10 main strategies which were grouped into four Strategy groups, including:

a) S-O (STRENGTHS- OPPORTUNITIES) Strategy

- i. Increased production of sago raw materials (Using Strengths 1; Strengths 2; Strengths 3 and Opportunities 1; Opportunities 2; Opportunities 5)
- ii. Increased in Sago Processed production (Using Strengths 2; Strengths 4; Strengths 5 and Opportunities 2; Opportunities 3; Opportunities 4; Opportunities 5)
- iii. Expansion of the marketing area for Processed Sago (Using Strengths 4; Strengths 5 and Opportunities 3; Opportunities 4; Opportunities 6)

b) W-O (WEAKNESSES- OPPORTUNITIES) Strategy

- i. Sago Nursery Technical Guidance Program (Using Weaknesses 1 and Opportunities 1; Opportunities 2; Opportunities 5)
- ii. Modernization of sago production and packaging equipment (Using Weaknesses 2; Weaknesses 3; Weaknesses 4 and

- Opportunities 1; Opportunities 2; Opportunities 5)
- iii. Packaging and Labeling of processed sago products (Using Weaknesses 3; Weaknesses 4 and Opportunities 2; Opportunities 3; Opportunities 4; Opportunities 5)
- iv. Production and financial management training program for sago agroindustry (Using Weaknesses 5 and Opportunities 2; Opportunities 5; Opportunities 6)

c) S-T (STRENGTHS-THREATS) Strategy

- i. Policy making for sago land conversion (Using Strengths 1 and Threats 1)
- ii. Formulation of Lowest and Highest Price Policy for sago processed products (Using Strengths 2; Strengths 4; Strengths 5 and Threats 2; Threats 3; Threats 5)

d) W-T (WEAKNESSES - THREATS) Strategy

Preparation of Partnership Programs between Sago Agroindustry, Local Governments and Universities in solving sago agroindustry problems (Using Weaknesses 1; Weaknesses 2; Weaknesses 3; Weaknesses 4; Weaknesses 5 and Threats 1; Threats 2; Threats 3; Threats 4; Threats 5).

The formulation of a SWOT strategy obtains four groups of strategies which then be formulated into some of the most relevant strategies and similar strategies are combined in the selected alternative strategy. The selected strategies are arranged based on the priority order of implementation and conduct in the Sago Agroindustry, while the sequence of strategies includes:

- a. Strategy I: Training program on packaging and labeling of processed sago products.
- b. Strategy II: Increasing sago production and marketing area.
- c. Strategy III: Sago nursery training program, production management and financial management of sago agroindustry.
- d. Strategy IV: Policy making on land use change and the lowest-highest price of sago.
- e. Strategy V: Preparation of Partnership Programs between Sago Agroindustry, Local Governments and Universities in solving sago agroindustry problems.

5. Conclusion

The monthly income level of sago agroindustry in Konawe Regency is Rp 14,205,770.00 per month of sago processing. The analysis results of Konawe Regency's sago agroindustry development strategy are five core strategies with a focus on packaging and labeling, sago production and marketing, training in seedling and management of sago agroindustry, land conversion policy and sago price policy, and partnership programs for sago agroindustry.

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