The Developing Prospect of Sago Noodle Agroindustry in Maluku Province
(Case Study in Tulehu Village, Salahutu District, Central Maluku Regency, Maluku Province)

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Abstract - The Objectives of research were to analyze the internal and external factors carrying capacity of the developing of sago noodles agroindustry in Tulehu village, to analyze the business feasibility of sago noodle agroindustry in Tulehu village, and to analyze the developing strategies of sago noodle agroindustry in Tulehu village. The analysis methods used in this research were the analysis of internal and external factor carrying capacity with direct observation in the field, direct interview using questionnaires with various parties related to the developing of sago noodle agroindustry, the analysis of sago noodle agroindustry feasibility with four investment appraisal methods namely Net Present Value (NPV) analysis, Internal Rate of Return (IRR) analysis, Benefit cost ratio (Net B/C) analysis and Pay Back Period at 13.5 % of SDR, and the analysis of sago noodle agroindustry developing strategies in Maluku Province using SWOT analysis. The results of the research showed that there are 10 internal strategic factors as strength and weakness factors and 10 external strategic factors as opportunity and threats factors in the developing of sago noodle agroindustry in Tulehu village. The result of business feasibility analysis of sago noodle agroindustry showed that the developing of sago noodle agroindustry is viable. Then, SWOT analysis was done based on the identification of results from internal and external factors and the feasibility analysis of sago noodle agroindustry. SWOT analysis showed that there are 12 strategies that can be carried out in the developing of sago noodle agroindustry grand strategy in the future. The primary strategy is publication and socialization of feasibility analysis of sago noodle agroindustry in Tulehu village.

Keywords - Developing Prospect; Noodle Agroindustry; Sago.

I. INTRODUCTION
A. Background
Agroindustry activities as an integral part of agricultural sector have crucial contribution to the industrialization process (Suryana, 2004). The developing of agroindustry is not only aims to increase food quantity and food product types available in the market, but also aims to increase the economic income of community through the increasing of raw materials production and added value, to create employment as well as to increase the economy of the region.

The developing of agroindustry in order to increase villagers’ income is usually conducted using three patterns, that are: (1) agroindustry is integrated directly with family farming, (2) agroindustry is integrated directly with agricultural company and (3) agroindustry is located in rural areas. Food agroindustry is expected can produce product
with high added value particularly practical fast food products and can consider the quality problems (Lukminto, 2004). The other factors should be considered are the reachable product price, closer location to consumers, comfortable shopping centers and a better presentation (Ibrahim, 1997).

Masyrofie (1996) in Gumbira (2003), suggested that the role of agroindustry in the future is expected will reduce the problem of poverty and unemployment as well as to drive the rural industrialization. The positive impact of growing and developing agroindustries in rural areas is to open cooperation between one village with other villages or with the city so as to provide opportunities for the villagers to obtain a uniform income. Contribution and the role of agroindustry to the national economy according to Soekartawi (2005) is realized in the form of: 1) the creation of employment by giving life to most of the Indonesian people who work in agriculture, 2) the enchancement of the quality of agricultural products to ensure the procurement of raw materials of agricultural processing industry, 3) the realization of equitable development in various places of the country that has large agricultural potential, particularly in places outside Java Island, 4) the encouragement of the creation of agricultural commodity exports and 5) the enchancement of agricultural product added value.

One of a well developed food agroindustry is noodle agroindustry. Noodles are food product fond by various people from urban areas to rural areas. A certain phenomenon occured that noodles are consumed by all community level; old-young, without considering sex types, education level and income. This is caused not only because of its delicious taste but also the practical way of presentation. Noodle products can be presented in various cooking forms that can be sold as snacks in roadside and in luxurious restaurant.

**B. Problem Formulation**

The demand of noodles as a food product is more increasing along with the rapid growth of population. It means that the import of wheat product becomes greater because the majority of noodles traded in the market are wheat noodles. However, noodles also can be made from sago starch. If sago noodle business can be develop, the dependence to wheat import can be decreased, value added can be created and the employment can be initiated for the sago producer communities.

Tulehu village is one of sago producer villages in Maluku province as well as a model village of sago flour processing. However, the developing of sago flour to be sago noodles is poor developed due to various factors either in production level or in marketing level. Therefore, the investigation about the developing prospect of sago noodle agroindustry has to be done to find the solution and to push the developing of sago noodle agroindustry in Tulehu village.

Talking about the developing prospect of a business in a place, it means that we are talking about two things: potency and opportunity. Potency is strongly related to the factors affecting the business or internal factors of business location area such as: (1) natural resource condition, (2) business environment, (3) related and supporting industries, (4) domestic demand, and (5) labor factors, whereas opportunity is related to factors outside the internal factors or known as external factors such as price and demand in world markets or outside the region (Bappenas (2004) and Joesron (2001)).

According to Gittinger (1986), internal factors of development area or business location are the dominant factors that determine the success or failure of a business development. Factors that need to be considered in the selection of business location are factors that are owned of the location (internal factors), such as: geographical conditions, climate, availability of inputs and output markets, related industrial activities or support, infrastructure and socio-cultural aspects of local communities. Tarigan (2005) also states that the factors that need to be considered in the selection of business location are the availability of raw materials, labor wages, security guarantees, infrastructure, local market absorption and market accessibility, and local government policies.

The carrying capacity of internal factors in a region such as availability of production inputs, supportive government policies and local markets greatly affect the feasibility of business in that region, or it can be said that business feasibility in a region is a description of the carrying capacity of internal factors to the business. Generally there are two types of analysis used in assessing the feasibility of a business: economic analysis and financial analysis. Thing that should be considered in the economic analysis is the benefit given by a business to the economy as a whole (the social return), while in the financial analysis is the benefit given by a business for the parties directly involved in the business (the private return).

According to Kotler (1997), the results of analysis of internal and external factors can be used to determine the
position and to strategize future business development. Strategy is a tool for achieving business objectives in relation to long-term objectives, programs and resource allocation priorities (Chandler, 1962 in Rangkuti, 2006). Furthermore, according to Porter (1998), strategy is an important tool to gain competitive advantage.

The study of Sudiarta et al (2014) on: “Analysis of Factors Affecting the Performance of Micro Small and Medium Enterprises (UMKM) In Bangli District using internal and external factor analysis shows that internal factors such as marketing, capital access, entrepreneurship skills, human resources, financial knowledge and business plan are the most dominant factors affecting the performance of MSMEs.

A good business development strategy comes from good strategic planning, which is a process of analysis, formulation and evaluation of strategies, where the main objective of strategic planning is to seek conformity of business activities with internal-external conditions affecting business development. Thus, strategy in developing a business is important to gain competitive advantage and to produce output in accordance with market demand with optimal support from existing resources (Rangkuti, 2006).

Strategic evaluation is important because organizations face a dynamic environment in which the major external and internal factors change rapidly. Strategy evaluations include three main activities (David, 2010): investigation of the underlying foundations of the company strategy, expected outcome comparison with actual results, corrective action to ensure that performance is in line with the plan. Evaluation of the strategy becomes more difficult as time passes, due to: 1. Increased complexity of dynamic environment, 2. Increasingly difficult to predict the future accurately, 3. Increasing the number of variables, 4. Fast aging of product life even for the best design, 5. The increasing number of events within and outside the country that affect the company, 6. Less time-span to run the plan with a certain degree of certainty.

This research aimed to analyze the carrying capacity of internal and external factor of the developing of sago noodle agroindustry in Tulehu village, to analyze the business feasibility of sago noodle agroindustry in Tulehu village, and to analyze the developing strategies of sago noodle agroindustry in Tulehu village.

II. METHODOLOGY OF RESEARCH

A. Place and Time

This research was located in the central Maluku district, Maluku province. The selection of research site was conducted purposively by considering Maluku province as one of sago noodle developing project sites and has the abundant availability of sago raw materials in Maluku province. Research was conducted for a month in December 2016.

B. Location and Sample

The study was located in Tulehu village Salahutu District Central Maluku Regency, Maluku Province. Site selection was done purposively (purposive sampling) with the consideration that Tulehu village is one of the locations of sago flour development project and has a considerable availability of raw materials.

The sample collection of sago noodle businessmen was as many as five households. The collection of internal and external factor decisive respondents was as many as six respondents who are highly competent in understanding the research problems.

C. Data Analysis Technique

The type of data used in this research was cross section data consist of qualitative and quantitative data. The sources of data used were primary data sources and secondary data sources. Primary data sources were obtained from direct observation and depth interview with selected respondents while secondary data sources were obtained through literature review and data from institutions related to this investigation (Neuman, 2003).

The same condition was also applied by Ngumar et al (2006) in the study of Economic Support Capacity of the Region Against Industrial Development of Bangkalan Regency conducted exploratively with survey approach, to collect primary and secondary data.

The sample in this research is representation of related industry actors (stakeholders) in East Java Province particularly Bangkalan Regency which is directly involved in all or part of the activity. Social studies that examine the aspects of community behavior, by observing the sample of objects that represent the target population based on the object of research in accordance with the needs of research will be effective and efficient both in terms of time, cost and energy.
Collected data then was processed, analyzed, and presented in the form of tabulation. The analysis methods used in this research were the analysis of the carrying capacity of internal and external factors, the analysis of sago noodle agroindustry and the analysis of sago noodle agroindustry developing strategies in Maluku Province.

The identification analysis of internal and external factor can explain the phenomenon that cannot be explained quantitatively. The identification analysis of internal factors can describe the situation of a region or business descriptively where there were two internal factors determined the feasibility and competition position: strengths and weaknesses, while the analysis of external environment was needed to investigate factors that can provide opportunities and threats to the developing of a business. This analysis was done through direct observation with various parties related to the developing of sago noodle agroindustry using questionnaire.

In order to investigate the economic and financial performance of sago noodle agroindustry, DCF analysis was used with 4 investment appraisal methods that are NPV, IRR, Net B/C and PBP at 13.5% of SDR, with decision criteria: 1) NPV > 0 (sago noodle agroindustry is feasible to conduct), 2) B/C > 1 (sago noodle agroindustry is feasible to conduct), 3) IRR > i (sago noodle agroindustry is feasible to conduct), 2) PBP ≤ n (sago noodle agroindustry is feasible to conduct).

In order to examine and to determine the developing strategies of sago noodle agroindustry in Maluku Province, SWOT analysis was used. SWOT matrix was compiled based on FGD results of internal and external factor determinant respondents. The developing strategies of sago noodle agroindustry, related to internal and external factor situation then was compiled based on that matrix.

III. RESULTS AND DISCUSSION

A. The Carrying Capacity of Internal and external factors in the developing of sago noodle agroindustry in Tulehu village

According to Kotler (1997) the carrying capacity of internal-external factors will determine the feasibility position, competition, opportunity and threat position in the developing of a business in a location. The analysis of internal and external factor matrix evaluation is a common analysis used to find out internal and external strategic factors as carrying capacity of the developing of sago noodle agroindustry in Tulehu village. The preliminary step of this matrix analysis was the factor identification based on literature review, the feasibility analysis of sago noodle agroindustry attached in questionnaire and interview with several prominent figures (the internal and external factor determinant respondents) that were believed familiar with the sago noodle agroindustry characteristics and were involved directly in the developing activities of sago noodle agroindustry. From the identification results, it can be seen that there are 10 internal strategic factors as strength and weakness factors and 10 external strategic factors as opportunity and threat factors in the developing of sago noodle agroindustry, as can be seen in Table 1.

<table>
<thead>
<tr>
<th>Internal factors</th>
<th>External factors</th>
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<tbody>
<tr>
<td><strong>Strength factors</strong></td>
<td><strong>Opportunity factors</strong></td>
</tr>
<tr>
<td>1. Raw material availability</td>
<td>1. Regional legislation about sago and food security committee program</td>
</tr>
<tr>
<td>2. Existing institutional group of sago producer</td>
<td>2. High market potential</td>
</tr>
<tr>
<td>3. Strategic developing location</td>
<td>3. Technology availability</td>
</tr>
<tr>
<td>4. Infrastructure availability</td>
<td>4. Partnership opportunities</td>
</tr>
<tr>
<td><strong>Weakness factors</strong></td>
<td><strong>Threat factors</strong></td>
</tr>
<tr>
<td>1. Raw material characteristics</td>
<td>1. The Low popularity of products</td>
</tr>
<tr>
<td>2. Limited skills and management of sago producer group</td>
<td>2. The competitor of the same products with the same or different raw materials</td>
</tr>
<tr>
<td>3. Social cultural of community</td>
<td>3. high product standardization</td>
</tr>
<tr>
<td>4. Limited business financial capital</td>
<td>4. Politics and safety (opinión)</td>
</tr>
<tr>
<td>5. Poor institutional group of sago producer</td>
<td>5. The damage of sago forests</td>
</tr>
</tbody>
</table>
6. Feasibility study of sago noodle agroindustry is not conducted yet.

Source: The responses of internal and external determinant respondents in the developing of sago noodle agroindustry in Tulehu village. Primary data analysis result 2016

Strength factors are internal strategic factors as strength in the developing of sago noodle agroindustry in Tulehu village. Therefore, these factors should be used optimally in the developing of sago noodle agroindustry. There are 4 internal strategic factors as strengths in the developing of sago noodle agroindustry in Tulehu village:

1. **Raw material availability**

   Tulehu village has a widely sago forest approximately 100 ha, with approximately 1500 sago trees and 50% ready to be harvested. Village government has full power to manage those trees. The sago producer groups or farmers who want to purchase sago trees to processed have to pass a procedure. The type of raw materials in the making of sago noodles is dry sago flour. This flour is obtained by drying the wet sago flour. The technology and skills of drying up the sago flour are possessed by the sago producer groups in Tulehu village.

2. **The existing institutional group of sago producers.**

   The institutional group of sago producers in Tulehu village has already attained the age of 2 years old and has 10 groups (each group has 5 members came from the family of the group’s leader). Four groups are the nurtured groups from food security institution through formerly programs and 6 groups are the autonomous group motivated by the existence of food security institution’s programs.

3. **A strategic developing location**

   Tulehu village is said as strategic location in the developing of sago noodle agroindustry because of the closeness either to raw material sources or marketing center. The closer distance to raw material sources will minimize the transport costs while the closer distance to marketing centers will minimize marketing costs.

4. **Infrastructure availability**

   The infrastructure condition in Tulehu village is quite sufficient. It can be seen from better road condition from the processing center to city center or marketing center. Transportation infrastructures are available in quantity and in time either for land and sea transportation or electricity and communication infrastructure.

   The weakness factors are part of internal strategic factors as weaknesses and are the obstacles in the developing of sago noodle agroindustry in Tulehu village. Weakness factors identified as obstacles in the developing of sago noodle agroindustry in Tulehu village are:

1. **Raw material characteristics**

   In general, agricultural products have unique characteristics. This situation causes high cost in handling particularly transportation costs, laborer costs, storage costs, etc (E. Gumbira Said, 2001). Sago noodle raw materials also have unique characteristics that cause high cost in its provisioning and its handling.

   The majority of native people assume that the working of sago processing is no longer interesting because it is not beneficial and it takes long duration. The sago processing work of wet sago flour is mostly done by foreigner from Buton.

2. **Limited skills and management of sago producer groups**

   The success of the developing of economic activities is depend on human resources available both in quantity and quality, or in other words the characteristic of human resources at the sago producer groups particularly for small business determine the character and the development of a business. In general, human resource characteristics of sago producer groups in Tulehu village comprise: business experience, age, formal education, total group members and skill mastery, as seen in Table 2.
Table 2. The characteristic of sago producer group in Tulehu village

<table>
<thead>
<tr>
<th>No.</th>
<th>Sago producer group characteristic</th>
<th>average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Business Experience</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Wet sago flour management</td>
<td>&gt; 10</td>
</tr>
<tr>
<td></td>
<td>- Dry sago flour management</td>
<td>1 – 2</td>
</tr>
<tr>
<td></td>
<td>- Sago noodle management</td>
<td>1 – 2</td>
</tr>
<tr>
<td>2.</td>
<td>Respondents’ age (year)</td>
<td>25 – 45</td>
</tr>
<tr>
<td>3.</td>
<td>Formal education</td>
<td>Junior High School – Senior High School</td>
</tr>
<tr>
<td>4.</td>
<td>Total family members (individual)</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Primary data analysis result, 2016

Business experience of sago producer groups in the processing of wet sago flour is quite long. Clean wet sago flour can be obtained through the programs from food security institution. The management skill of dry sago flour and sago noodle is mastered in the last 2 years but the application in the field is rare due to limited equipments. The applied procedure in making wet sago flour, dry sago flour and sago noodle can be seen in appendix 3-5. Age is a variable that should be identified because it is related to physical strength, experience, skill and positive attitude towards innovation. The younger the respondents’ age, the stronger and the more creative they are as well as the more open minded to new ideas than the older respondents. Therefore, it is easily for them to improve their skills in planning and conducting production activity.

Formal education level is relatively connected with the ability to adopt innovation and to access technology advances. The average education level of respondents is at senior high school level. The lower level of respondents’ education and the distant living location from city center cause the limited access to information, science and technology.

Total family members in sago producer groups to household based entrepreneur are often related to the expectation to obtain labors. The total average of family members is 4-5 people. Sago noodle agroindustry in Maluku Province like the other household businesses utilizes internal family labors.

3. Social cultural of community

The culture of Maluku people that is based on multi commodity plantation with relatively high income level per year causes farmers are more selective in choosing the economic activities and more satisfied with the achievement from plantation or fishery activities. On the other side, Tulehu village are transit area. Thus, the service and trade sector are developed rapidly. This condition affects the low intention to sago processing sector because it needs longer time to generate income and the selling price of sago products is low.

4. Business financial capital

Business financial capital is one obstacle in the developing of a business. If the business needs relatively immense capital, it is difficult to develop the business particularly in the environments of low income farmers (Soekartawi et al, 1986). The necessity of business financial capital can be obtained from various sources. A weak businessman economically uses 2 sources of capital that are: from formal institutions and non formal institutions (Ibrahim, 1997).

5. Poor institutional group of sago producers

The existence and the role of supporting institution is important in creating the business integrity to attain the business developing aims. Institutions such as the association of sago noodle businessmen, sago producer groups, government, cooperation, financial institution, research and development institution, etc in rural area is relatively limited. This condition causes the sago noodle agroindustry in Maluku province is not develop due to the limited transfer of knowledge between groups’ members and limited access to investment and operational cost financing. Nowadays, the majority of sago producer groups are groups formed and motivated by related department in connection with implementation programs and are relatively difficult in accessing their needs to develop their business through related supporting institutions.

6. Feasibility study of sago noodle agroindustry is not conducted yet

Feasibility study of sago noodle with industry scale and household scale is not yet conducted. Thus, the sufficient
information is not available for investor and a business financial capital provider.

Factors believed as opportunities are factors that can be utilized in order to achieve the objectives. From interview results with respondents, there are 5 opportunity factors identified in the developing of sago noodle agroindustry in Tulehu village that are:

1. **Government policy** *(Regional legislation about sago and food security committee program)*.

Policy is government intervention to change producer and consumer behavior. In general, the aim of government policy is the achievement of efficiency, equal distribution, and security. Efficiency is achieved when scarce economic resources can generate maximum income, goods and service allocation can produce high level of consumer satisfaction. Equal distribution means the equal distribution of income and security means the availability of needs at stable and reachable price (Pearson et al., 2005). Government policy related to the developing of sago noodle agroindustry is local food developing as part of food security committee program and Tulehu village is one of the locations of sago noodle agroindustry developing. The implementation of developing program of sago noodle agroindustry in Maluku province is managed by food security committee.

2. **High market potential**

The development of noodle consumption gives lessons that noodles are the type of food conform to the needing and the preference of Indonesian consumers. However, noodle consumption has an opportunity to decrease foreign exchange, because keep in mind noodles are made from wheat flour, an import commodity. Meanwhile, national agricultural development can produce various carbohydrate commodities which have to be utilized particularly in order to provide food for people. Therefore, the developing of noodle technology besides using wheat flour as raw materials is needed. Sago flour is appears to be processed into noodles. Noodles made from sago starch are needed to be developed because have some special quality such as having starch resistant needed for intestine health, having low glycerine index content for diabetic sufferer and for diet people, and not having gluten suitable for autistic sufferer.

3. **Technology availability**

The processing technology of sago noodles are arranged according to series of research results done by Agricultural Post Harvest Research and Development Chamber, Bogor. This research aims to lift the position of sago that is lower than rice or the other food. The raw material availability reaches 27 million ton per year. However, only 350-500 thousand ton of sago starch is utilized each year. In any case, the processing technology of sago noodles is available and the raw materials are abundant so the government promotion and support in utilizing sago as noodle raw material can be develop. On the other side, the role of sago as staple food is increasing and the processing product of sago is various. The processing technology of sago noodles is available at BKP Maluku and is applied to sago producer groups. However, the autonomous application by sago producer groups is relatively limited due to the limitation of equipment. The processing technology is relatively simple and easy to learn. The important factor needed to be concerned is the cleanliness of every equipment and material used to provide different color of product and the quality of product.

4. **Partnership opportunity**

Partnership can be built from the processing stage to marketing stage. In the case of sago noodle agroindustry in Tulehu village, sago producer groups are having partnership with CV Putra Sentosa in the processing and product marketing. The sago producer groups provide raw materials while CV Putra Sentosa processes and distributes sago noodles.

5. **Existing micro and middle level business credit scheme**

In order to motivate real sector, government formulates policy to decrease the level of commercial interest and to provide credit scheme for micro and middle level business. The former level of commercial interest is 21 percent decrease to 13.5 percent, while soft credit for micro and middle level business reaches 6 percent. This opportunity cannot be utilized by sago noodle businessmen to develop their business or by other people who want to create new sago noodle agroindustry due to limited information or the difficulties in accessing fund from funding institution.

Threat factors are factors impeding the developing of sago noodle agroindustry in Tulehu village. According to identification results, there are five threat factors to the developing of sago noodle agroindustry in Maluku:

1. **The low popularity of products**

Sago is Maluku people’s staple food. However, it roles tend to decrease and its consumption pattern gradually tend to shift to rice. This is caused by the inferior impression attached to sago. Therefore, the effort to make sago food as
popular food is needed. Sago noodles are widely known in Indonesia such as in West Java, Bogor, Cianjur, Sukabumi and Riau. Sago noodles are known as “pentil noodle” or “Gleser noodle” or “Leor noodle”. However, in the sago producer areas such as Maluku and Papua, sago noodle are not widely known.

2. **The competitor of the same products with the same or different raw materials.**

Wheat noodles are very popular in communities and are strong competitor for sago noodles because its flavor is accustomed with Indonesian tongue or even most people in the world tongue. Creating sago noodles with Indonesian national standard and high quality as well as good food for health is expected can access specific market segment particularly middle and high economic level.

3. **High product standardization**

Quality and quantity standards are often the obstacles in the marketing of agricultural products or agroindustry products. According to Mangunwidjaja (2002), quality standard can be national or international. Quality standard in Indonesia has to meet the Indonesian national standard released by National Standardization Council since 1994. Quality product standardization becomes an obstacle for sago producer groups and sago noodle businessmen because the standardization cost is high. Thus, some products without quality standardization label are having difficulties in accessing specific market particularly middle and high level market segment as well as international segment.

4. **Politics and safety (opinion)**

A stable politic and safety condition is needed in economic activities particularly investment activities. Due to social conflict in Maluku Province in 1998-2002, private investment is relatively low. Today, the politic and safety condition in Maluku is 100 percent recovered. Thus, the opinion about unstable Maluku politic and safety condition must be changed.

5. **The damage of sago forests**

The damage of sago forests is caused by land acquisition for other agricultural land and settlement. The important thing to be considered then is the existence of sago noodle agroindustry will not destroy sago forest due to over exploitation.

1.1. **The business feasibility of sago noodle agroindustry in Tulehu Village**

The analysis of business feasibility is financial analysis. This analysis is more relevant because it reflects autonomous business and gives information about the benefit of sago noodle agroindustry activities to industrialists. Financial analysis was done to investment cost of Rp. 183.82 million, operational cost of Rp. 77.81 million, production capacity of 96000 units per year and product selling price of Rp. 3000 per unit (Appendix 6-8). The analysis result of sago noodle agroindustry financial feasibility in economic age of 10 years and interest rate or social discount rate (SDR) of 13.5 percent shows that the developing of sago noodle agroindustry is feasible.

Table 3. The results of sago noodle agroindustry financial analysis

<table>
<thead>
<tr>
<th>No.</th>
<th>Investment Criteria</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Net Present Value (NPV)</td>
<td>1234.03</td>
</tr>
<tr>
<td>2</td>
<td>Internal Rate of Return (IRR)</td>
<td>52.20%</td>
</tr>
<tr>
<td>3</td>
<td>Benefit Cost Ratio (BCR)</td>
<td>7.71</td>
</tr>
<tr>
<td>4</td>
<td>Pay Back Period (PBP)</td>
<td>2.27</td>
</tr>
</tbody>
</table>

Source: Primary data analysis, 2016

According to Table 3, Net Present Value (NPV) of sago noodle agroindustry is greater than 0 (Rp. 1,234,03 million > 0). Internal Rate of Return (IRR) is greater than Social Discount rate (SDR) of 52.2 percent. Benefit Cost Ratio value (BCR) is greater than 1 (7.71 > 1) and Pay Back Period is smaller than economic age (2.27 years < 10 years).

1.2. **The developing strategy of sago noodle agroindustry in Tulehu village**

According to Christensen in Supriyono (1998: 7), strategy is the pattern of various objectives, basic policies and plans to achieve the goal, formulated in such a way so
that it is clear what business is and will be implemented by
the company now, as well as in the future.

According to identification results of internal and
external factors and the feasibility analysis of sago noodle
business, the SWOT analysis (Appendix 6) was conducted
to compile policy strategy related to the developing of sago
noodle agroindustry in the future such as:

1. S-O strategy is strategy using strengths to utilize
opportunities. There is one strategy namely publication
and socialization of sago noodle agroindustry feasibility analysis.

2. S-T strategy is strategy using strengths to overcome
threats. There are five strategies such as:
   a. The promotion of sago noodle as healthy food
   b. Facilitation of product standardization through
      local government program
   c. Building business partnership including with
      competitor
   d. Creating a healthy investment climate
   e. The exploitation of resources based on market
demand

3. W-O strategy is strategy that minimizes weaknesses to
   utilize opportunities. There are 3 strategies such as:
   a. Socialization of local legislation and food security
      committee program to people.
   b. Facilitation of sago business and management
      workshop for sago producer groups.
   c. Motivating and facilitating sago producer groups to
      form cooperation

4. W-T strategy is strategy that minimizes weaknesses
   and overcomes threats. There are 3 strategies such as:
   a. The entrepreneurship training to sago producer groups
   b. The transparence of program for related parties
   c. Building the groups’ business fund

These strategies will provide maximum results if they
are implemented gradually and based on the needs in the
field. The company’s sensitivity and ability to analyze and to
adapt quickly and appropriately to competitive internal and
external environment changes can strengthen the company’s
performance that slowly and unwittingly can raise the
company.

The success of a defined strategic plan is determined by
the level of strategy conformity with environment changes,
competition, and internal situation of the company so as to
create sustainable competitive advantage.

IV. CONCLUSION

1. Internal-external factor carrying capacity in the
developing of sago noodle agroindustry in Maluku Province is relatively good but it needs a better
management.

2. The feasibility analysis of sago noodle agroindustry
shows that the developing of sago noodle agroindustry in
Tulehu village is feasible.

3. The SWOT analysis shows that there are 12 strategies
that can be implemented in grand strategy of the
developing of sago noodle agroindustry in the future
with primary strategy namely publication and socialization of sago noodle agroindustry feasibility analysis in Tulehu village.

4. It is needed to improve knowledge and performance of
related institution in order to implement the program
based on the aims and potential area.

5. It is needed to build partnership pattern with related
parties, particularly to increase production knowledge
and skills, business financing and product marketing, the
cooperation between institutions to reach the developing
of sago noodle agroindustry’s aims.

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