Business Feasibility Observation Of Sweet Dried Tomato Product
By SWOT Analysis At Giripurno Village, Batu City

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Abstract.

Tomato is one agricultural commodity from Batu City which is so abundant in number. Although the number of products is relatively high, the benefit earned by tomato farmers is still uncertain due to price fluctuation. The other problem is the characteristic of the tomato that easy to get rotten. This condition increases the risk of farmers to get loss. One alternative solution to minimize the risk is processing the tomato as a sweet-dried tomato. Conversely, The sweet dried tomato product is still less popular than the fruit cracker in Batu City. Through the community service program, we help local people to make Strengths, Weaknesses, Opportunities, and Threats (SWOT analysis) to see the prospect of sweet-dried tomatoes. We also recommended some strategies for developing the sweet-dried tomatoes business to the village authority.

I. INTRODUCTION

Giripurno Village, located in Bumi Aji district, Batu City, is a tourism destination in East Java. With an altitude of 700 m, the area has a beautiful mountain and forest view. With this altitude, Bumi Aji has cool weather and potential for agriculture. There are at least 37 vegetable commodities with a competitive advantage from Bumi Aji district. One is tomato (1). The tomatoes from Batu City, including Bumi Aji district, reach 76.745 quintals (2). Compared with the other vegetables, tomato is number four for sequence, after mold, mustard leaves, and carrot. The high of tomato products has its challenge. The price of tomatoes is very fluctuating in the market. The tomato price is sometimes very high, which is the farmer's increased income. But there is a risk of getting lost when the price is depressed. The tomato price fluctuation depends on planting, harvest, and weather. The farmer cannot predict when the price will be high or low. The tomato price depression often happens at harvest time when farmers crop their tomatoes simultaneously. The product is abundant in this situation, but the demand does not increase (3). Tomatoes prices usually increase during bad weather, such as high rain intensity. In this situation, many farmers face crop failure (4). The production of sweet-dried tomatoes becomes one alternative to minimize the risk of the farmer getting lost. In addition, this also becomes a business chance for local people to produce the sweet dried tomato as a special local product. In our previous report, the community service about processing tomatoes to become sweet dried tomatoes had been delivered to Giripurno village people.

Our community service team arranged the socialization, workshop, and assistance for the local community about the procession of sweet dried tomatoes. We also granted the dehydrated fruit machine to Giripurno village-owned enterprise to support the run of the business (5). Although local people already have the skill to produce sweet-dried tomatoes, and we also granted a dehydrated food machine, they are still doubtful about starting the business. On the other side, making sweet dried tomatoes is very potential. The farmer usually gets lost when the tomato price is depressed, but when the people produce sweet dried tomatoes, vice versa. The profit getting increase when the tomato price decrease (6). The location of Bumi aji district near the tourism destination makes this area often visited by people from other cities. It causes an

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increase in the local product souvenir business. So far, fruit crackers become the most popular ones. It has a chance for a sweet dried tomato to compete with the earlier product. Nonetheless, there are always both chances and challenges in every start-up. Most people are focusing on the challenges. Local people are still less motivated to start the business and fear facing the challenges. Analysis of the supporting factor and the obstacle of the business must be delivered to the local people so they have a good understanding of running the business. The analyses include the strengths, weaknesses, opportunities, and threats. It is familiar with the name of SWOT analysis. SWOT analysis is one method to identify the current condition and predict the future of the organization or business.

The SWOT analysis also identifies the main supporting factor, additional supporting factor, neutral factor, and internal or external obstacle (7). The basic components of SWOT analysis are strength, weakness, opportunity, and threat. Strength means the internal attributes and resources that support or benefit the business. The weakness is the internal factors that make the organization difficult to reach its goal or obstruct the process. The opportunity is the external factor that an organization can take advantage of, such as the policy from the local government. The threats are external factors that can harm the business, such as increasing competition and an uncertain supply chain (8).

To understand the potential of sweet dried tomatoes as small enterprises in Giripurno Village, Bumi Aji district, Batu City, the authors did SWOT (Strength, Weakness, Opportunities, and Threats) analysis. From the analysis result, the authors can recommend to the people and local government what strategy should be taken to build the start-up sweet dried tomato. Through this program, we hope the sweet-dried tomatoes business can develop into a real business and compete with other special local products of Batu City. Another purpose is to increase the people's prosperity.

II. METHODS

The community service program has been done at Giripurno village, Bumi Aji district, Batu city east java. The community service team is the lecturer of Universitas Pembangunan Nasional Veteran Jawa Timur, with the partnership BUMDES (a business owned by the village government of Giripurno). Our objects are the Giripurno village community, the farmers, and the housewife organization PKK. The activities were held for six months. The methods of our programs are shown in figure 1.

Figure 1 explains the steps of the community service program with the sequence

1) Field Survey
   The field survey was done to explore the village's potential. The field survey also identifies the people's problems to be solved. A survey is done through direct interviews with local people, village officers, and field observation. The field survey documentation can be seen at figure. 2

2) Data collection
   Data collection was done by resuming the interview result and filed observation result. We also added the data needed from the literature survey. The data collected include the strength or potency to build the start-up and the weaknesses.

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3) Data analysis
   After data was collected, a SWOT analysis was done by mapping all aspects that become the strengths, weaknesses, opportunities, and threats.

4) SWOT Matrix
   The next step from the SWOT analysis data is to make a SWOT matrix. It is used to identify the strategy needed to develop the business. The SWOT matrix is created to have all possible methods to grow the business by considering the strengths, weaknesses, opportunities, and threats. The strategy to be taken will be the viable strategy with the lowest risk.

5) Recommendation and socialization
   The last step in this program is to convey the SWOT analysis results and deliver the recommendation to the village officer about the policy that should be taken to develop the village by the small enterprise, especially sweet-dried tomatoes.

III. RESULT AND DISCUSSION
   3.1 Field Survey Result
   The field survey in the Giripurno village shows that the agriculture in this village is very abundant. Most people cultivate fruits and vegetables. Of all agricultural products, tomatoes are the most fluctuating in price. When the tomato price is depressed, the farmers get a loss. It is because the income is much lower than the cultivation cost. Processing tomatoes into sweet-dried tomatoes can be a possible alternative to reduce the risk potential, especially when the tomato price is low. The workshop to process the tomatoes into sweet dried tomatoes has been done in the author's previous community service report (5). The field survey also surveyed the sweet tomato product taste. People mostly like the taste of sweet-dried tomatoes. The taste of the sweet dried tomatoes is sweet and a little sour. It is like a candy taste. For children who do not like to eat tomatoes, the sweet dried tomato can be the choice for children on consuming the tomatoes. The dried sweet tomatoes can be stored for about 36 days at room temperature (9).

   3.2 SWOT Analysis Result
   The SWOT analysis identifies the sweet-dried tomato business's strengths, weaknesses, opportunities, and threats. The strength is the ability, capability, and resources that support the enterprise of sweet-dried tomatoes. The strength has been identified; the result is shown in Table 1. The weakness is the internal situation where the competency, capability, and resources cannot handle the threat. The identified weakness is also seen in Table 1. The opportunity is the external situation that benefits the sweet-dried tomatoes enterprise. The threat is the aspect that has the potential to make difficulties in business. The opportunities and the threats factors are also present in Table 1.

   **Table 1. The SWOT Analysis Result**

<table>
<thead>
<tr>
<th>Strength</th>
<th>Weakness</th>
</tr>
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<tbody>
<tr>
<td>1. The availability of raw material</td>
<td>1. Have no business legality, such as a license for Home Food industries (PIRT)</td>
</tr>
<tr>
<td>2. The additional material is easy to obtain</td>
<td>2. The Giripurno People have less knowledge about running business</td>
</tr>
<tr>
<td>3. The process is very simple</td>
<td></td>
</tr>
<tr>
<td>4. People in Giripurno village have been trained to make the sweet-drained tomatoes</td>
<td></td>
</tr>
<tr>
<td>5. Having the food dehydrator machine</td>
<td></td>
</tr>
<tr>
<td>6. The village officer supports</td>
<td></td>
</tr>
</tbody>
</table>

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From Table 1, we can see the strength aspect includes the availability of raw materials. As mentioned above, tomatoes product is abundant, so it is easy to obtain. Tomatoes farmers can harvest from their agricultural land. The additional material, such as sugar, is also easy to get. The sweet dried tomatoes taste like candy with a tender texture. Besides being delicious, sweet dried tomatoes are also nutritious. The process of making sweet-dried tomatoes is simple. The problem in producing sweet-dried tomatoes is only in the drying process, which takes about three days by direct sunlight. But, by using a food dehydrator, it takes only 8 hours. Another strength aspect of building the sweet dried tomatoes enterprises is the support from the village officer. The weakness of the sweet dried tomatoes enterprise is people have less knowledge about entrepreneurship. They do not know where to sell their products. The most important disadvantage is that they do have not business legacy yet, such as a Special license for Home Food industries. So the product can not sell widely to the market. The opportunities for the sweet-dried tomato small enterprise to become a developed businesses are a lot. The location near the tourist destination where and the number of tourists in Batu City increases. In 2022, more than 7 million tourists entered Batu City (10). It becomes an opportunity to sell the sweet dried tomatoes product because most tourists buy the local product as souvenirs. The threat to the small sweet-dried tomato enterprise is most local people have less motivation to build the enterprise. It can happen because starting a new business is not easy. They prefer to work as farmers than to make a start-up.

3.3 Matrix SWOT

After knowing the strength, weaknesses, opportunities, and threats in the sweet-dried tomatoes enterprise in Giripurno village, the next step is to make a matrix to develop a strategy to make sweet-dried tomatoes one of the local products in the market. The type of strategies is SO (Strength-opportunities), WO (weakness-opportunities), ST (strength-opportunities), and WT (weakness-threats). The four methods are shown in Table 2.

<table>
<thead>
<tr>
<th>OT</th>
<th>SW</th>
<th>Strength</th>
<th>Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities</td>
<td>1</td>
<td>Improve the product quality</td>
<td>Apply the home-food industry licensed</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Increase the promotion</td>
<td>Improve the entrepreneur’s motivation</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Improve the packaging</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Improve the government support</td>
<td></td>
</tr>
<tr>
<td>Threat</td>
<td>To be more creative in selling product</td>
<td>Collaboration between the tomato farmer and the entrepreneur Creating</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows that many strategies can be implemented to develop small enterprises, especially for starting a small sweet-dried tomato enterprise in Giripurno village. SO (Strength-opportunities) strategy is to optimize all the resources and opportunities as much as possible. The methods arranged with this analysis are: improve the product quality, improve the promotion, improve the packaging, and improve the government support. Giripurno Village has a business unit called Badan Usaha Milik Desa (BUMDES). BUMDES can facilitate the people who want to run the sweet-dried tomato small enterprise. WO Strategy is the strategy of exploiting the opportunity and minimizing the weakness. In this case, overcoming the weaknesses is more important.

Some activities arranged based on this strategy, such as registering the product for the home-food industry license, improve people's knowledge about entrepreneurs. Some workshops and assistance were needed by people who started small enterprises. The ST (Strength-threats) strategy uses all strengths to overcome the threat. Considering the SWOT analysis results, this strategy can be done through market expansion. They need to make people familiar with the product. Creativity in marketing was also a kind of
this strategy. WT Strategy is some strategy to minimize weakness and avoid the threat. Collaboration between the family welfare program, village-owned enterprises and the tomato farmer can be one example of this strategy. A farmer passionate about farming cannot easily learn how to make a product. Some housewives may need additional money for their expenses. The village officer can help create a local sweet-dried tomato small enterprise through a village-owned enterprise. the workshop as one strategy to motivate people as shown in figure 3.

![Fig 3. Workshop with Giripurno village community and Village officer](image)

IV. CONCLUSION

From all identification and analysis results, The sweet-dried tomato products very the potential to be local competitive products. People in Giripurno village have many resources from natural resources, human resources and village office support to create the sweet-dried tomatoes enterprise. The village officer can collaborate with the university or public institution to give more intensive workshops and assistance to the people to improve their skills and knowledge of running the business. Commitment from all components in the community is needed to enhance Giripurno village through small enterprises.

V. ACKNOWLEDGMENTS

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