



## **DEVELOPMENT STRATEGY OF CASSAVA ADDED VALUE INTO KAOPI IN LAPODI VILLAGE PASARWAJO SUBDISTRICT**

**Juhasri<sup>1)</sup>;Antasalam Ajo<sup>2)</sup>**

<sup>1)</sup>*Study Program of Agribusiness, University of Muhammadiyah Buton*

<sup>2)</sup>*Major of Agribusiness Management, University of Muhammadiyah Buton*

Email: <sup>1)</sup> [juhasri.umb@gmail.com](mailto:juhasri.umb@gmail.com)

### **How to Cite :**

Juhasri; Ajo, A. 2021. Analysis Of The Economic Dimension Sustainability of the *Naoogst* Tobacco In Jember. *Journal of Agri Socio-Economics and Business*. 3 (1): 59-68. DOI:<https://doi.org/10.31186/jaseb.3.1.59-68>

### **ARTICLE HISTORY**

Received [11 June 2021]

Revised [18 June 2021]

Accepted [28 June 2021]

### **KEYWORDS**

Added Value,  
Cassava, Kaopi,  
Strategy, SWOT  
Analysis

### **ABSTRACT**

*Cassava is a food plant that has many advantages. For example, when there is a shortage of food reserves (grain), cassava can still be relied on as a source of substitute material because cassava is a food material that is resistant to water scarcity so that it can still be produced in critical land and easy to cultivate .The strategy of developing cassava itself is to increase the durability of cassava so that it is suitable for consumption for a long time and is not easily damaged in order to obtain a high selling value in the market by using modern technology such as a shredding machine to make it easier to smooth the cassava and jack technology in the process of pressing the caopy more quickly. With the existence of cassava processing business activities that change the shape of the primary product into a new product with a higher economic value after going through the production process, it will be able to provide added value due to the costs incurred so that a new higher price is formed and a bigger profit if compared without going through the production process. The problem faced in the strategy for the Development of Added Value of Cassava into Kaopi is that the processing of cassava still uses traditional technology so that the processing of cassava into caopy is very slow in the processing process, it takes a very long time starting from grating the cassava using hand grater, if using a grater machine. It will be faster and the pressing of the kaopi is done on by one compared to pressing using a jack which can be done by more than one kaopi and the packaging of the kaopi is undesirable so that it does not have an appeal to consumers until it is marketed outside the region.*

This is an open access article  
under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license



## INTRODUCTION

According to Herlina and Farida (2014) Indonesia is a country rich in natural resources, including nutritious plants. One of the nutritious plants that are often used is cassava. Cassava is one of the food crops that has long been cultivated traditionally in Indonesia and has been widely known in the community. Cassava (*Manihot Esculenta* Crantz) has several uses, including as a food ingredient, it can also be used as industrial raw material and animal feed. The production of modified cassava is still traditional, namely *kaopi*.

Cassava is the basic ingredient for making *kaopi*. *Kaopi* is made from cassava which is processed in several stages, the process of making *kaopi* is brief, namely fresh cassava that has been peeled, washed and drained then grated. After obtaining the results of the grated, then wrapped in a filter cloth and squeezed until there is no more juice. This is what is called *kaopi* (BPTP Sultra, 2019).

Cassava is a food crop that has many advantages. For example, when there is a shortage of food reserves (grain) cassava can still be relied on as a source of substitute material because cassava is a food ingredient that is resistant to water scarcity so that it can still be produced in critical land and how to cultivate cassava is uncomplicated. The strategy for developing cassava itself is to increase the durability of cassava so that it is suitable for consumption for a long time and is not easily damaged in order to obtain a high selling value in the market.

Zakaria (2000) in a previous study regarding the analysis of cassava in several cassava-based agroindustry stated that the added value of cassava is the difference between the value of the product and the cost of raw materials and other inputs. The results of the analysis of the added value of cassava are produced in several cassava-based agro-industries which include the kelanting industry, cassava chips and tapioca. The added value of cassava produced varies according to the agroindustry, the level of product produced, the level of technology used and the business management applied to each business unit.

Added value is the value that is added to a product before the production process is carried out and after the production process is carried out. One strategy for developing cassava into *kaopi* is to use modern technology such as a grater machine to make it easier to grind cassava and jack technology in the *kaopi* pressing process more quickly. With the business activity of processing cassava into *kaopi* which changes the shape of the primary product into a new product with a higher economic value after going through the production process, it will be able to provide added value because of the costs incurred so as to form a new higher price and greater profits if compared without going through the production process. To find out the added value that is given to cassava as a raw material, it is necessary to analyze the added value so that it can be seen whether the business being carried out is efficient and profitable.

The added value obtained from processing is the difference between the value of the commodity and the value of the expenditure that must be incurred during the production process. If the added value obtained is more than 50% then the added value is categorized as large and vice versa the added value obtained is less than 50% then the added value is categorized small (Sudiyono, 2004).

The problem faced in the Development Strategy of Cassava Added Value into *Kaopi* is that cassava processing still uses traditional technology so that processing cassava into *kaopi* is very slow in the processing process takes a very long time starting

from grating cassava using a hand grater, if using a grater machine it will be faster and the *kaopi* pressing is done one by one compared to pressing using a pressing jack which can be done more than one *kaopi* and the *kaopi* packaging is undesirable so that it has no appeal to consumers until it is marketed outside the region.

The objectives of this study are as follows: 1) To find out the strategy for developing value-added cassava into *kaopi* in Lapodi Village, Pasarwajo District; 2) To find out the added value of cassava into *kaopi* in Lapodi Village, Pasarwajo subdistrict.

## RESEARCH METHODS

The determination of the sample was carried out by purposive sampling, which was intentionally based on the consideration that some farmers in Lapodi Village, Pasarwajo Subdistrict, had cassava plantations which were processed into *kaopi*. According to (Sugiono, 2008) purposive sampling is a sampling technique with certain considerations.

The variables observed in this study are: 1) Respondent's Identity; 2) Strategy in maintaining the *kaopi* business; 3) The added value of cassava into *kaopi* is obtained from the amount of production, revenue and profits.

The development strategy includes internal factors, namely strengths and weaknesses, and external factors, namely opportunities and threats. While the added value is production capacity (Kg), raw materials used (Kg), labor used (HOK), labor wages (Rp), output price (Rp/Kg), raw material price (Rp), and other value added.

Data that has been obtained in the field is processed by tabulating then transferred in tabular form and analyzed using SWOT analysis as has been done by Arianti and Waluyati (2019), Wahyudi, et al. (2012), Naton, et al. (2020) and Diarsa, et al. (2017), as well as analysis of the added value of the Hayami Method. SWOT analysis is expected to minimize weaknesses and threats, as well as maximize strengths and take advantage of market opportunities (Bradford, Duncan, and Tarcy, 2004 in Wa Ode Al Zarliani and La Ode Muhammad Mustari). Then by added value analysis, it can be seen how much added value, ratio of added value, margin and reward obtained by the owner of the factors of production (Hayami, et al. 1987). The Hayami method has been applied by several previous researchers such as Utami, et al. (2020), in identifying the amount of added value, the ratio of added value, margins and rewards obtained by the owners of production factors.

## RESULTS AND DISCUSSION

### 1.1 Development Strategy using SWOT Analysis

Table 1. IFAS (Internal Factor Analysis Summary) and EFAS (Eksternal Factor Analysis Summary) Matrix

Internal Strategy Factor	Weighted	Rating	Score
<b>Strengths:</b>			
1. Products without preservatives	0.26	4	1.04
2. <i>Kaopi</i> which has a smooth texture and tough	0.25	3.8	0.95
3. Has its own raw material supply	0.25	3.8	0.95

4. Workers come from their own families	0.25	3.8	0.86
<b>Subtotal</b>	<b>1.0</b>		<b>3.8</b>
<b>0</b>			
<b>Weaknesses:</b>			
1. <i>Kaopi</i> processing takes time	0.27	-3.5	-0.94
2. Cassava is still grated manually	0.24	-3.5	-0.85
3. Pressing the <i>kaopi</i> one by one, there is no jack	0.25	-3.5	-0.87
4. There is no attractive packaging to be marketed more widely outside the region	0.24	-3.5	-0.84
<b>Subtotal</b>	<b>1</b>		<b>-3.49</b>
<b>Total</b>			<b>-1.1</b>

External Strategy Factor	Weighted	Rating	Skor
<b>Opportunities:</b>			
1. The product is one of the traditional foods and typical of the region	0.27	4	1.08
2. Can be processed with various kinds of preparations	0.24	4	0.96
3. Wider market share	0.24	3.6	0.86
4. Having regular customers and cooperating with distributor agents	0.25	3.6	0.9
<b>Subtotal</b>	<b>1</b>		<b>3.8</b>
<b>Threats:</b>			
1. More business competitors in the market	0.26	-3.7	-0.96
2. The emergence of foreign suppliers	0.25	-3.6	-0.9
3. The lifestyle of society is increasingly modern	0.24	-3.7	-0.88
4. Less attractive to the current generation	0.25	-3.6	-0.9
<b>Subtotal</b>			<b>-3.64</b>
<b>Total</b>			<b>0.16</b>

Comment [AP1]: G  
dalam bahasa Inggris

From the results of the analysis in Table 1 of IFAS above, the factors Strengths and Weaknesses have a total score of -1.1. Because the total score above is less than 2.5, this indicates an internal position that has a few weaknesses.

From the results of the EFAS analysis in Table 2 above, the opportunity and threat factors have a total score of 0.16. because the total score is very low, this indicates that the industry is not responding to the opportunities that exist and is not trying to avoid the threats. Furthermore, the total score of each can be determined, namely strength 3.8, weakness -3.49, opportunity 3.8, threat -3.64, so that the difference in the total score of the strength and weakness factors is 7.29, while the difference in the total score of the opportunity and threat factors is 7.44.

Opportunity +3.8

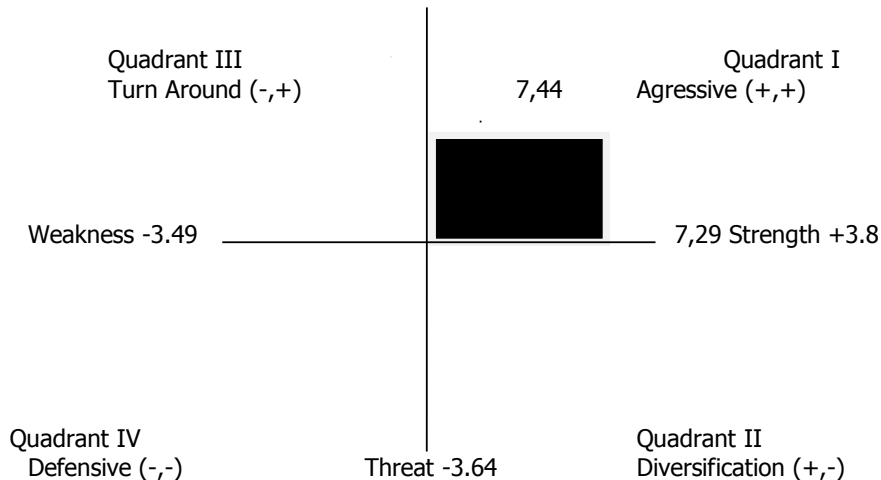


Figure 1. Cartesian diagram SWOT analysis of *Kaop's* business

Description:

Quadrant I: This is a very profitable situation. industry has opportunities and strengths so that it can take advantage of existing opportunities. The strategy that must be applied in this condition is an aggressive growth policy.

Quadrant II: Despite facing various threats, this industry still has internal strength. The strategy that must be applied is to use strength to take advantage of long-term opportunities by means of a diversification strategy (product/market).

Quadrant III: The industry faces enormous opportunities, but on the other hand it faces several internal constraints/weaknesses. The focus of this industry strategy is to minimize internal problems.

Quadrant IV: This is a very unfavorable situation, the industry is facing various internal threats and weaknesses.

It has been explained above that quadrant I signifies a very favorable situation. the industry has opportunities and strengths so that it can take advantage of existing opportunities, the strategy that must be applied in this condition is to support aggressive growth policies. The SWOT matrix is a tool used to measure the company's strategic factors. This matrix can clearly describe how external opportunities and threats are owned. This matrix can produce four possible alternative strategy cells which can be seen in Table 3.

Table 3. SWOT Analysis Matrix

<b>Internal</b>	<b>STRENGTH</b>	<b>WEAKNESS</b>
	<ol style="list-style-type: none"> <li>1. Products without preservatives</li> <li>2. <i>Kaopi</i> which has a smooth texture and tough</li> <li>3. Has its own raw material supply</li> <li>4. Workers come from their own families</li> </ol>	<ol style="list-style-type: none"> <li>1. <i>Kaopi</i> processing takes time</li> <li>2. Cassava is still grated manually</li> <li>3. Pressing the <i>kaopi</i> one by one, there is no jack</li> <li>4. There is no attractive packaging to be marketed more widely outside the region</li> </ol>

<b>External</b>	<b>OPPORTUNITY</b>	<b>THREAT</b>
	<ol style="list-style-type: none"> <li>1. The product is one of the traditional foods and typical of the region</li> <li>2. Can be processed with various kinds of preparations</li> <li>3. Wider market share</li> <li>4. Having regular customers and cooperating with distributor agents</li> </ol>	<ol style="list-style-type: none"> <li>1. More business competitors in the market</li> <li>2. The emergence of foreign suppliers</li> <li>3. The lifestyle of society is increasingly modern</li> <li>4. Less attractive to the current generation</li> </ol>

Based on the above analysis, it can be seen that industry performance can be determined by a combination of internal factors and external factors, the combination of these two factors is shown in the SWOT analysis result diagram as follows:

#### **S-O (Strength-Opportunity) Strategy**

1. Maintaining products without preservatives so that consumers remain loyal to the products offered
2. Expanding sales to outside the area and cooperating with distributor agents
3. Creating *kaopi* that has a smooth texture and is not easily crushed so that it can be processed with various kinds of food

#### **S-T (Strength-Threat) Strategy**

1. Continuing to maintain products without preservatives with a smooth texture and tough
2. Creating products with colors that are attractive to consumers
3. Developing attractive product designs and innovations

#### **W-O (Weakness-Opportunity) Strategy**

1. Improving production processes more effectively and efficiently by modern technology
2. Creating attractive packaging so that it can be marketed more widely
3. Providing training in creating quality products

#### **W-T (Weakness-Threat) Strategy**

1. Creating quality products so that they can compete with foreign products
2. Innovating and creating creative products so that they can be favored by the current generation
3. Finding out consumer tastes according to the lifestyle of an increasingly modern society.

## **2.2 Value Added by the Hayami Method**

The average cassava production in Lapodi Village, Pasarwajo District in 2020 is 36 kg with an average cassava raw material of 175 kg, resulting in a conversion factor of 0.2057. The value of this conversion factor indicates that each processing of 1 kg of cassava will produce 0.2057 *kaopi*. The average workforce for this production business is 3.5 or 4 people, where the coefficient of labor obtained is 0.02.

Comment [AP2]: B

Table 3. Value Added Analysis the Hayami Method

<b>o.</b>	<b>Variable</b>	<b>Value</b>
	<b>Output, Input, and Price</b>	
.	Production (kg)	36
.	Cassava Raw Material (kg)	175
.	Laborers (HOK)	3,5
.	Conversion Factor	0,2057
.	Laborers Coefficient	0,02
.	Product Price (Rp/Kg)	30.000
.	Wage Level (Rp/HOK)	20.000
	<b>Revenue and Profit</b>	
.	Raw Materila Price (Rp/kg)	700.000
.	Complement Material (Rp/kg)	0

0.	Product Value (Rp/kg)	6.171
1.	Added Value (Rp/kg)	-693,8
	Added Value Ratio (%)	-112,4%
2.	Laborers' Income (Rp/Kg)	400
	Laborers; Wages (%)	-0.576%
3.	Profit (Rp/Kg)	-1,093.8
	Profit Level (%)	-1,099.9%
	<b>Rewards for Production Factor</b>	
4.	Margin (Rp/kg)	-693,8
	Direct Laborers' Income	-0.576%
	Complement Material (%)	0%
	Business Profit (%)	1,576%

The added value obtained from processing cassava into *kaopi* in Lapodi Village, Pasarwajo subdistrict in 2020 is Rp -693.8/kg. This added value is obtained from the reduction in product value of Rp. 6,171/kg with the price of raw materials of Rp. 700,000 and other processing additives. The added value of the cocoa business was Rp -693.8/kg, the added value for processing cassava was mostly obtained by entrepreneurs (processors) of Rp - 1,093.8/kg (-1,099.9%). Meanwhile, the added value ratio obtained is -112.4%, which means that the processing of cassava into *kaopi* provides an added value of -112.4% of the product value. The added value ratio < 50% can be categorized as cassava processing materials into *kaopi* in Lapodi Village, Pasarwajo subdistrict, which does not have added value.

The labor income obtained from processing cassava into cocoa is IDR 400/kg. This labor income is obtained from the multiplication of the labor coefficient with the average wage per person. Meanwhile, the employee benefits obtained are -0.576%. This value also shows that the processing of cassava into *kaopi* needs to use a lot of labor to produce 1,000 kg of *kaopi* in 1 time of production.

The profit obtained from processing cassava into *kaopi* in Lapodi Village, Pasarwajo District is -1,093.8/kg. This profit is obtained from the difference between value added and labor income. Where the profit ratio obtained is - 1,099.9%, which means that if the added value is 1 unit, the profit obtained is -0,1,0099.9 units. The profit rate is said to be very large/profitable if >50%, in this case it means that the business of producing cassava into *kaopi* in Lapodi Village does not make a profit.

Direct labor income from processing is obtained from the comparison between labor income and margin multiplied by 100%. The result of direct labor income is - 0.576%. In processing cassava into *kaopi* in Lapodi Village, there is no price for raw materials and additional materials, this is because the *kaopi* entrepreneur has his own cassava plantation, so the cost of raw materials is Rp. 0 and there are also no other single-use materials used in one production/ processing other than *kaopi*. The profit from the business of processing cassava into *kaopi* is obtained from the comparison of profit with margin multiplied by 100%. The business profit obtained is -1,099.9%. This means that if the margin is 1 unit, the profit will be -0,1,099,9 units. The profit margin



for processing cassava into *kaopi* is greater than the income margin for workers. This shows that this business is a capital intensive business.

From the analysis of the added value of cassava production in Lapodi Village, it can be seen that the production of cassava into *kaopi* has a greater business advantage compared to selling cassava without processing.

## CONCLUSIONS AND POLICY IMPLICATIONS

### Conclusions

Based on the results of this study, it can be concluded as follows:

1. After calculating the added value, the total production of cassava into *kaopi* is Rp. 36/kg per production (month) with an average of 179 kg of raw materials, an average of 3 workers, 5/4 people, getting an added value of Rp -693.8/kg has a profit of Rp -1,093.8/kg and a value added ratio of -112.4% if the value added ratio is <50% then the cocoa has no added value.
2. From the results of the research on the *kaopi* business development strategy on the Cartesian diagram, the right strategy is in quadrant I at point (3.8: 3.8) indicating a very profitable situation that has opportunities and strengths so that it supports aggressive growth policies and the SWOT matrix implementing the SO strategy, namely maintaining products without preservatives so that consumers remain loyal to the products offered, expanding sales to outside the area and cooperating with distributor agents, creating *kaopi* that has a smooth texture and tough so that it can be processed with various kinds of food. Then the results of data analysis in the IFAS matrix have a total score of 3.8 strengths and a total weakness of -3.49 while in the EFAS matrix it has a total opportunity score of 3.8 and a total threat of -3.64

### Policy Implication

1. To obtain added value, entrepreneurs continue to do efficiency, especially in terms of costs and using raw materials in raw material processing activities in order to further increase the added value of the products produced.
2. By first improving Human Resources, then modern technology because basically between Human Resources and technology is an important factor in a business continuity.
3. For entrepreneurs, there is cooperation between the local government and the people of Lapodi Village, Pasarwajo subdistrict.

## REFERENCES

- Arianti, Y. S., Waluyati, L. R. 2019. Analisis Nilai Tambah dan Strategi Pengembangan Agroindustri Gula Merah di Kabupaten Madiun. *JEPA*. Vol 3 (2); 256-266.
- BPTP. 2019. Proses Pembuatan *Kaopi* Sulawesi Tenggara Kabupaten Buton
- Diarsa, A. W., Dkk. 2017. Analisis Nilai Tambah dan Strategi Pengembangan Home Industry Kupang Kering di Desa Balongdowo Kecamatan Candi Kabupaten Sidoarjo. *Jurnal Universitas Jember*. Vol 10(3).
- Hayami. 1987. *Agricultural Marketing and Processing in Upland Java. A Perspective From a Sunda Village*. CGPRT: Bogor.

- Herlina, Farida. 2014. Pengembangan Produk Pangan Fungsional Berbasis Ubi Kayu (Manihot Esculenta) Dalam Menunjang Ketahanan Pangan. *Jurnal Sains Dasar*, 3(2) 142-148
- La Ode Muhammad Mustari dan Wa Ode Al Zarliani. 2020. *Strategi Pengembangan Dan Pemasaran Komoditas Kopi Di Desa Kaongke-Ongkea Kecamatan Pasarwajo*. Kota Bau-Bau. Jurnal Media Agribisnis. Vol.4, Issue 1, Mei 2020.
- Naton, S., Radiansyah, D., Juniansyah, H. 2020. Analisis Nilai Tambah dan Strategi Pengembangan Usaha Pengolahan Pisang Pada UMKM Keripik Tiga Bujang di Kota Pontianak. *Jurnal Sosial Ekonomi Pertanian*. Vol 16(2); 135-148.
- Sudiyono A. 2004. Pemasaran Pertanian. UMM Press. Malang
- Sugiyono. 2008. *Metode penelitian administrasi*. Bandung: alfabeta
- Utami, A., Utama, S. P., Asriani, P. S. 2020. Nilai Tambah dan Keberlanjutan Usaha Pengolahan Pisang di Kecamatan Curup Tengah Kabupaten Rejang Lebong (Studi Kasus Pisang Sari Gizi Kamiso Karto). *Jurnal Agriseip*. Vol 19 (1); 191-206.
- Wahyudi, D., Santosa, R., Juhari, I. 2012. Analisis Nilai Tambah dan Strategi Pengembangan Agroindustri Pengeringan Ikan di Kecamatan Ambunten. *Cemara*. Vol 9(1); 13-22.
- Zakaria, W.A.2000. Analisis Nilai Tambah Ubi Kayu Beberapa Agroindustri Berbasis Ubi Kayu Di Provinsi Lampung. *Jurnal Ilmiah Sosial Ekonomi Pertanian*. Vol 6 (2): 122-123