

**ANALYSIS OF SWEET BREEDING VALUE ADDED  
(Case Study: UD. Cemasari, Karang Sari Village, Sukorejo, Blitar City)**

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**ABSTRACT**

The aim of the study was to find out the benefits obtained from processed starfruit sweets, to know the efficiency of the starfruit candied processing business, and the added value obtained from starfruit candied processing at UD. Cemasari. The research method used is descriptive method, the type of data uses primary and secondary data. The type of data analysis used is income, efficiency gains, profitability and added value. Where in the end the results were in the form of profits of candied starfruit business in the amount of Rp.137,165.55. R / C is 1.58, with a profitability value of 57.67%, the value of high profitability is influenced by several factors, namely, internal and external factors. And added value of Rp. 12,146.

**Keywords:** *Analysis Of Added Value Of Starfruit Candied Processed*

**1. INTRODUCTION**

Indonesia is an agrarian country that has various types of agricultural commodities which can be further processed into high quality and valuable products, one of which is sweet star fruit. One of the biggest sweet star fruit producers in East Java, namely Blitar city in Karang Sari Village, Sukorejo District. Karang Sari starfruit is different from starfruit in general, because Karang Sari starfruit has special features in terms of taste, color, size. Added value is the value added of a commodity because it undergoes a process of processing, storing, transporting in a production process. According to Hayami, et al. (1987) the definition of added value is the value added of a commodity because of the functional input applied to the commodity concerned. The functional input is in the form of a form utility, place utility, or time utility. Added value describes rewards for labor, capital and management. Starfruit in Karang Sari village is not sold in the form of fresh fruit, but also sold in processed form one of which is starfruit candy, candy star fruit is processed star fruit mixed with sugar and other food additives. One of the drivers of business in the processed field is UD. Cemasari at UD. Cemasari star fruit is processed into various kinds of starfruit processed products. In order for the business to run to get profits according to the target, it is necessary to do an added value analysis.

### **Aim**

1. To find out the benefits obtained from processing star fruit into candy star fruit at UD Cemasari.
2. To find out the business efficiency of star fruit processing into starfruit sweets at UD Cemasari.
3. To find out the added value obtained from star fruit processing into starfruit sweets at UD Cemasari.

## **2. RESEARCH METHODS**

This research was carried out by using descriptive method, which is a method in examining the status of a human group, an object, a set of conditions, a system of thought, an event in the present with the aim of systematically or accurately describing or painting the facts, the characteristics, and the relationship between the phenomena investigated. (Nazir, Moh, 2005).

The study was conducted for 1 month in Karang Sari village, Blitar City. Determination of the location of the study was carried out deliberately, with the consideration that in Karang Sari village there are several *home industries* processing sweet star fruit. The scope of this research is limited to the analysis of added value of starfruit candy.

### **Types and Data Sources**

1. Primary data is collected and obtained directly from candy starfruit entrepreneurs, as well as labor and related parties using a list of questions that have been prepared in advance.
2. Secondary data is data obtained from publications as well as agencies, journals, theses, social media, BPS, books, and literature related to the research conducted.

### **Sampling Method**

The research subjects used to achieve the objectives of this study were deliberately chosen ( *purposive sampling* ). *Purposive sampling* is a sampling technique with special consideration so that it can be sampled (Noor, 2011).

### **Data analysis**

In analyzing the added value of cassava into chips using the Hayami method found in Marimin and Magfiroh (2010) where in the end results will be obtained in the form of output values, added value, remuneration for labor services and processing benefits. The value added is obtained from the value of the product minus the cost of raw materials and other inputs (other than labor). Output is the amount of sweets produced in one production process which is calculated in units of kilograms. Input is the main raw material needed in one production process which is calculated in units of kilograms. Labor is the number of people / employees who carry out the production process in one production process. Conversion factor is the division of output with input in one production process. The coefficient of labor is obtained from the quotient between labor and input.

## **3. RESULTS AND DISCUSSION**

### **Candy Starfruit Production**

candy starfruit production process is carried out from the selection of raw materials, washing, cutting, cooking, mixing additional ingredients, drying, and packaging. The ingredients used for making candy starfruit include 15 kg starfruit with a maturity level of 60-70% and additives such as 2.6 kg of granulated sugar, 0,003 gr of sodium benzoate, 0,004 gr of citric acid. So as to produce 4.95 kg starfruit candy for each production process.

### **Production Costs of Starfruit Candy Per Production Process**

Production costs in general represent the total cost of all that is used from production preparation to marketing candy starfruit. The total cost is obtained from the sum of fixed costs and variable costs.

#### **Fixed Costs ( *Fixet Cost* )**

Fixed costs, the costs of which the size is not influenced by the volume of industrial activities both in the production process and the sales process. Fixed costs for candy starfruit production consist of building depreciation costs, building taxes and equipment depreciation costs.

Table 4.3 Building Depreciation

Cost Description	Depreciation Value (Rp)
1. Building	26,041.67
2. Building Taxes	221,35
<b>Total Depreciation Costs</b>	<b>26,263.02</b>

Based on table 4.3, it is known that the fixed costs for building rent and building tax are Rp.26,263.02. Which consists of building depreciation costs and building tax depreciation costs.

Table 4.4 Costs of Tax and Equipment Depreciation

No.	Cost Description	Depreciation Value Rp
1	Washtub	121.53
2	Scales	250.00
3	Stirrer	52.08
4	Stove	446.43
5	Medium griddle	250.00
6	Knife	34.72
7	Basin	104,17
8	Seng drying	138.89
9	Plastic Drying	173.61
10	Bamboo Drying	0
<b>Total Depreciation Costs</b>		<b>1,571.43</b>

Based on table 4.4 it is known for the fixed costs of equipment which is equal to Rp. 1,571.43. So that the total fixed costs for processed candy star fruit is Rp. 27,834.45 per production process.

### Variable Costs

Variable costs are costs that are affected by the volume of production

Table 4.5 Variable Cost of candy Starfruit Per Production Process

No.	Cost Description	Quantity	Price (Rp.)	Total (Rp)
	Raw material			
1.	Star fruit	15 (kg)	3000	45,000
	Additional ingredients			
	a. Sugar	2.6 (kg)	11,000	28,600
2.	Sodium			
	b. Benzoate	0.003 (gr)	45,000	135
	c. Citric Acid	0,004 (gr)	35,000	140
	Packaging Costs			
	a. Mika jars	25	2,000	50,000
3.	b. Insulation	3	1,000	3,000
	c. Sticker	25	500	12,500
	Labor			
	a. In family			
	Production	1 / HOK	10,000	10,000
4.	Packing	-		
	b. Out of family			
	Production	-		
	Packing	1 / HOK	50,000	50,000
5.	Fuel	5,25 (hours)	500	2,625
6.	Supporting Costs	1 (liter)	8,000	8,000
	<b>total</b>			Rp. 210,000

Based on table 4.5, it can be seen that the total variable cost for one-time production process is Rp.210,000. Consists of 15 kg IDR 45,000 raw material costs, 2.6 kg additional sugar costs Rp.28,600, sodium benzoate 0.003 Rp.135, citric acid 0.004 Rp.140. Packaging costs for jar 25 Rp.50,000, isolation of 3 seeds Rp. 3000, sticker 25 seeds Rp. 12,500. The cost of labor outside the family is Rp.50,000 / HOK, the cost of labor in the family is Rp.10,000 / HOK.

Gas cylinder fuel costs 5.25 hours Rp.2,625. Support / transportation costs 1 liter Rp.8,000.

### Total Production Costs

Total production costs represent the total production costs incurred which consist of fixed costs and variable costs. According to Iswardono (1990: 145), the components of total costs are total fixed costs and total variable costs. Total costs are derived from: Total fixed costs plus total variable costs. The total cost of candy starfruit production for each production process is Rp.237,834.45.

### Business Acceptance of Candy Per Production Process

Acceptance is the total production of candy starfruit produced multiplied by the selling price of candy starfruit.

Table 4.6 Business Reception of Starfruit Candy Per Production Process

Description	Quantity / Jar	Price (Rp.)	Reception
Production	25	15,000	<b>375,000</b>

Based on table 4.6, it can be seen that for one production process produce 25 jars, with a selling price of Rp. 15,000, so as to get revenue of Rp.375,000.

### Business Benefits of Processed Starfruit Sweets Per Production Process

Profit is the net profit received by UD. Cemasari from candy star fruit production. This business earns a net profit from revenue minus total costs.

Table 4.7 Advantages of Starfruit candy Per Production Process

No.	Description	Value
		Candy Starfruit
1	Total production (jar)	25
2	Price per jar	15,000
3	Total revenue (Rp.)	375,000
4	Total cost (Rp)	237,834.45
<b>TR - TC advantages</b>		<b>137,165,55</b>

Based on table 4.7, it can be seen that the receipt obtained by UD. Cemasari for each production process is Rp.375,000 and the total costs incurred for making starfruit sweets are Rp.237,834.45. Thus the income or net profit of UD. Cemasari is Rp.137,165.55 / per production process.

#### **Value of Candy Profitability Starfruit**

Profitability is a comparison between profits and total costs in percentages.

Table 4.8 Value of candy Profitability of Starfruit

<b>No.</b>	<b>Description</b>	<b>Candy Starfruit</b>
1.	Total Production / Jar	25
2.	Price / Jar	15,000
3.	Total Revenue	375,000
4.	Total cost	237,834.45
5.	Income / Profit	137,165,55
<b>6.</b>	<b>Profitability</b>	<b>57.67</b>

Based on table 4.8, it can be seen that the profitability value of star fruit processing business into star fruit candy products is 57.67%, for per production process.

#### **Efficient Use of Candy Starfruit Business Costs at UD. Pollasari Per Production Process**

The level of efficiency of the use of costs in candy starfruit processing business is influenced by the value of receipts and the amount of costs incurred during the production process.

Table 4.9 Business Efficiency of Starfruit Candy Per Production Process

<b>No.</b>	<b>Description</b>	<b>Value</b>
		<b>candy Starfruit</b>
1	Total production (jar)	25
2	Price per jar	15,000
3	Total revenue (Rp.)	375,000
4	Total cost (Rp)	237,834.45
<b>5</b>	<b>R / C ratio</b>	<b>1.58</b>

Based on table 4.9, it can be seen that the value of R / C ratio for starfruit candy products is 1.58 for each production process which means that every use of 1 rupiah costs will receive revenues of 1.58 so that the profits obtained are equal to 0.58 rupiahs. .

### **Analysis of Starfruit Added Value Into Candy Star fruit per Production Process**

#### **Star fruit**

Sweet star fruit in Karangasari village was harvested three times a month, due to the same harvest during the starfruit harvest, resulting in a relatively low bidding side so that farmers' income was relatively small, besides star fruit also had perishable properties if it was too long time in storage, this is where farmers and owners of UD. Cemasari took the initiative to use star fruit to be processed so as to provide added value.

Table. 4.10 Production Structure of Starfruit Processing at UD. Cemasari.

<b>Description</b>	<b>Starfruit</b>	<b>Candy Starfruit</b>
Production result	15 kg	25 jars
Raw material	0	15 kg
Conversion Factor	0	1.6
Product Prices	Rp.3,000	IDR 15,000
Additional Input Value	0	1,925
Value-added	0	7.346

From table 4.10 it is known that 15 kg of star fruit becomes 4.95 kg of sweets and packed in jars produces 25 candy jars, from the price of star fruit which is only Rp. 3,000 can be priced at Rp. 15,000 after being sweets. Conversion factor produced by starfruit is only 0 while candy produce 1.6 starfruit candy, additional input value of star fruit 0 while additional input value for sweets is Rp.1925, and for added value produced by star fruit 0 while candy produce added value of Rp.7,346.



### Analysis of Added Value of Starfruit Sweets Per Production Process

Added value is the processing of raw materials which causes an increase in value of production.

Table 4.11 Analysis of Added Value of Starfruit Sweets Per Production Process

No.	Value Added Analysis	Unit	Formula	Value
1.	Output	Jar		25
2.	Raw material			
	a. Starfruit	Kg		15
3.	Labor input	HOK		2
4.	Conversion factor		(1) / (2)	1.6
5.	Workforce coefficient		(3) / (2)	0.08
6.	Product price	Rp. Jar		15,000
7.	Labor wages	IDR / HOK		60,000
<b>Receipts and Benefits</b>				
8.	Raw material prices			
	a. Starfruit	Rp/kg		3000
9.	Price of other inputs			
	a. Additional material costs	Rp/kg		
	b. Packaging costs			1.925
	c. Fuel costs	Rp/kg		4.366
	d. Supporting costs	Rp/kg		175
	e. Depreciation costs for tools	Rp/kg		533
	The total price of other inputs	Rp/kg		1,855
		Rp/kg		8.854
10.	Output value	Rp/Toples	(4) x (6)	24.000
11.	a. Value-added	Rp/Toples		
	b. Value added ratio		(10)-(8)-(9)	12.146
12.	a. Direct TK income	%	(11a)/(10)*100	50,60
	b. Share TK directly	Rp/Toples	(5)*(7)	4.800
13.	a. Advantage	%		
	b. Level of Profit		(12a)/(11a)*100	39,51
		Rp/Toples	(11a)-(12a)	7.346
		(%)	(13a)/(10)*100	30,60

From the table above, it is known that the added value produced by star fruit candy is Rp.12,146 / jar, with a profit of Rp.7,346, and a profit rate of 30.60%. Based on the results of the analysis of added value of starfruit into candy starfruit, it is known that star fruit has a higher profit value when it is processed, compared to unprocessed star fruit, the benefit is only a little considering that star fruit is a sorting fruit.

#### **4. Conclusion**

From research carried out on starfruit sweets business at UD.

Cemarasari can be summarized as follows:

1. Carambola candy business carried out by UD. Cemarasari is profitable, the profit obtained for each production process is Rp. 137,165,55.
2. Judging from the efficiency of the use of costs has been running efficiently that is equal to 1.58, meaning that every use of the cost of one rupiah will result in revenues of 0.58 rupiah.
3. candy starfruit also provides added value which is equal to Rp.12,146 per kilogram of starfruit.

#### **5. Suggestion**

The suggestions that can be given by researchers are as follows:

1. To UD. Cemarasari

It is hoped that UD. Cemarasari will increase the production of candy starfruit, considering that the starfruit candy business is seen from business efficiency as having run efficiently and able to provide more benefits.

2. To the Government

It is expected that the government should pay more attention to entrepreneurs making starfruit processing especially in terms of providing assistance in processing machinery so that entrepreneurs can increase their production.

### 3. To Researchers Next

It is hoped that future researchers will conduct research into the analysis of the added value of various starfruit preparations.

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