



## Analysis of Seaweed Business Income Level at Rawing Mairori in Sarwandori Village, Yapen Regency

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### ABSTRACT

*Analysis of Operating Revenues Seaweed On Mairori in Kampung Sarwandori Rawing Yapen. Objective is to determine the level of income of seaweed products and to determine the factors that influence the level of income of seaweed products in businesses in the village Sarwandori Rawing Mairori Yapen. Results showed that the cost of production has twice earned total net income of Rp 2,352,542, -. Analysis of the income level of seaweed products in businesses in the village Sarwandori Rawing Mairori Yapen financially beneficial to the R / C ratio is 2,442, While production levels to reach the breakeven point BEP is Rp 16 016, -. As for the factors that affect the level of seaweed products in businesses in the village Sarwandori Rawing Mairori Yapen namely Labor, Environment Weather / Climate, Capital, Selling Price.*

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## 1. Introduction

Ministry of Maritime Affairs and Fisheries (MMAF) has set three main policy marine and fisheries development in the years 2015-2019 as the framework to make Indonesia as the pivot of the maritime world, one of which is to apply the principles of management of marine resources and fisheries are responsible, competitive, and sustainable (CTF 2015). One of the operational steps that need to be done in connection with building self-reliance in aquaculture is developing the cultivation of seaweed.

Yapen merupakan one of the districts that have the potential for the development of seaweed. Of potential of the sea in the village sarwandori, sea grass plants used by one masyarakatan there is mama Rosmina Karubaba to make a variety of foods and snacks that basic ingredients made from seaweed. See great opportunities in this sea grass plants eaten mama Rosmina establish a joint business unit and mama invite others to join and manage plant seaweed into a product that can be consumed by other people. Points of seaweed was named "Rawing MAIRORI" where workers / employees are indigenous (local) Sarwandori village and mostly in kelolah by mama (mother), these efforts began to run in 2007 by mama Rosmina.

## 2. Theoretical Basis

### 2.1. Seaweed Cultivation

Seaweed is classified as low-level plant, does not have roots, stems and true leaves, but only resemble rods called thallus, growing in the wild to attach themselves to rocks, mud, sand, rocks and other hard objects. Taxonomically grouped into divisio Thallophyta (Anggadiredja, 2007). Seaweed chemically composed of protein (54%), carbohydrates (33.3%), fat (86%), crude fiber (3%) and ash (22.25%). It also contains amino acids, vitamins, and minerals such as sodium, potassium, calcium, iodine, iron and magnesium. The content of amino acids, vitamins and minerals reach 10-20 times more than the land plants (Aslan, 2011).

According Anggadiredja (2007), the essential prerequisites for the success in the cultivation of seaweed is:

- a. Site Selection





Seaweed farming success is determined in the site selection. The factors include conditions substart aquatic ecology, water quality, climate and geographical bottom waters. Another factor is no less important in determining the location of which is the ease (accessibility), risks (security issues), as well as conflicts of interest (tourism, transportation and national marine plants).

- b. preparation of planting  
Planting Eucheuma seaweed covers the provision of farming equipment in accordance with the methods to be used and the provision of good seeds, tools and methods that will be used properly. Preparation of planting is important that the selection and handling of Eucheuma grass seed before planting.
- c. cultivation  
Can be accomplished using several methods. There are three methods of off-bottom method (off bottom method), floating raft (floating rack method), and line (land long method). The choice of method depends on the geographical conditions of the location.
- d. Maintenance  
Maintenance of seaweed growth of routine is to clean mud and debris on sea grass embroider plants damaged or loose the bonds. Replacing rope, bamboo stakes and buoys were damaged, as well as keeping the plants from predators such as fish, and turtles.
- e. harvesting  
Harvesting is done when the seaweed reaches a certain weight is about 4 times its initial weight (within the maintenance of 1.5-4 months). For Eucheuma can reach about 400-600 grams, then this type usually can be planted

Seaweed Eucheuma divided into four species are Eucheuma denticulatum (E.spinosum), Eucheuma edule, Eucheuma cottonii and Eucheuma serra. Eucheuma cottonii characterized grows erect, very dense form dense grass, attached on top of a rock with adhesive discs, height approximately 15 cm and a diameter of 20-30 cm. Thorns thallus like E. spinosum but not arranged encircling the thallus. Branching out into different directions with the main shaft adjacent to each other in the base area. Eucheuma cottonii many live in tidal zones are based on the coral to the subtidal zone. Often form vast colonies. Living in a quiet backwater / somewhat bumpy and tropical. (DJPBKPP, 2004).

## 2.2. Income concepts

In the economic sense, the revenue is for the use of factors of production owned by the household sector and the corporate sector rumha that can be salary / wages, rent, interest and profit / profit (Hendrick, 2011). Thus is the farm family income is all income obtained from the entire production of uasaha farmer. Revenue is the gross inflow of economic benefits arising from ordinary activities during the period when the cash flows resulted in an increase ekualitasnya not come from the contribution of capital investment.

## 2.3. Cost concepts

According to Mulyadi (2003), the cost is the expenditure of resources that have been or will be sacrificed to achieve certain goals. Cost is the sacrifice of economic resources, measured in terms of money, that have occurred or are likely to occur for a particular tujuan. in the narrow sense, the cost can be interpreted as the sacrifice of economic resources to acquire assets. Cost is classified into two types, namely fixed costs and variable costs. And also calculate the total cost

### a. Reception

The reception is obtained by multiplying the output generated by the sale price. Systematically can be written as follows:

$$TR = Q \times P$$

Where :

TR = total revenue (total revenue)

Q = amount of product produced (quantity)

P = Price (price)

### b. Profit

The advantage is selisi of receipts and total expenses incurred for the production process. The advantage is tujua of every effort, sehingga the greater the benefits, the more feasible the business is run. Advantages can be formulated as berikut:

$$\Pi = TR - TC$$

Where :





$\Pi$  = Business income  
TR = Revenue Business  
TC = Total cost

## 2.4. Break Event Point Theory

The Theory of Break Event Point:

- a. BEP also Iyalah point where the entity or company or business in the state could also gain an advantage, and not already experienced loss breakeven analysis is an analysis that is used by managers to take a decision. This analysis Calculating the break-even point to be noted is the total amount of fixed costs, variable costs per unit or a total of variables, total sales proceeds or the selling price per unit.
- b. Benefits of BEP according Nurlala (2006: 28), that is: to know the number of penjualan minimum that must be maintained firm in order not to lose, knowing the number of sales achieved to obtain the level of certain financial, mengetahui how much lack of sales that the company did not suffer a loss, knowing how to effect change in selling prices, costs and volume of sales.

## 2.5. Factors of Production

Production is every process that creates value or increase the value of something good, or can easily be said that the production is any business that create or increase the usability of the goods. Related to this, a nation must produce to ensure its survival. Production must be carried out under any circumstances, by governments and by the private sector. However, the production certainly can not be done if there is no material that allows her to do the production process itself. To be able to require the production of human labor, natural resources, capital in all its forms, as well as skill. All the elements are called the factors of production. So, all the elements that sustain value creation businesses or business increases the value of the goods referred to as factors of production.

### a. Natural resources

In this case the natural resources are the factors of production are sourced from natural resources. Natural resources can meet the needs for life. Namely 1). Air, land, and water. 2). Animals and plants. 3). Minerals and other mineral

### b. Labor (labor)

In the knowledge economy, which is meant by the term human labor (labor) is not merely human strength for digging, sawing, carpentry, and all other physical activities. What is meant here is not just labor or labor alone, but the broader human resources (human resources). (Suherman Rosyid, 2009: 56).

### c. Skill

According to (Suryana 2006: 10) entrepreneur / Skill are those who make the efforts of creative and innovative by developing ideas and commit resources to find opportunities and improve lives. Factors of production management skills are also often referred to as a production factor of entrepreneurship, entrepreneurship or skill.

### d. Capital (Capital)

The third factor is the production of capital (capital) or designation for this third factor of production is the real capital goods (capital goods real terms), which covers all types of goods that are made to support the production of other goods and services, for example, machinery, plant, highways, power plants and all crockery.

## 2.6. Factors Affecting Earnings

As for the factors that affect revenue, as follows:

### a) Technology

According Hamriani with their science and technology, the HR will increase with the knowledge of the technology. Meanwhile, according to Basse, using technology that will reduce costs and speed up production and will have an effect on the income of farmers. The implementation is quite labor intensive technologies will provide a proportion of the workforce that is bigger than the benefits for employers, while the capital-intensive small proportion of the workforce. Seaweed farmers dependence on technology is quite high. This is because where the cultivation of seaweed that is quite far from the shore so that the necessary means of transportation such as a boat engine to reach the location of seaweed cultivation and transportation equipment to transport the seaweed. In addition to low transportation technology owned by seaweed farmers in general, others facing seaweed farmers are not all seaweed farmers have the tools runput marine aquaculture. For seaweed





farmers thus, there is no alternative but to work on other people who need energy that is a labor of seaweed farmers. The problem is that in addition to lower sales results seaweed, the sharing system made by the skipper also tend to be less favorable labor seaweed farmers. there is no alternative but to work on other people who need energy that is a labor of seaweed farmers. The problem is that in addition to lower sales results seaweed, the sharing system made by the skipper also tend to be less favorable labor seaweed farmers. there is no alternative but to work on other people who need energy that is a labor of seaweed farmers. The problem is that in addition to lower sales results seaweed, the sharing system made by the skipper also tend to be less favorable labor seaweed farmers.

b) **Capital**

The accumulation of capital occurs when part of the earnings in the tube and reinvested with the goal of enlarging the output and income in the future. "Capital has a very strong relationship with the success or failure of an established production venture". Capital can be divided into two, namely "fixed capital (fixed capital) and working capital (Working capital)". The fixed capital goods are used in the production process that can be used several times, although ultimately these capital goods ran out, but not completely sucked in the results. Examples of fixed capital is the machinery, factories, buildings, and others. Capital moves are items used in the production process that can only be used for disposable, or in other words, that the goods used up in the production process, such as a feed, fuel, and others. This difference is used relates to the calculation of costs. The cost of capital should move at all factored into the price of the real cost, while fixed capital costs are taken into account through depreciation. According hendro most important capital is the experience. Meanwhile, according to Chaudhry Muhammad Sharif is the capital of wealth in human get through its own power and then use it to generate more wealth.

Assessment of the venture capital seaweed farming can be done by three ways. First, the assessment is based on the value of the new tools, namely in the form of the cost of obtaining these tools according to current prices. Thus, by knowing the types of tools and the new amount and at what price it can be calculated much capital right now. Second, based on the purchase price or manufacture tools, so does the initial investment has been implemented seaweed farmers, departed from here, taking into account the depreciation per year, can be calculated the value of equipment or capital at the present time. The second way this is done when the seaweed farmers to buy new tools and seaweed farmers considering the purchase price. Third, by estimating the value of the tool at the present time, ie the price that would be obtained if the tools are sold. In this case the vote is influenced by the price of a new tool, the depreciation rate instrument or condition of the tool at this time. This method is used only to assess the boat / canoe which had been a few years old and is still in a rather good condition.

c) **Work experience**

Work experience is the knowledge or skills that are known and controlled by a person who as a result of the action or the work that has been done for a certain time. According to Mulya Sukmana Ganjar Work experience in formal sector employment is generally considered to increase a person's ability to work. Work experience can describe a person's level of mastery of the job. Someone will have the opportunity to increase revenue and productivity with much longer experience. It can be concluded that the more experienced person in work, then it will be able to increase work productivity.

Determinants of the productivity of human capital is a term economists to the knowledge and expertise gained workers through education, training, and experience. Human capital includes the skills acquired, as well as job training. As a result of the accumulation of experiences in doing a job or producing an item, can reduce the average costs per unit of goods. This is logical because with increasing experience of someone in doing the job, of course, will be acquired subject to do it better and more efficiently. The mistake has been done can be known and henceforth not repeated to the same error. So,

Factor experience, this factor is theoretically in the book, there is nothing to discuss that experience is a function of income or profit. However, the activity of seaweed farmers with more and more experience in the seaweed business can increase revenues or profits. The more extensive the work experience person, the more skilled do more perfect work and patterns of thinking and attitudes in





action to achieve the goals set. Therefore, someone gained work experience will improve the ability to carry out the work so that it will be able to increase work productivity.

### 3. Research methods

This study uses a descriptive study conducted surveys with a population derived from seaweed farmers. The approach taken is qualitatively and quantitatively. The research location is in the business district Sarwandori Rawing Mairori village Kosiwo Yapen on April 1 until May 7, 2019. Mairori Rawing effort on the research object that is characteristic of mama Rosmina ketuan as part of product processing and chairman of Business Rawing Mairori village district Sarwandori kosiwo Yapen already selling seaweed produ operating results are dried noodles, sticks etc.

Researchers conducted the data Analysis method, as follows:

- a. Qualitative Data Analysis where I combine a variety of information that can be dipercayaaai appropriate existing problems.
- b. Analysis of quantitative data which is used to answer the problem formulation of the problem of income level. The data analysis technique used to be the existing problems is by using the technique in the following:

- Statements R / L

The income statement is a systematic report on the cost income profit / loss derived by an enterprise for a certain period

Format Lap L / R	
Income	Rp. xxx
variable costs	Rp. xxx -
Contribution	Rp. xxx
Cost tetep	Rp. xxx -
Profit	Rp. xxx

(Munawir 2010: 5)

This shows the calculated profit and loss of the revenue profits derived from any costs incur.

- R / C Ratio

R / C ratio shows the amount of revenue from each rupiah costs incurred greater the R / C ratio, the greater the benefits

R / C Ratio		
total Revenue		
Total	Cost	of
Production		

(Seokartawi, 2005: 58)

- *break Event Point (BEP)*

A break-even point at which point the state of farming no profit and no loss. This breakeven point value can be calculated using the following equation:

$$BEP = \frac{\text{Biaya Tetap}}{1 - \frac{\text{Biaya Variabel}}{\text{Penjualan}}}$$

(Soekartawi 2005: 58)

### 4. Results and Discussion

Based on the results of research conducted then it was obtained are as follows in producing seaweed and consists of capital investment in equipment and working capital.

#### a. Details of Investment in Fixed Assets (Hardware)

To produce Seaweed Products Serpti dry noodles and Sticks require multiple appliances such as blenders, dough penipis tool, and stoves, to find out what the price of the equipment owned and used in the production process can be seen in the table below ...





**Table 1.**

List of equipment used in the production of seaweed products

No.	commentary	quantiti	Price	Total
1	blender	2	Rp. 250,000	Rp. 500,000
2	Penipis tool Dough	1	Rp. 125,000	Rp. 125,000
3	Stove	1	Rp. 500,000	Rp. 500,000
Total price				Rp. 1,125,000

Source: Processed Data, 2019

From the above table have 3 equipment in the production process of seaweed products namely dry noodles and sticks, which consists of a blender, dough penipis appliance, and stove. Of the three equipment, which gives the most impact was a stove with a value of Rp. 500.000, - and other supporting tools, namely a blender with a value of Rp. 500.000, - as well as depleting Tool dough with a value of Rp. 250.000, -. Total price or the total number of list of equipment used in the production of seaweed products amounted to Rp. 1,125,000, -.

### b. Operating costs

Operating costs are the costs incurred by Mairori Rawing Enterprises, in connection with the production activities undertaken. Operating costs can be dijelaskna analysis as follows:

**Table 2.**

Operational costs are used in the production activities

No.	description of Materials	quantiti	Price	Total
1	Flour 25 kg	1	Rp. 260,000	Rp. 260,000
2	1 egg rack	1	Rp. 70,000	Rp. 70,000
3	5 liters of cooking oil	1	Rp. 35,000	Rp. 35,000
4	Cheese	1	Rp. 16,000	Rp. 16,000
5	Salt	1	Rp. 5,000	Rp. 5,000
6	Cornstarch	1	Rp. 15,000	Rp. 15,000
7	Sugar	1	Rp. 10,000	Rp. 10,000
<b>total Material</b>				<b>Rp. 413,000</b>
<b>Equipment</b>				
8	blender	2	Rp. 250,000	Rp. 500,000
9	penipis Dough	1	Rp. 125,000	Rp. 125,000
10	Stove	1	Rp. 500,000	Rp. 500,000
<b>total Equipment</b>				<b>Rp. 1,125,000</b>
11	transportation	1	Rp. 100,000	Rp. 100,000
<b>Grand Total</b>				<b>Rp. 1.638 million</b>

From the above table, the details of the values of the cost operasinal, operating costs terdiri of raw material costs, costs of equipment and transportation costs where these costs are classified as operating costs because of a charge often used to carry out production activities but these costs can not be categorized in fixed costs because these costs can be any time mengalami terhadap change its value.

### c. Cost Depreciation / Depreciation

The depreciation method used in the straight-line depreciation method (with Asusmsi residual values equal to 0) with the following formula:

$$\text{Cost Depreciation} = \frac{\text{harga perole han} - \text{nilai residu}}{\text{umur ekonomis}}$$

Then for the respondent:

Depreciation costs per year =  
**Blender and penipis dough** = Rp. 625,000 / 3  
 Depreciation costs per year = Rp. 208 333  
 Depreciation costs per week = Rp. 17 361/4  
 = Rp. 4,340 per week  
**Stove** = Rp. 500.000 / 2  
 Depresias costs per year = Rp. 250,000  
 Depreciation costs per month = Rp. 250,000 / 12





- = Rp. 20 833
- Depreciation costs per week = Rp. 20 833/4
- = Rp. 5208
- Depreciation costs blender, tools and stove peneipis
- = Rp. 4,340 + USD. 5208
- = Rp. 9548

To find out how much the cost of depreciation of equipment used by the production of Rawing effort Mairori for 2 to 3 years, per month and per week can be seen in the table below.

**Table 3.**

Depreciation costs Equipment For a One-Time Production

No. resp	value of equipment (USD)	Economic age	Cost Depreciation / 1 year (USD)	Depreciation costs per month	Cost Depreciation One week Production
1	1,125,000	3	208 333	17 361	4,882
		2	250,000	20 833	5208

Source: Data Processed in 2019

From the table shows that respondents have a number of depreciation expense amounting to Rp. 9548 depreciation costs.

**d. Calculation of Volume Sales**

The volume of production and sales volume per 1 times sales for the respondents can be seen in the following table:

**Table 4.**

The production volume and sales volume per 1 week of production

No Res	volume Production	Sales volume		total Sales
	Q (wrap)	Total production per 1 x production	Price per unit	
1	200	200	20,000	4,000,000

Source: Data processed, 2019

From the table above shows that sales in Mairori Rawing Enterprises has sales revenue amounting to Rp 4,000,000 per week of production and volume penjulannya 200 wrappers at a price of 20,000 perbungkus.

**e. The calculation of P / L (Profit and Loss)**

In the calculation of profit and loss can be substantial known and revenue, in the runninghis efforts for one week. To see how much profit can be used from the salereducedvariable costs. The result is a reduced margin contribution to the fixed costs will gain net income, for more details can be seen in the table below.

**Table 5.**

Income Statement Rawing Mairori for one week Production

No. res	Total sale	by Variables	Contribusi margin	by remain	net profit
1	Rp.4.000.000	Rp.1.638.000	Rp. 3.262 million	Rp.9.548	Rp. 2352542

Source: processed data, 2019

The above table shows that the income statement of Rawing Mairori obtain a net profit of Rp. 2,352,542 with a total sales of Rp.4.000.000 and fixed costs Rp. Rp.1.638.000 9548 and variable costs. This effort shows that a decent and very lucrative when it is run and developed into larger

**f. Calculation of R / C Ratio**

analysisReturn Cost Ratio or acceptance analysis and production costs on this study aims to determine how much the success rate of business Rawing Mairori. The calculation of the R / C ratio can be seen in the table below:

**Table 6.**

Calculation of R / C Ratio

No Res	Depreciation costs	Operating costs	Total Production Costs (US \$)	total Sales	R / C Ratio (IDR)
1	9548	1.638 million	1647548	4,000,000	2427

Source: processed data, 2019





On the above table shows that the value of R / C Ratio of more than 1 (R / C) at Rawing Enterprises Mairori it can be concluded that the income is less than the costs incurred means they have an advantage. To find out how to calculate the R / C ratio required the following steps:> 1

$$\begin{aligned} \text{Total Production Cost} &= \text{Cost Depreciation} + \text{Operational Costs} \\ &= \text{Rp. } 9548 + \text{Rp. } 1.638 \text{ million} \\ &= \text{Rp } 1,647,548 \end{aligned}$$

To determine the value of R / C Ratio:

$$\begin{aligned} \text{R / C Ratio} &= \frac{\text{Jumlah Penerimaan}}{\text{Total Biaya}} \\ &= 4,000,000 / 1,647,548 = 2,427 \end{aligned}$$

It can be seen that the average value of the R / C ratio is Rp. 2,427, which means that for any costs incurred IDR 1.00 will generate revenue of Rp. 2,427 that experience the benefits.

### g. break Event Point (BEP)

Calculation of Break Event Point (BEP) Rawing Enterprises Production Mairori Setu week

No Res	by Remain (USD)	by Variables (USD)	sale (USD)	$\frac{1}{\text{By Variabel Penjualan}}$	BEP (Rp)	BEP (Q)
1	9548	1.638 million	4,000,000	0.5905	16 016	0.8008

Source: processed data, 2019

In the above table shows the value of Break Event Point (BEP Rp) and the value of the unit Break event point (BEP Q), where the respondent has a value that is 16 016 while the rupiah BEP calculation unit is 0.8008 following the BEP Price (USD) Respondents:

$$\text{BEP (Rp)} = 9.548 : 0.5905 = \text{Rp. } 16.016$$

So BEP (Rp) is sekitar Rp. 16.016 maka circumstances do not profit nor loss.

BEP Counting Unit:

$$\text{BEP (Q)}: 16.016 : 20.000 = 0.8008$$

## 5. Conclusion

Analysis of Product Revenue Seaweed on Rawing Enterprises Sarwandori Mairori village Yapen showed that respondents melakukan eg production or a production activity with a total expenditure of Rp 1,125,000 to produce seaweed (kelp noodles) 200 packaging, with a sales volume Rp 4,000,000 and a profit of USD 2,352,542 per one production where breakeven obtained Rp. 16 061 and R / C ratio is 2,442 this indicates that Sea Rumpt Product Production In Rawing Enterprises Mairori in Kampung Sarwandori Yapen deserves to be proposed.

Factors that affect the income of seaweed products in businesses in the village Sarwandori Rawing Mairori Yapen villages namely 1). Workers coming from farmers' own family plays a very important. 2). Weather environment / climate is where the activities of drying seaweed noodle dough can run well. 3). Capital is one of the factors of agricultural production, if a business without capital, the effort will not run. 4). The selling price to be profitable we need to sell to the market, but prices in the market Sell often unstable (up and down) and erratic result in losses for the business.

## 6. Reference

- [1] Asriany. 2014. Analisis usahatani rumput laut (eucheuma cattoni) kecamatan mandalle kabupaten pangkep. Pangkep.
- [2] Asriany asriany.azis@yahoo.co.id Jurusan Agribisnis Politeknik Pertanian Negeri Pangkep
- [3] Aslan, L. M. 2003. Budidaya rumput laut. Kanisius, Yogyakarta.
- [4] Bambang Priono, 2010, Budidaya rumput laut dalam upaya peningkatan industrialisasi perikanan, Pusat Penelitian dan Pengembangan Perikanan Budidaya.
- [5] Dina Indah Yanti, Analisis pendapatan dan fungsi produksi rumput laut Eucheuma cottonii. Studi Kasus Pada Usaha Budidaya Rumput Laut Di Kecamatan Wongsorejo Kabupaten Banyuwangi. Fakultas pertanian-peternakan Universitas muhammadiyah Malang.







- [6] Departemen Pendidikan Nasional, Kamus Besar Bahasa Indonesia, Edisi Ketiga, Jakarta: Balai Pustaka, 2005, h. 1092
- [7] Fadli1, Rachmat Pambudy2, dan Harianto3, Jurnal Agribisnis Indonesia (Vol 5 No 2, Desember 2017); halaman 111-124
- [8] Husain Umar, 2003, Metode Riset Bisnis, Gramedia Pustaka Utama, Jakarta.
- [9] Muh Yusri r. 2016. Analisis faktor-faktor yang memengaruhi peningkatan pendapatan petani rumput laut di desa laikang kecamatan mangarabombang kabupaten takalar. Makassar
- [10] Sugiyono. 2011. METODE PENELITIAN PENDIDIKAN. Bandung: Alfabeta
- [11] Sumber Google, Teori Pendapatan, diterbitkan oleh hestanto di Management.
- [12] Tibo, M. W. G, 2008. Analisis usaha rumput laut di kabupaten sikka. Prossiding symposium nasional Mahasiswa Pasca Sarjana Universitas Gajah Mada, 263 – 257.
- [13] Shanty Chisty Kappuw, 2016. SKRIPSI. Jayapura
- [14] Gabriel N Simanjuntak. Analisis titik impas (break event point) dan faktor– faktor yang mempengaruhi produksi kelapa sawit pt. perkebunan nusantara iv unit usaha tinjowan. 2017. Program studi agribisnis fakultas pertanian universitas sumatera utara medan.

