

Analysis Value-added of Baung Fish (Mystus Nemurus) in Increasing Income of Fishermen in South Labuhanbatu District

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Abstract - Labuhanbatu Selatan Regency is a production center of processed fish baung. Processed products studied in this research are baiung salai fish. This research was conducted on three districts in Labuhanbatu Selatan District. This study used descriptive and Hayami methods to analyze added value. The result of the research shows that the value added from processed products has a blend of Rp 33.848,99 / kg with added value ratio of 38.46 percent for one production. Revenues earned by fishermen processing salai baung fish for Rp 33.428,21 / kg for one-time production of patan obtained for Rp 1,303,700.

Keywords - Salai Baai Fish; Value Added; Income.

I. INTRODUCTION

Fisheries subsector has an important role as a connector of protein for the people of Indonesia. Fish as one of the natural resources (SDA) contained in public waters and has the potential to be developed for prosperity and welfare of the wider community.

Fish and other fishery products are easy to decompose food, for it is necessary processing and preservation which aims to inhibit and even stop the activity of substances and microorganisms destroyers or enzymes that can cause deterioration of quality and damage. to overcome this, it takes a way of preservation (processing) that can maintain the durability of fish without reducing the nutritional value to the maximum (Adawiyah, 2008). Preservation is defined as an attempt to maintain the quality of fish or prolong the shelf life of fish, so that fish can still be utilized and consumed in good and decent condition (Murniati and Sunarman, 2001).

Baung fish (*mystus nemurus*) is one of the original fish of Indonesia fishery that has the potential to be developed. The regency of South Labuhanbatu is one of the producers of baung fish as well as the argoindustri/ processing center of capture fisheries, especially baung fish which has potential to be developed (BPS Labuhanbatu, 2016)

Argoindustri is a form of activities (activities) that process raw materials derived from plant or animal that can provide added value so as to produce new products. Therefore agro-industry is part of the agricultural subsystem (Soekartiwi, 2000). Value added is the difference in value of a product after the production process done before the production process. Where value added can form new higher prices and greater profits so as to increase opinion (Zulkiflii, 2012).

This paper is the result of the study by using value-added analysis method that aims to increase the income of baung fish processing fishermen in Labuhanbatu Selatan district.

II. RESEARCH METHODS

This research was conducted in three sub-districts in South Labuhanbatu Regency: Torgamba District, Kota Pinang Subdistrict, and Kecamatan Kampung Rakyat. The area of research is determined purposively or deliberately premises premises because the research area is the center of baung fish processing. Sempel in this research is fisherman who process fish baung become salai fish. The method used to determine the sample is the census method (Ritonga, A. 2004).

Data types used are premier and secondary data. The premier data was obtained from interviews and Focus Group

Discusstion (FGD) with salai fish farmers. Secondary data is obtained from the liberature relating to the research undertaken.

Value-added analysis aims to determine the amount of income obtained by fishermen processing baung fish. The amount of added value is expressed mathematically using the method Hayami (Sudiyono, 2004).

III. RESULTS AND DISCUSSION

A. Description of Research Areas

South Labuhanbatu regency is one of the regencies of the division of Labuhanbatu regency. South Labuhanbatu regency consists of 5 districts namely: District Pinang, Torgamba District, District River Kanan, District Kampung Rakyat and Silangkitang District. With an area of 311,600 ha. Most of the population in Labuhanbatu Selatan Regency has a search for agriculture and fishery sector of 65.07 percent. (BPS Labuhanbatu, 2016).

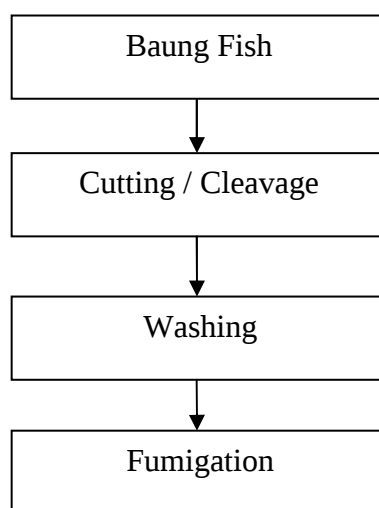
B. Respondent Characteristics

Respondents in this research are baung fish processing fishermen in three sub districts: Kota Pinang Subdistrict, Kampung Rakyat Subdistrict and Torgamba sub-district are productive age: 35-49 years old 75%, baung fish processing fishermen have 5-10 year business experience.

C. Processing Process

Processing baung fish so that produces processed salai baung fish in Labuhanbatu Selatan Regency is done by traditional methods and traditional tools. The processing business includes: supply of raw materials, fish cutting, cleaning and fogging. The raw material in the form of baung fish is obtained from the catch of fisherman of fresh fish from the catch of fisherman then split into two parts by using knife. Fish cleavage is aimed to remove the gills and the contents of the fish so that there is no spoilage bacteria that can damage the quality/ quality of salai fish products. The baung that has been cleared is then washed. Fish wash aims to clean fish from dirt and blood attached to the surface or inside the fish. Fish that has been washed after it is inserted into the basin jarring to remove water contained in the fish during the washing process.

The final stage is the fumigation that is done by the method of smoking hot (hot smoking) is the process of fumigation that has a distance close enough to the source of smoke. (Suprpto, 2006). Fresh baung fish that have been cut / split in two, washed and drained and then prepared p [there is a container of the grill for fogging. The curing process lasts 2-7 hours. Smoking is done to reduce water content so as not to provide opportunities for bacteria to thrive (maintain durability) and menghilangkan fishy smell. From the above description concluded the pronology of salai fish processing as follows.



D. Analysis of Added Value of Baung Fish

Processing fresh baung fish into salai baung cause the added value obtained from fish processing in the form of added value to the commodity of baung fish. The added

value obtained from fish processing can be value added products and economic value added. The added value of the product obtained from the processing of baung fish into baai fish can be durable/ keep the fish product longer, the smell

is typical/ fragrant, good taste, attractive color (yellow or golden brown). Salad baung fish can survive (stored) for about a month, so the increase in selling prices baich salai more expensive than baung fish sold in fresh condition. Besides the salai baiung fish processing business can increase the added value of the product, it can also increase

its economic value. Where for salai bai fish entrepreneurs will get additional income. So there is a change in income obtained by fishermen. Added value on salted fish processing can be seen in Table 4:18 as follows:

Table 4:18 Value Added Salai Fish in the District of South Labuhanbatu (Rp / Kg)

No	Variable	Value
I	1. Output (Kg)	7,80
	2. Input (Kg)	19,50
	3. Labor (HOK)	2
	4. Conversion Factor	0,40
	5. Labor Coefficient (HOK/Kg)	0,10
	6. Price Output (Rp)	220.000
	7. Wages of Labo (Rp/HOK)	4.102,56
II	Receipts and Profits	
	8. Raw Material Price (Rp / Kg)	41.250
	9. Other Input Contribution (Rp/Kg)	12.901,01
	10. Output Value (Rp/Kg)	88.000
	11a. Add Value Added (Rp/Kg)	33.848,99
	11b. Add Value Ratio (%)	38,46
	12a. TK Revenue (Rp/Kg)	420,78
	12b. TK Share (%)	1,24
	13a. Profit (Rp/Kg)	33.428,21
	13b. Profit Rate (%)	10,94
III	Reply Service Owner Factor Production	
	14. Margin (Rp/Kg)	46.750
	a. Labor Revenue (%)	0,90
	b. Other Input Contribution (%)	27,60
	c. Employer Profit (%)	71,50

Sorce : Sudiyono, 2004

Based on the calculation done by using Hayami method in Table 4:18 it can be seen that the average of fresh baung fish processed by 19,50 kg after processed yield 7.80 kg baif fish with conversion factor 0,4. Conversion is obtained from the distribution of output with inputs in one production. Workforce needed in processing baiung salai 2 (HOK) consisting of one male worker and one female worker. Male worker wage of Rp. 50,000 while the female worker wage is Rp. 30,000 with labor coefficient of 0.10 HOK / Kg. So that the average labor wage of Rp.4.102,56 / HKP with salai bai food processing income of Rp. 420,78 / Kg. The added value of the economy obtained by fishermen processing salai baung fish of Rp. 33,848.99 / kg bai fish with a value

added ratio of 38.46 percent of the output value. The added value obtained from the output value of Rp. 88.000 / kg minus the value of raw materials of Rp. 41.250 / kg and other input contributions of Rp. 12.901,01 / kg. Where the value of output obtained from the sale price of bai fish salai of Rp. 220.000 / kg multiplied by a conversion factor of 0.04 to obtain an output value sebsar Rp.88.000 / kg.

Revenue is the difference between the income earned from the processing of salai bai fish and the production cost incurred during the production process. Where production costs include fixed costs and non-fixed costs. Fixed costs consist of depreciation costs of equipment used in processing baung fish into salai. While the non-fixed costs

consist of raw material costs, supporting material costs, labor costs and other costs (transport costs).

By processing fresh baung fish into baung salai fish can increase economic added value for salai fish farmers in Labuhanbatu Selatan Regency. The results showed that the average of fresh baung fish processed by 19.50 kg will produce an average of 7.80 kg baiung salai with a selling price of 220,000/ kg. After analyzing the added value by using Hayami formulation approach (1987), for one kg of baiung salai fish, the fisherman earns a profit of Rp. 33.428,21 / kg with a profit rate of 10.94 percent and a margin of Rp. 46,750/ kg.

From the previous research results obtained that the amount of income obtained by producers of moves equally follow the amount of raw materials and supporting materials are processed. This means that the greater the raw materials processed then the resulting product more and more so the higher income will also be accepted by the manufacturer. This is in accordance with research conducted by M. Ramli and Intan Putri Anggarini (2012) entitled Value Added Processing Salai Patin . The results showed that the processor obtained a profit of Rp. 258,900 production cycles. In a week to do two times the production with an average of Rp. 517,800 or Rp. 2.071.200/ month. Fitriyani (2012) entitled Analysis of Value Added Fresh Fish Processing in Serdang Bedagai District. The results showed that the average added value generated from fresh fish processing in Serdang Bedagai Regency is processing fish so fish cracker Rp. 142.722,23/ Kg. Processing fish into salted fish that is Rp. 5.450,29/ Kg on fish processing into catfish smoke that is Rp. 5.566,32/ Kg for processing fish into fish abon that is Rp. 7.934,17/ Kg. I Putu Andika Mahardana, et al (2015) entitled Analysis of Value Added Processed Fish Process Case in Processing Group and Marketing Dwi Tunggal in Banjar Penganghan, Village Tengkidak, District Penebel, Tambanan Regency. The results show that the added value in one production process abon catfish Rp. 61.583,33/ kg, pepes catfish of Rp. 29.650,00/ kg and fried tilapia Rp. 11.380,00/ kg. Where the value added is Rp. 73. 511.904,00/ tahun. Keuntungan highest per production process is found in abon catfish of Rp. 38.250,00 / kg, pepes catfish of Rp. 19.190,00/ kg and fried tilapia Rp. 5,780,00/ kg. With a total profit of Rp. 43.272.000/ year.

Fishermen processing salai baai fish in Labuhanbatu Selatan district processing baung fish 5 times in one month. Then the income earned by fishermen in Labuhanbatu Selatan Regency Rp. 1,303,700. Based on observations in

the field, income from the sale of baia fish salai obtained by fishermen in Labuhanbatu Selatan District for one month is low. This happens because the small volumes of baung fish immediately processed into baia fish and salai fish processing frequency for one month is relatively small. The small volume of fresh baung fish processed due to the production of baung fish began to decline so that the processing frequency of baiung salai fish also decreased. Viewed from the prospect of salai bai fish processing business has a prospect to be developed. This can be seen from the demand of bai fish from various markets outside South Labuhanbatu and high selling price. To increase income in South Labuhanbatu regency, fishermen produce salai fish with other fish species such as red fish, corks fish, catfish and catfish with more frequency than bai bai fish.

IV. CONCLUSIONS AND SUGGESTIONS

A. Conclusion

From the results of research and analysis of added value of baung fish in increasing the income of fishermen in Labuhanbatu Selatan Regency conducted can be concluded as follows:

1. Salai fish business in Labuhanbatu Selatan Regency has added value of 33.848,99 / kg with value added ratio of salai fish processing in research area is 38, 46 percent.
2. Salai business income in Labuhanbatu Selatan Regency is Rp. 33.428,21 / kg for one production. Where fishermen processing salai bai fish in Labuhanbatu Selatan Regency produce average processed product as much as 7.80 kg so that the income earned is Rp. 260,740.04 for one production. Where the average frequency of processing baung fish into salai in Labuhanbatu Selatan regency as much as 5 times in one month. So it can be obtained the average salai fisherman income baung in Labuhanbatu Selatan District for one month of Rp. 1.303.700.

B. Sugestion

- 1) To the Entrepreneur
 - a) It is expected that salai fish processors in South Labuhanbatu regency maintain the quantity of bai fish salai which is characteristic and fruit of hand from Labuhanbatu Selatan Regency.
 - b) More innovative in the processing of baung fish by adding to the processed products of baung fish and increasing the number of production so that the income of fishermen is increasing.

- c) To increase the income of salai bai fish fishermen need to be expanded in product marketing because salai bai fish business has a bright prospect.
- 2) To the Government
- a) It is expected that South Labuhanbatu regency government can assist in procurement of bakuberupa fish baung so that bai fish salai production in Labuhanbatu Selatan Regency can increase.
 - b) To the South Labuhanbatu regency government is expected to provide assistance to salai bai fish fishermen either in the form of financial or non financial. Financial assistance in the form of capital aid to fishermen processing salai bai fish to advance their business. While non-financial assistance in the form of other innovations in the processing of salai fish in other fish species for salai fish processing can grow as well as the production activities of the fishermen can continue, assistance in the form of more modern tools in producing fish salai baung.

REFERENCE

- [1] Adawiyah. R. 2008. *Pengolahan dan Pengawetan Ikan*. Bumi Aksara. Jakarta
- [2] BPS. 2016. *Labuhanbatu Dalam Angka*. Badan Pusat Statistik. Labuhanbatu
- [3] Fitriani. 2013. *Analisis Nilai Tambah Pengolahan Ikan Segar di Kabupaten Serdang Bedagai*. Universitas Suamtera Utara. Medan
- [4] I putu, A.M, dkk. 2015. *E-Jurnal Agribisnis dan Agrowisata Vol. 4 No.1 : Analisis Nilai Tambah Usaha Olahan Ikan (Kasus pada Kelompok Pengolah dan Pemasar Dwi Tunggal di Banjar Penganggahan, Desa Tengkidak, Kecamatan Penebel, Kabupaten Tabanan)*. Universitas Udayana. Bali
- [5] Murniyati, A.S. dan Sunarman. 2000. *Pendiginan, Pembekuan, dan Pengawetan Ikan*. Kanisius. Yogyakarta
- [6] M. Ramli dan Intan, P. A. 2012. *Berkala Perikanan Terumbuk, Vol.40 No. 2. Nilai Tambah Pengolahan Ikan Salai Patin*. Kampar
- [7] Ritonga, A. 2004. *Statistika Terapan Untuk Penelitian*. Lembaga Penerbit: Fakultas Ekonomi Universitas Indonesia. Jakarta
- [8] Soekartawi. 2000. *Pengantar Agroindustri*. Raja Grafindo Pustaka. Jakarta
- [9] Sudiyono A. 2004. *Pemasaran Pertanian*. UMM Press. Malang
- [10] Zulkifli. 2003. *Manajemen Biaya*. BPFE. Yogyakarta.