Value Addad Analysis Of The Pickling Fish Agroindustry In Muncar District Banyuwangi Regency

Dina Nurul Lailika[1*] , Henik Prayuginingsih[1], Risa Martha Muliasari[1]

[1] Universitas Muhammadiyah Jember; dinan3106@gmail.com

*Correspondence: Dina Nurul Lailika
Email: dinan3106@gmail.com

Abstract: Indonesia is a maritime country consisting of islands and has a vast water area with abundant natural resource potential, including fish. One way to process fish so that it doesn't rot easily is by panning. The reason for carrying out the fish processing process is so that the fish and fishery products have added value. The research method used is the hayami method to calculate added value. The basis for the initial calculation is the variable value for measuring added value for one production process such as output, input, labor, wages, average labor, raw material prices, and costs other than raw materials. The average revenue from products produced by the pindang fish agroindustry in Muncar District is IDR. 13,500/fish with an added value of Rp. 2,726/fish. The resulting value added ratio is 20.19. This means that the pindang fish business in Muncar District, Banyuwangi Regency is still profitable.

Keywords: Indonesia, Pindang Fish, Value Addad

INTRODUCTION

Indonesia is a maritime country consisting of islands and has a vast water area with abundant natural resource potential, including fish. Fish is an important component in daily food to meet food needs [1] . Food ingredients come from two sources, namely vegetable and animal. Vegetable food sources are types of food that come from plants, for example vegetables, fruit, grains and nuts. Animal food sources are food produced from animals and suitable for human consumption, for example meat, eggs, milk and fish [2] .

Fish is a food that is easily damaged (rotten). In just about 8 hours after the fish is caught and landed, a process of change will occur which will lead to damage [3]. Therefore, so that fish and other fishery products can be utilized as optimally as possible, their condition needs to be maintained (Sa'adah, 2021a). The abundance of fish and fishery products cannot run out in a short time, if it is not managed it will undergo a process of change which will cause damage and result in a decrease in product prices. Therefore, it is necessary to carry out a processing process which aims to inhibit destructive microorganisms or enzymes which can cause a decrease in quality and damage. One way to process fish so that it doesn't rot easily is by panning it (Sa'adah, 2021b).

Pemindangan is a form of traditional fish processing and preservation that has long been used by the community. Another reason for processing fish is so that the fish and fishery products have added value [4]. Added value is the addition of value to a commodity by providing special treatment to that commodity with the addition of functional inputs. These inputs are in the form of moving places, changing shape processes, or storing things carried out on a commodity.

One of the districts in Indonesia which has quite large marine and fisheries potential is Banyuwangi Regency, East Java Province, with a coastline of ± 282 km, a pond area of 1,361 ha, a pond area of 284.53 ha, and a river length of 284.53 ha. ± 735 km. Processing pindang fish into a product that is more durable will

provide added value that can increase the economic value of the processed product. The aim of this research is to determine the added value per fish obtained from processing pindang fish in Muncar District, Banyuwangi Regency.

METHOD

Location determination was carried out deliberately (purposive methods). Because the home industry in Muncar District, Banyuwangi Regency has superior commodities in the form of processed pindang fish products. There is fresh fish which is an added value in the processing of pindang fish. This research was carried out in 2024.

Data collection is a very important stage in assisting the research process. So researchers must create appropriate data collection techniques because the choice of data collection techniques is a determinant of research success. Appropriate data collection techniques will make it easier for researchers to obtain valid data and information needed in research. Data collection was carried out through observations, questionnaires or interviews with respondents from pindang fish business actors, Literature Study.

The data analysis method uses quantitative and analytical methods, namely the hayami method of added value analysis. In general, the Hayami calculation method is used to calculate and analyze the added value of processed pindang fish products.

Tabel 1. Hayami Method Calculations

No	Component	Value
	Output, Input and Price	
1	Output (*ekor/proses produksi*)	1
2	Input Raw Material (*ekor/proses produksi*)	2
3	Input labor (*Hari/proses produksi*)	3
4	Conversion Factor	4=(1/2)
5	Labr Coefficient (*Rp/ekor*)	5=(3/2)
6	Product Price	6
7	Labor Wages (*Rp/ekor*)	7
	Profit and Value Addad	
8	Raw Material Input Price (*Rp/ekor*)	8
9	Biaya intermediet (*Rp/ekor*)	9
10	Product Value (*Rp/ekor*)	10=(4x6)
11	A. Value Addad (*Rp/ekor*)	11A=(10-9-8)
	B. Value Addad Ratio	11B=(11A/10)x100%
12	A. Labor Income (*Rp/ekor*)	12A=(7/2)
	B. Labor Share %	12B=(12A/11A)x100%
13	A. Profit (*Rp/ekor*)	13A=(11A-12A)
	B. Profit Ratio	(13A/10)x100%

Source : Hayami, 1987 in Hardian (2018).

According to [5] there are three indicators of the ratio of added value to product value, namely:

1.   If the added value ratio is <15%, then the added value is low.

2.   If the added value ratio is 15% - 40%, then the added value is moderate.

If the added value is > 40%, then the added value is high.

RESULTS AND DISCUSSION

Muncar is one of the largest fish producing districts in Banyuwangi Regency. The process of processing pindang fish in Muncar is done by boiling the fish by adding salt to kill bacteria that stick to the fish and so that the fish does not rot easily. Processing time is 4-6 hours. Pindang fish marketing covers the Bondowoso, Jember, Surabaya and Malang areas.

Tabel 2. Respondent Characteristics

Characteristics	Category	Amount	Percentage
Age	30-40	-	
	40-50	-	
	50-60	4	100%
Gender	Woman	2	50%
	Man	2	50%
Education	SD	2	50%
	SMP	1	25%
	SMA	1	25%

Based on Table 2, the age characteristics of pindang fish agroindustry respondents in Muncar District ranged from 50 years to 60 years, reaching a percentage of 100%. Productive age is the age of workers who are still doing their work well. Individual performance will decline with decreasing age and workload. Regarding the gender of pindang fish entrepreneurs in Muncar District, Banyuwangi Regency, the percentage of 2 women is 50% and the percentage of 2 men is 50%. In terms of education for pindang fish entrepreneurs, the percentage is 50% for elementary school 2 education, 25% for junior high school 1 education, and 25% for high school 1 education.

Analysis of the added value of pindang fish is carried out to determine the amount of added value of a food commodity to the factors that support the production process so that it becomes a processed ingredient for pindang fish. The output produced is the result of production. The added value analysis starts from calculating the cost of raw materials on Variabel Output, Input, and Price is Production Result, Raw Material, Work Force, Conversion Factor, Labor Coefficient, Production Price, Labor Wages. While the profits and added value are Raw Material Price, Intermediate Cost, Product Value, Value Addad, Value Addad Ratio, Labor Income, Labor Share, Profit, and Profit ratio in the form of fresh fish to processed products in the form of pindang fish. The main components in calculating added value are raw materials, output/product, labor input, and other input contributions. The basis for calculating the added value of pindang fish processing is as follows:

Table 3. Average Added Value per head of Pindang Fish in Muncar District, Banyuwangi Regency in 2024

No	Variabel	Unit	Value
	Output, Input, and Price		
1	Production Result	(ekor)	2.700
2	Raw Material	(ekor)	2.700
3	Work Force	(HOK)	19
4	Conversion Factor		1,00
5	Labor Coefficient	(HOK/ekor)	0.01
6	Production Price	(IDR/ekor)	13.500
7	Labor Wages	(IDR/HOK)	620.000
	Profit and Value Addad		
8	Raw Material Price	(IDR/ekor)	9.250
9	Intermediate cost	(IDR/ekor)	1.524
10	Product Value	(IDR/ekor)	13.500
11	a. Value Addad	(IDR/ekor)	2.726
	Value Addad Ratio	(IDR/ekor)	20,19

12	Labor Income	(IDR/ekor)	229,63
	b. Labor Share	(IDR/ekor)	8,42
13	a. Profit	(IDR/ekor)	2.496
	b. Profit Ratio	(IDR/ekor)	18,49

Based on Table 3, it is known that the average added value of output and input is the same, namely 2,700 individuals. The labor input amounted to 19 HOK. The conversion factor is obtained from the output formula divided by the input resulting in a conversion factor of 1.00. The labor coefficient is obtained from the formula for labor input divided by raw material input, which produces a labor coefficient of 0.01. The production price is 13,500 per head. Meanwhile, labor wages are IDR 620,000/HOK. Profits and added value have several components, namely the first is the price of raw materials which amounts to 9,250 per head. The second is intermediate costs amounting to 1,524 per head. The third is the product value, which is 13,500 per head which is obtained from the conversion factor formula multiplied by the product price. The fourth is the added value of 2,726 per head which is obtained from the product value formula minus intermediate costs minus the price of raw material input.

The fifth is the added value ratio with the amount 20.19 obtained from the formula of added value divided by product value multiplied by 100%. The sixth is labor income which amounts to 229.63 which is obtained from the formula for labor wages divided by raw material input. The seventh share of labor is 8.42 which is obtained from the formula for labor income divided by added value multiplied by 100%. The eighth is a profit of 2,496 per head which is obtained from the added value formula minus labor income. The last one is the profit ratio of 18.49, obtained from the profit formula divided by the product value multiplied by 100%. The price of products produced by the pindang fish agroindustry in Muncar District is IDR. 13,500/fish with an added value of Rp. 2,726/fish. The resulting value added ratio is 20.19. This means that the pindang fish business in Muncar District, Banyuwangi Regency is still profitable.

This research is in accordance with previous research as follows. The first research by Shofia Nur et.al, (2019), processing smoked catfish obtains added value of IDR. 4,042 per kg with a value added ratio of 14.58%. Secondly, Candra Adi et.al, (2020), the processing of wilted salted fish obtained an added value of IDR. 22,334 per kilo with a value added ratio of 62.47%. The third research by Aulia Magfhira Ichwan's research (2023) showed that processing pindang swallowtail fish obtained an added value of IDR. 14,356 per kg with a value added ratio of 39.14%.

CONCLUSION

From the research results, it was found that the average added value produced from the pindang fish agroindustry in Muncar District, Banyuwangi Regency was IDR. 2,726 per head with a value added ratio of 20,19.

REFERENCES

[1]   N. S. Dwi, "Pengaruh Ekstrak Lengkuas Terhadap Kadar Formalin Pada Ikan Pindang Berdasarkan Variasi Konsentrasi Dan Lama Waktu Perendaman," Pap. Knowl. . Towar. a Media Hist. Doc., vol. 3, no. 2, p. 6, 2021.

[2]   I. G. P. A. F. S. Putra, I. K. P. Juliantara, N. L. P. A. Sukmayanti, and D. P. Apsari, "Pemeriksaan Kualitas Mutu Dan Cemaran Mikrobiologi Ikan Pindang Layang (Decapterus spp) di Pasar Mambal, Bali," J. Ilm. Medicam., vol. 5, no. 1, pp. 16–20, 2020, doi: 10.36733/medicamento.v5i1.834.

[3] W. Sa'adah, "Analisis Nilai Tambah Pengolahan Ikan Mujair Menjadi Ikan Asin Di Desa Weduni Kecamatan Deket Kabupaten Lamongan," Mimb. Agribisnis J. Pemikir. Masy. Ilm. Berwawasan Agribisnis, vol. 7, no. 1, p. 466, 2021, doi: 10.25157/ma.v7i1.4709.

[4] S. Imelda, M. Wodi, E. Cahyono, and N. Mamontho, "Mutu Ikan Pindang Selar (Selaroides Sp.) pada Berbagai Konsentrasi Ekstrak Daun Kemangi (Boiled Fish Processing Trevally Quality (Selaroides Sp.) in Various Extract Concentration of Basil Leaves)," J. Ilm. Tindalung, vol. 2, no. 1, pp. 36–41, 2016.

[5] L. Hardian, Analisis Nilai Tambah, Pendapatan Usaha, Dan Pengembangan Produk Olahan Singkong Skala Industri Rumah Tangga (Studi Kasus Kecamatan Sepatan Timur …. 2018.