CONTRIBUTION OF FISH CATCHES TO COMMUNITY HOUSEHOLD INCOME IN THE RIVER OF RADEN ANOM VILLAGE, BATANG ASAI DISTRICT

Kontribusi Hasil Tangkapan Ikan Dalam Pendapatan Rumah Tangga Masyarakat Di Sungai Desa Raden Anom, Kecamatan Batang Asai

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ABSTRACT

The phenomenon of the relatively small income of the fishing community so that it is not able to meet the needs of fishermen's households, this situation makes fishermen have to have an additional source of income to be able to meet their household needs. Efforts that can be made by fishermen in Raden Anom Village, Batang Asai District are to catch fish in the Batang Asai River. The people in Raden Anom Village, Batang Asai District have their main jobs as farmers, laborers and self-employed. In addition to the community having the main job, some people in Raden Anom Village also carry out fishing activities in the Batang Asai River. This study aims to determine the contribution of fish catches to the household income of the community in Raden Anom Village, Batang Asai District. The method used in this study is a survey method with the analysis used is descriptive. The respondents to this study were obtained by census of 15 people (100%) fishermen with the data collection instrument being a questionnaire. The results of the research showed that the livelihood patterns of the people in Radon Anom Village, Batang Asai District were diverse, ranging from builders as fishermen, rubber plantations as well as fishermen, motorcycle repair shops as well as fishermen and members of the wallet as well as fishermen. The contribution of income that is dissipated is from non-fish activities, namely as a member of the wallet of Rp. 4,987,500 with a very high category, while the contribution of income from fish activities or from fishing is those that have a livelihood pattern as fishing as well as as a builder, which is Rp. 1,215,000 with a low category.

Keywords: income, contribution, receipts from fish and non-fish

ABSTRAK

Fenomena penghasilan masyarakat nelayan yang relatif sedikit sehingga tidak mampu mencukupi kebutuhan rumah tangga nelayan, situasi ini membuat para nelayan harus memiliki sumber penghasilan tambahan agar dapat memenuhi kebutuhan rumah tangganya. Upaya yang dapat dilakukan nelayan di Desa Raden Anom Kecamatan Batang Asai adalah dengan menangkap ikan di Sungai Batang Asai. Masyarakat di Desa Raden Anom, Kecamatan Batang

Asai mempunyai pekerjaan utama sebagai petani, buruh dan wiraswasta. Selain masyarakat memiliki pekerjaan utama, sebagian masyarakat Desa Raden Anom juga melakukan kegiatan menangkap ikan di Sungai Batang Asai. Penelitian ini bertujuan untuk mengetahui kontribusi hasil tangkapan ikan dalam pendapatan rumah tangga Masyarakat di Desa Raden Anom Kecamatan Batang Asai. Metode yang digunakan dalam penelitian ini adalah metode survey dengan analisis yang digunakan adalah secara deskriptif. Responden penelitian ini diperoleh secara sensus sebanyak 15 orang (100%) nelayan dengan instrument pengumpulan datanya adalah quisioner. Hasil penelitian yang didapatkan menunjukkan bahwa pola matapencaharian Masyarakat di Desa Radon Anom Kecamatan Batang Asai beragam mulai dari tukang bangunan sekaligus sebagai nelayan, kebun karet sekaligus sebagai nelayan, bengkel motor sekaligus sebagai nelayan dan anggota dompeng sekaligus sebagai nelayan. Kontribusi pendapatan yang tersebsar adalah dari kegiatan non ikan yaitu sebagai anggota dompeng sebesar Rp. 4.987.500 dengan katagori sangat tinggi sedangkan kontribusi pendapatan dari kegiatan ikan atau dari penangkapan ikan adalah yang memiliki pola matapencaharaian sebagai menangkapan ikan sekaligus sebagai tukang bangunan yaitu sebesar Rp. 1.215.000 dengan katagori rendah.

Kata Kunci: Pendapatan, Kontribusi, Penerimaan Dari Ikan dan Non Ikan

INTRODUCTION

Raden Anom Village is one of the villages included in Batang Asai District, Sarolangun Regency, Jambi Province. The Central Statistics Agency (2022) states that Batang Asai District has an area of 926.79 km2 and an altitude of 600 meters above sea level. This district is located at coordinates 2˚20 'LS to 2˚45' LS and 102˚05' BT to 102˚20' BT.

The people of Raden Anom Village, Batang Asai District, work as rubber tappers, builders, workshops, members of the gold mine and also carry out fishing activities in the Batang Asai River. This fishing activity is carried out because the income of the community as farmers, laborers and entrepreneurs is not sufficient for their household needs. This condition makes the people of Raden Anom Village have to have additional sources of income in order to meet their household needs, one of which is by becoming fishermen as well as having other professions such as rubber tappers, builders, workshops and members of the gold mine.

Fishing activities in Raden Anom Village are carried out on the Batang Asai River. The Batang Asai River has a river length of around ±104.1 km and a total river basin area of around 1262.4 km2. The Batang Asai River is a tributary of the Batang Tembesi River which is included in the Batanghari River Basin Area (DAS). The upstream of this river is located at an altitude of 40 - 100 meters above sea level, while downstream there is a fairly large flood area on the Batang Tembesi River to the estuary (Tikno, 2000; Nurdawati, 2017; Ilfan & Arwin, 2019).

The vast waters of the Batang Asai River contain potential fish resources including patin, gabus, seluang, baung, semah and lampam fish. The fishermen's catch in the river is sold by fishermen as one source of income in fishermen's households to meet their living needs in addition to income from other professions.

Based on information that the results of the fish catch obtained by fishermen are uncertain, but the community still catches fish in the Batang Asai River, this is because the income from the catch is thought to contribute as additional income in the community's household in addition to income from non-fish activities such as rubber tappers, builders, workshops and members of the gold mine.

Community contributions based on type of work will provide an overview of the income conditions of the Raden Anom Village community where contributions can be assessed through the percentage of income from both non-fish activities and from fishing activities. The amount

of business contribution to total income is seen from the size of the income from the community's catch generated in the Batang Asai River. The income studied in the study was business income from catches by comparing it with income outside the catch (Nazda, 2016, Hamka & Nia, 2024).

Household income is the total income of each household member, both from fishing business activities and non-fish business activities in Raden Anom Village received during a certain period of time. The main business activities of this community can be in the form of work that is done routinely. For this reason, it is necessary to know the contribution between fishing income and household income in Raden Anom Village. The purpose of this study was to determine the Contribution of Fish Catch Results to Household Income in Raden Anom Village, Batang Asai District, Sarolangun Regency.

RESEARCH METHODS

Place and Time

This research was conducted in Raden Anom Village, Batang Asai District, Sarolangun Regency, Jambi Province. The research was conducted for 1 month, namely from November 1, 2023 to December 1, 2023.

Toold and Materials

The materials used in this study were fish catches. While the equipment used in this study was using questionnaires, stationery, cameras as documentation tools.

Methods

The method used in this study is the survey method. The survey method is a method of collecting data from the results of interviews with respondents. The survey method is an investigation conducted to obtain facts from existing symptoms and seek factual information, both about social, economic, or political institutions of a group or a region (Morrisan, 2012).

The method of determining respondents is a census where people who work as fishermen and have other livelihoods outside of fishing are obtained as many as 15 people so that all respondents are taken to be samples in the study. Data were collected using structured interview techniques and direct observation in the field, as well as filling out questionnaires that had been prepared previously. The data collected were primary data obtained from interviews using questionnaires and secondary data obtained from various literature and reports from the fisheries service.

Data Analysis

This study uses quantitative analysis combined with descriptive. Revenue is the sales value of fish catches (Pujianto *et al*., 2013). To calculate revenue from fishermen's catches, the following formula is used.:

$$TR = P \cdot Q$$

Information:
TR = Total Acceptance (Rp)
P = Selling price (Rp)
Q = Number of fish sold (kg)

$$TC = FC + VC$$

Information:
FC = Fixed Cost
VC = Variabel Cost

$$\text{Income/Profit} = TR - TC$$

Information:
Π   = Profit
TR = Total Revenue
TC = Total Cost

The collected data is analyzed quantitatively and then explained descriptively. The calculation of income from fish catches uses the following equation:

$$I = TR - TC$$

Information:
I   = Total Business Income (Rp)
TR   = Total Business Revenue (Rp)
TC   = Total cost (Rp).

Meanwhile, to calculate the contribution of fish catches made by fishing communities to the household economy, use the following equation:

$$\text{Contribution} = \frac{\text{Capture Business Income}}{\text{Total Household Income of Fishermen}} \times 100\%$$

To determine the category of contribution of fishermen's income to household income using indicators according to Istiyanti & Hasanah (2013), to determine the size of the contribution of fishermen's income to household income, it can be measured by:

1. Contribution < 25% of total household income means the contribution is very low.
2. Contribution of 25% – 49% of total household income means low contribution.
3. Contribution of 50% – 75% of total household income means high contribution.
4. Contribution >75% of total household income means the contribution is very high.

RESULT

Table 1. Income Receipt Based on Fishing Results

No	Livelihood Patterns (people) (%)	Catch Results			Reception	
		Types of Fish	Amount (kg)	Average (kg)	Amount (Rp)	Average (Rp)
1	Fishing + Construction worker (2) (13,33%)	Baung	37		1.850.000	
		Semah	7		280.000	
		Patin	10		300.000	
		Amount	54	27	2.430 000	1.215.000
2	Fishing + Rubber plantation (3) (20%)	Baung	12		600.000	
		Semah	9		360.000	
		Gabus	16		640.000	
		Seluang	7		210.000	
		Patin	19		570.000	
		Amount	63	21	2.380.000	793.333
3	Fishing + Motorcycle Repair Shop (2) (13,33%)	Seluang	15		450.000	
		Patin	13		390.000	
		Amount	28	14	840.000	420.000

4	Fishing +	Baung	30		1.500.000	
	Dompeng	Semah	20		800.000	
	Members (8)	Gabus	5		200.000	
	(53,34%)	Seluang	8		240.000	
		Lampam	13		520.000	
		Patin	40		1.200.000	
		Amount	116	14,5	4.460.000	557.500
	(15) (100)	Total	261	17,4	10.110.000	746.458

Table 2. Income Receipt Based on Non-Fish Results

| No | Livelihood Patterns (people) (%) | Non-Fish Income Sources | Reception | |
			Total number	Average
1	Fishing + Construction worker (2) (13,33%)	Construction worker		
		Work wages	4.180.000	2.090.000
2	Fishing + Rubber plantation (3) (20%)	Rubber plantation		
		Rubber products	3.780.000	1.260.000
3	Fishing + Motorcycle Repair Shop (2) (13,33%)	Motorcycle workshop		
		Repair services	6.470.000	3.235.000
4	Catching Fish + Dompeng Members (8) (53,34%)	Dompeng members		
		Gold acquisition	39.900.000	4.987.500
	(15) (100%)	Total	54.330.000	11.572.500

Table 3. Household Income Based on Revenue Contribution

| No | Livelihood Source Patterns (people)(%) | | Household Income | | |
			Average (Rp)	Contribution (%)	Category
1	Fishing + Construction worker (2)(13,33%)	Fish	1.215.000	31,25	Low
		Non Fish	2.090.000	68,75	High
		Number	3.305.000	100	
2	Fishing + Rubber plantation (3)(20%)	Fish	793.333	38,64	Low
		Non Fish	1.260.000	61,36	High
		Number	2.053.333	100	
3	Fishing + Motorbike Repair Shop (2) (13,33%)	Fish	420.000	11,49	Very low.
		Non Fish	3.235.000	88,51	Very high.
		Number	3.655.000	100	
4	Catching Fish + Dompeng Members (8)(53,34%)	Fish	557.500	9,69	Very low.
		Non Fish	4.987.500	90,31	Very high.
		Number	5.545.000	100	
5	Total Average (15)(100%)	Fish	746.458	18,91	Very low
		Non Fish	2.893.125	81,09	Very high
		Number	3.639.583	100,00	

DISCUSSION

General conditions of the Research Location

Raden Anom Village is one of the villages included in Batang Asai District, Sarolangun Regency, Jambi Province. Based on data from the Central Statistics Agency in 2022, Batang Asai District has an area of 926.79 km2 and an altitude of 600 meters above sea level. This district is located at coordinates 2° 20' 00" S to 2° 45' 00" S and 102° 05' 00" E to 102° 20' 00" E.

In Raden Anom Village, there is the Batang Asai River which has a river length of ± 104.1 km and a total river basin area of around 1262.4 km2. The Batang Asai River is a tributary of the Batang Tembesi River which is included in the Batanghari River Basin Area (DAS). The upstream of this river is located at an altitude of 40-100 meters above sea level, while downstream there is a fairly wide flood area in the Batang Tembesi River to the estuary. The research area was conducted in Raden Anom Village, Batang Asai District, Sarolangun Regency where the research location point can be seen in Figure 1 below:
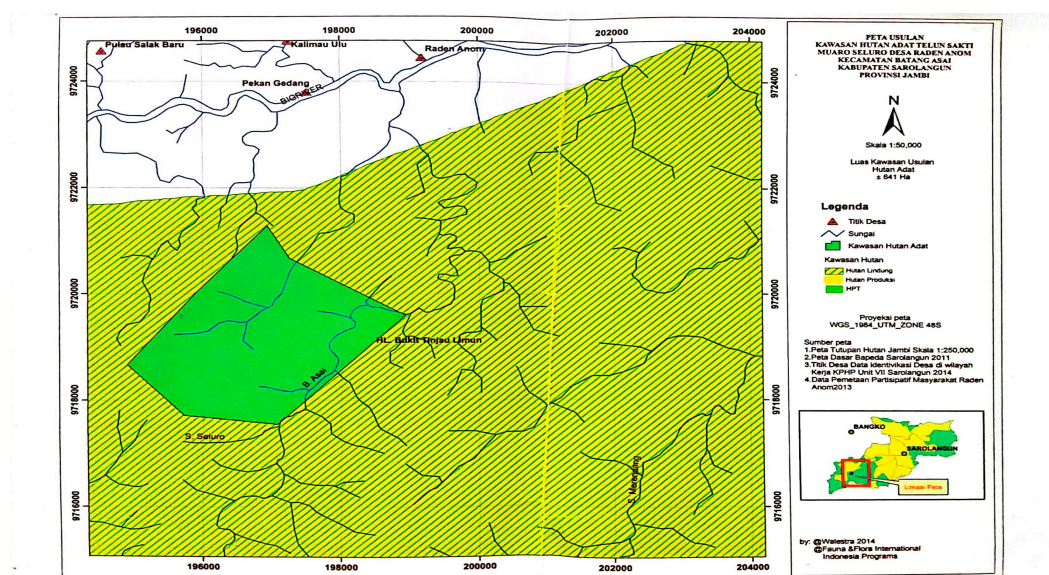

Figure 1. Research Location Map

Income Receipt Based on Fishing Results

Income from fishing is income obtained from the results of fishing carried out by fishermen, the results of the fish catch are sold to collectors or markets. Fishermen's income is an accumulation of the results of fishermen's efforts that do not stand alone, but are influenced by various factors such as capital and income from the fish catch obtained (Wibowo *et al*., 2019; Dahar, 2016).

Table 1 shows that the highest income based on fishing results is as a fish catcher as well as a member of the dompeng, which is IDR 4,460,000, but the highest income based on the largest average is fishing as well as a builder, which is IDR 1,215,000. The high income outside of fishing activities is influenced by side jobs carried out in the fishermen's spare time (Hamzah *et al.,* 2021; Oktaveasmara *et al.,* 2013).

Income Receipt Based on Non-Fish Results

Non-fish income is income obtained from work outside of fishing, such as laborers, entrepreneurs, self-employed and so on. Income is the inflow of cash assets and/or settlement of liabilities from the delivery or production of goods, provision of services, and other profit-

seeking activities which are the main or large operations that are continuous for a period (Cahyani & Hertati, 2023).

Based on table 2, it can be seen that the percentage of income obtained by fishermen in Raden Anom Village, Batang Asai District, Sarolangun Regency which has the highest percentage is in the profession of fishing and Dompeng Members, namely 53.34% with gross income of 39,900,000. The high income outside of fishing activities is influenced by the side jobs carried out by fishermen (Rini *et al.,* 2017; Indrawati *et al.,* 2018; Hamzah *et al.,* 2021; Purwaningsih *et al.,* 2014).

Household Income Based on Income Receipt Contribution

Household income based on the contribution of each income receipt for each livelihood pattern described in the form of a table explanation, Household income of fishermen in this case is the sum of income, from fishing and non-fish income. Household income is income from all family members connected to meet joint or individual needs in the household (Marini & Ningsih, 2015; Alpharesy *et al*., 2012).

Based on table 3, it can be seen that respondents who have a very high livelihood pattern from non-fish income are as members of a dompeng of IDR 4,987,500 while the highest income from fish is those who work as fishermen and builders, namely IDR 1,215,000. The variation in this income is influenced by working hours and the number of fish obtained, the longer the time to catch fish in the river, the more income will be received. This is in accordance with the opinions of Indrawati *et al*., (2018); Rahmasari, (2017); Konoralma *et al*., (2020); Sari & Rauf, (2020) who stated that the longer the fishing time, the higher the fishermen's income. However, the income from fishing is also influenced by other factors such as fishing gear and fishing location as well as the fishing season faced.

CONCLUSION

Based on the research results, it can be concluded that the livelihood patterns of the people in Raden Anom Village are diverse, influenced by the demands of the family that must be met, where the highest contribution from the livelihood pattern is from non-fish which falls into the very high category, while fish falls into the very low category.

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REFERENCES

Alpharesy, M. A., Anna, Z., & Yustiati, A. (2012). Analisis Pendapatan dan Pola Pengeluaran Rumah Tangga Nelayan Buruh di Wilayah Pesisir Kampak Kabupaten Bangka Barat. *Jurnal Perikanan dan Kelautan Unpad*, *3*(1), 125056.

Cahyani, N., & Hertati, L. (2023). Siklus Hidup Pendapatan Bersih dan Modal Kerja Bersih terhadap Arus Kas pada Perusahaan. *EKOMAN: Jurnal Ekonomi, Bisnis Dan Manajemen*, *1*(1), 59-82.

Dahar, D. (2016). Faktor-Faktor yang Mempengaruhi Pendapatan Nelayan di Desa Pohuwato Timur Kecamatan Marisa kabupaten Pohuwato. *Agropolitan*, *3*(3), 9-21.

Hamka, M., BD, A. I., & Nia, M. (2024). Analisis Pendapatan Usaha Nelayan Bajo di Kelurahan Tampo Kecamatan Napabalano Kabupaten Muna. *Jurnal Online Program Studi Pendidikan Ekonomi*, *9*(2), 929-945.

Hamzah, A., Widayati, W., Bahtiar, B., Bafadal, A., Hamzah, M., & Limi, Muh. A. (2021). Perubahan Model Pertukaran dalam Sistem Bagi Hasil Nelayan dan Upaya Peningkatan Pemahaman Bagi Nelayan. (*Jurnal Penelitian Pendidikan Indonesia*), *7*(3), 477.

Ilfan, F., & Arwin, A. (2019). Potensi Sumber Daya Air dalam Rangka Ketersediaan Sumber Air Baku Kota Sungai Penuh, Bangko dan Sarolangun di Subdas Batang Tembesi, DAS Batanghari, Provinsi Jambi-Zona Iklim Equatorial. *Jurnal Engineering*, *1*(1), 42-52.

Indrawati, U. S. Y. V., Endang, N., & Asriati, N. (2018). Peningkatan Kemandirian Usaha Kecil dan Menengah Melalui Pendampingan Program Kkn-Ppm. *Buletin Udayana Mengabdi,* 17(3).

Konoralma, S., Masinambow, V. A., & Londa, A. T. (2020). Analisis Faktor yang Mempengaruhi Pendapatan Nelayan Tradisional di Kelurahan Tumumpa Kecamatan Tuminting Kota Manado. *Jurnal Berkala Ilmiah Efisiensi*, *20*(02).

Marini, I. A. K., & Ningsih, N. S. K. (2015). Ragam Aktivitas Ekonomi Wanita Nelayan terhadap Peningkatan Pendapatan Rumah Tangga Nelayan Di Kota Mataram. *Jurnal Ganeç Swara*, *9*(1), 53-59.

Morrisan, M. A. (2012). *Metode penelitian survei*. Kencana.

Nazda, S., Mudzakir, A. K., & Triarso, I. (2016). Analisis Perbandingan Pendapatan Nelayan Jaring Pejer (Bottom Set Gill Net) Anggota Kub (Kelompok Usaha Bersama) dan Non Anggota Kub Di Desa Sukoharjo Kecamatan Rembang Kabupaten Rembang. *Journal of Fisheries Resources Utilization Management And Technology*, *5*(1), 134-144.

Nurdawati, S. (2017). Keanekaragaman dan Distribusi Benih Ikan di Beberapa Tipe Habitat Sungai Batanghari, Jambi. *Jurnal Penelitian Perikanan Indonesia*, *13*(2), 71-86.

Oktaveasmara, A., Bambang, A. N., & Yulianto, T. (2013). Analisis Tingkat Pendapatan Utama dan Sampingan pada Rumah Tangga Perikanan (RTP) Nelayan Gillnet di Desa Asinan, Kecamatan Bawen, Kabupaten Semarang, Jawa Tengah. *Journal of Fisheries Resources Utilization Management and Technology*, *2*(2), 68-79.

Pujiyanto., Heey, B., & Wijayanto D. (2013). Feasibility Study Analysis Financial Aspect to Marine Fisheries Bussiness of Mini Purse Seine with Net Different Size in PPI Ujung Batu Jepara Regency. *Journal of Fisheries Resources Utilization Management and Technology*, *2*(2), 125-126.

Purwaningsih, R., R., Z. F., & Nugrahaeni, V. S. (2014). Model Optimasi Perikanan Budidaya Laut (Studi Kasus Perairan Karimunjawa, Kabupaten Jepara). *Jurnal Teknik Industri,* *9*(3).

Rahmasari, L. (2017). Pengaruh Jarak Tempuh Melaut, Lama Bekerja dan Teknologi terhadap Pendapatan Nelayan. *Jurnal Sains dan Teknologi Maritim*, (2), 163-174.

Rini, N. P., Hapsari, T. D., & Sardiyatmo, S. (2017). Kelayakan Finansial Unit Usaha Penangkapan Multigear (Jaring Rampus dan Jaring Udang) di Pelabuhan Perikanan Pantai Tawang Kabupaten Kendal. *Indonesian Journal of Fisheries Science and Technology,* *12*(2), 124.

Sari, I. T. P., & Rauf, M. I. A. (2020). Analisis Pendapatan Usaha Perikanan Tangkap: Pengalaman dari Nelayan Kabupaten Garut Jawa Barat. *Ekono Insentif*, *14*(1), 12-27.

Tikno, S. (2000). Analisis Debit di Daerah Aliran Sungai Batanghari Propinsi Jambi. *Jurnal Sains & Teknologi Modifikasi Cuaca*, *1*(1), 101-108.

Wibowo, B. A., Triarso, I., & Suroyya, A. N. (2019). Tingkat Pendapatan Nelayan Gill Net di Pelabuhan Perikanan Pantai Morodemak. *Jurnal Perikanan Tangkap: Indonesian Journal of Capture Fisheries*, *2*(3), 29-36.