

Analysis of Fish Consumption Patterns of Budikdamber Households in Poklahsar Bankid Sejahtera, Kediri City

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Submitted: 29 October 2024

Revised: 21 April 2025

Accepted: 22 April 2025

ABSTRACT

Keywords:
Fish
Consumption
Pattern;
Household;
Budikdamber

Fish consumption pattern is a composition of the type and amount of food consumed by a person at a certain time as well as various information that provides an overview of the type and amount of fish eaten. This study aims to determine the pattern of fish consumption and the level of fish consumption in catfish budikdamber households. This type of research uses descriptive with interview, survey, observation and questionnaire methods. The research was determined by purposive sampling with 30 respondents. The results showed that the types of fish that are often consumed are catfish, tilapia and gourami, the average frequency of fish consumption is 12-17 times / month, the average amount of fish purchases is 6-10 kg / month with an average number of family members of 4 people. The average fish consumption level is still relatively low at 1.57 kg/capita/month and 18.84 kg/capita/year.

INTRODUCTION

Fish is one of the important sources of animal protein for the health and food security of the Indonesian people. The high potential of fisheries resources, both capture and cultivation, encourages various efforts to increase fish consumption among the community, especially in households directly related to the fisheries sector, such as fish farmers in buckets (BUDIkdAMBER). Budikdamber innovation is a technological advancement that combines vegetable cultivation with fish farming in one system (Purwanti et al., 2024). Fish consumption in aquaculture households is an interesting phenomenon to study because they have easier access and more affordable prices than the general public.

Fish consumption patterns, consumption behavior, and consumption levels of fish farming households are influenced by various factors, including preferences for fish species, fish availability, economic conditions, nutritional knowledge, and local food culture. Understanding the fish consumption patterns and behaviors of these households is important, as they are not only producers, but also potential consumers in increasing national fish consumption.

The fish consumption rate in Indonesia is 56.48 kg/capita in 2023, while this number has increased by 2.39% when compared to the fish consumption rate in 2021, which was 55.16 kg/capita. close to the annual target of 60 kg per capita (KKP, 2024). Kediri City's yearly fish consumption rate was 29 kg per capita in 2020, 32.60 kg per capita in 2021, 34.80 kg per capita in 2022, and 38.97 kg per capita in 2023 (BPS, 2024). Kediri's consume of fish is still comparatively low, falling short of the KKP's annual per capita fish consumption target. Research by Risnandar (2020), fish consumption patterns in coastal communities tend to be higher than in urban communities, in line with easier access to fisheries resources. The variety of fish cultivated by farmers often has a direct effect on the types of fish that are more often consumed. Farming households tend to consume the types of fish they cultivate, which can create a preference for certain types of fish (Yulianti, 2019).

This study aims to analyze consumption patterns, and the level of fish consumption in households of farmers, especially those who have a catfish culture business in Kediri City. This is expected to provide a clearer picture of the dynamics of fish consumption in community groups that are the main actors in the aquaculture supply chain. The results of this study are also expected to serve as a basis for formulating more effective policies and programs to increase fish consumption among the wider community, including strategies to support farming households as more prosperous fish consumers and producers.

LITERATURE REVIEW

Fish consumption patterns among fish farming households are strongly influenced by various factors, including income levels, cultural preferences, and accessibility to fish products. Fish plays an important role in the pattern of animal food consumption in Indonesia, showing that it is one of the main sources of protein consumed by households. The protein contained in fish provides the highest contribution to the animal protein source group, reaching around 57.2% (Rahma, 2024). Research by Fitria, (2021) on fresh fish consumption behavior in fish farming households, shows that farming households are more likely to consume fresh fish, because they have direct access to the harvest. Apart from fresh fish, fishery products can be processed which can be consumed by the community such as: sausages, nuggets, and fillets (Fattah et al., 2023).

Diversification of food production in households, including fish farmers, contributes to diverse consumption patterns, which are influenced by demographic

and socio-cultural factors (Sudrajat, 2023). Research by Virgantari et al., (2022) on mapping household fish consumption levels in Indonesia, showed that there are variations in fish consumption levels in Indonesia, where some provinces such as Aceh and Riau recorded high levels of fish consumption, participation and expenditure. This suggests that geographical location and availability of local fisheries resources may influence fish consumption patterns in aquaculture households.

Based on the research Ermanda et al., (2019) revealed that animal food consumption patterns, including fish, in West Sumatra Province show that households tend to consume significant amounts of fish, with data showing fish consumption reaching 16.75 kg per capita per year. In 2023, the level of fish consumption in Kediri City was recorded to reach around 32.6 kg per capita per year. This figure shows a significant increase compared to fish consumption in previous years, such as 28 kg per capita in 2019 and 29 kg in 2020 (BPS, 2023). Meanwhile, the fish consumption figure for East Java in 2023 was 49.49 kg per capita per year. (KKP, 2024).

METHOD

The research was conducted in June-August 2024 in household cultivation in buckets (BUDIKDAMBER) Poklahsar BANKID Sejahtera Bandar Kidul Kediri City. This type of research uses descriptive with interview, survey, observation and questionnaire methods. Sampling technique with *Purposive Sampling*. Respondents taken are group members in Poklahsar Bankid Sejahtera as many as 30 households who do business budikdamber catfish. Data analysis includes fish consumption patterns, namely frequency of fish consumption, types of fish consumed and consumption levels. Data analysis method for fish consumption level is determined by quantitative analysis, namely calculating fish consumption of cultivator households based on the formula (Rhomy, 2014):

$$\text{Average consumption of fish} = \frac{\text{Total fish consumption}}{\text{Total samples}} \times 12$$

RESULT AND DISCUSSION

Characteristics of Catfish Cultivation Households

The 30 respondents were households of budikdamber cultivators who were members of Poklahsar Bankid Sejahtera, especially the wives of the cultivators. Characteristics of respondents based on age, education level, number of family members and income level of cultivator households. Based on age, the dominant cultivator households at the productive age of 86% are in the age criteria of 26-60 years with a diverse level of education ranging from elementary school, junior high school, high school and bachelor's degree. As many as 67% of respondents have a high school education and only 7% have primary school and bachelor's degrees. The

higher the level of education of housewives, the more it affects the reference of housewives in choosing fresh fish as a source of animal protein. Meanwhile, as many as 40% of family members depend on 3-4 people and the average income per month is Rp. 2,000,000-Rp. 5,000,000.

The following is the distribution of household characteristics of Budikdamber Poklahsar Bankid Sejahtera of Kediri city in Table 1.

Table 1. Household Characteristics of Budikdamber Poklahsar Bankid Sejahtera Kediri City

| Characteristics | Total (People) | Percentage (%) |
|--------------------------------------|-------------------|-------------------|
| A. Age | | |
| - 26-60 Year | 26 | 86 |
| - >60 Year | 4 | 14 |
| Total | 30 | 100 |
| B. Education Level | | |
| - SD | 2 | 7 |
| - SMP | 6 | 20 |
| - SMA | 20 | 66 |
| - Sarjana | 2 | 7 |
| Total | 30 | 100 |
| C. Total Family Members | | |
| - 1-2 | 9 | 30 |
| - 2-3 | 6 | 20 |
| - 3-4 | 12 | 40 |
| - 5 | 3 | 10 |
| Total | 30 | 100 |
| D. Income (Rupiah/ Month) | | |
| - 500.000- 2.000.000 | 10 | 33 |
| - 2.000.000- 5.000.000 | 13 | 43 |
| - >5.000.000 | 7 | 24 |
| Total | 30 | 100 |

Source: Data Prosesed (2024)

Fish Consumption Patterns

Consumption patterns reflect people's eating habits and the types of commodities that are often consumed. Fish consumption patterns in this study can be known by interviewing using the *recall* method (asking again) to respondents about fresh fish consumed during the last month. Consumption patterns in this

study can be known through four things, namely the type of fish, frequency of consumption and the amount of purchase. The pattern of fish consumption by households of Poklahsar Bankid Sejahtera in Kediri City is explained as follows.

1. Types of Fish

Type of fish is the variety of fresh fish consumed by the household during the past month. Fresh fish consumed includes catfish, tilapia, gourami, squid and shrimp. The type of fish most (60%) consumed by households is catfish, while the least (3.4%) consumed by households is squid. In addition, households also consume processed fish, namely nuggets and shredded catfish. Catfish is consumed more by households because it is taken from their own budikdamber and is easily available also the community's preference for catfish stems from the fact that catfish farming is growing in popularity because of how simple it is to raise and how widely consumed it is in the community, besides that the price is relatively cheap and tastes good is the reason households choose to consume catfish (Anandya et al., 2023). The high nutritional content in catfish makes it one of the main ingredients of processed fishery products (Purwanti et al., 2023)

2. Frequency of Fish

The frequency of fish consumption illustrates how often households consume fresh fish within one month. Based on Table 2, it is known that dominant (40%) households consume fish at a frequency of 12-17 times per month, with an average of consuming fish 3-4 times per week and the lowest (3.3%) households only consume fish once a month. There were no households that never consumed fish within one month. The preference or frequency of fish purchase is also influenced by income, the number of family members, and the price of fish. Households' habit of buying fish is often driven by factors such as income level, understanding of the nutritional content and benefits of fish, affordable price, and the taste of the fish (Mar'ie et al., 2022).

3. Number of Fish Purchased

The number of fish purchased is the number of fresh fish purchased by households during one month. Fresh fish purchased by households that are often consumed are catfish, tilapia, gourami, squid and shrimp. The number of fish purchased is measured in kilograms per month. Based on Table 2, it is known that dominant households (60%) buy catfish even though the results of their own cultivation amount to 6-10 kg/month with an average number of family members of 4 people. While the lowest fish purchase (6.7%), this is because households choose other protein source foods, namely tofu and tempeh, which are relatively cheap and easy to obtain, namely in the surrounding traditional markets and vegetable sellers who are regular subscriptions every day. When the price of fish falls, the appetite or frequency of buying fish will increase, so the amount of fish consumed will increase. (Mar'ie et al., 2022).

The following is the distribution of fish consumption patterns of households budikdamber Poklahsar Bankid Sejahtera Kediri city in Table 2.

Table 2. Fish Consumption Pattern of Budikdamber Household Poklahsar Bankid Sejahtera Kediri City

| Consumption Pattern | Total (Household) | Percentage (%) |
|---|----------------------|-------------------|
| A. Jenis Ikan | | |
| - Lele | 18 | 60 |
| - Nila | 6 | 20 |
| - Gurame | 3 | 10 |
| - Cumi-cumi | 1 | 3,4 |
| - Udang | 2 | 6,6 |
| Total | 30 | 100 |
| B. Frequency of Fish (times/month) | | |
| - 0-5 | 10 | 33,4 |
| - 6-11 | 6 | 20 |
| - 12-17 | 12 | 40 |
| - 18-23 | 1 | 3,3 |
| - 24-30 | 1 | 3,3 |
| Total | 30 | 100 |
| C. Number of Fish Purchased (kg/bulan) | | |
| - 1-5 | 2 | 6,7 |
| - 6-10 | 18 | 60 |
| - 11-15 | 10 | 33,3 |
| Total | 30 | 100 |

Source: Data Procesed (2024)

Fish Consumption Rate

Per capita fish consumption is calculated by dividing the total fish consumption in an area in a certain period of time by the total population in the area. The per capita fish consumption level of Budikdamber Poklahsar Bankid Sejahtera households in Kediri City is shown in Table 3.

Table 3. Per capita Fish Consumption Level of Budikdamber Household Poklahsar Bankid Sejahtera Kediri City

| Family Members (People) | Total Responden (People) | Total Family Members (People) | Number of Fish Purchased (kg/bulan) |
|----------------------------|--------------------------------|-------------------------------------|---|
|----------------------------|--------------------------------|-------------------------------------|---|

| | | | |
|---|----|-----|-------|
| 2 | 9 | 18 | 54 |
| 3 | 6 | 18 | 96 |
| 4 | 12 | 76 | 40 |
| 5 | 3 | 15 | 10 |
| Total | 30 | 127 | 200 |
| Fish Consumption Rate kg/ kapita/ month | | | 1,57 |
| Fish Consumption Rate kg/capita/year | | | 18,84 |

Source: Data Proccesed (2024)

Based on Table 3, it is known that the average level of household fish consumption is 1.57 kg/capita/month and 18.84 kg/capita/year, which means that the level of fish consumption in households of budikdamber farmers in Poklarsar Bankid Sejahtera is still relatively low. Based on the Information System for Data Dissemination and Statistics of Maritime Affairs and Fisheries (2016) the national standard of fish consumption rate has 3 criteria, namely low (< 32kg/capita/year), medium (32-43 kg/capita/year) and high (> 43kg/capita/year). The level of fish consumption in households of budikdamber cultivators in Poklarsar Bankid Sejahtera is still relatively low and is below the target set by KKP of 60kg/capita/year by 2023 and the target of fish consumption in Kediri City of 32.6kg/capita/year. This is because aquaculture households prefer cultivation products to be sold rather than consumed by themselves. It is hoped that by doing aquaculture households will find it easier to obtain fish as animal protein. What may need to be considered is increasing public awareness and interest in fish consumption itself. This is also corroborated by the opinion of Arthatiani & Zulham (2019) that one of the strategies to increase fish consumption is to increase the affordability of fish both in terms of price and availability.

CONCLUSION

The results showed that the types of fish that are often consumed are catfish, tilapia and gourami, the average frequency of fish consumption is 12-17 times/month, the average amount of fish purchases is 6-10 kg/month with an average number of family members of 4 people. The average level of fish consumption is still relatively low at 1.57 kg/capita/month and 18.84 kg/capita/year.

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