



ANALYSIS OF THE WELFARE LEVEL OF FISHERMEN'S HOUSEHOLDS IN JATILUHUR RESERVOIR, SUKASARI DISTRICT, PURWAKARTA REGENCY

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ABSTRACT

This electronic document is a “live” template. The various components of your paper [title, text, heads, etc.] are already defined on the style. This study aims to analyze the level of household welfare and the factors that affect the welfare of fishermen's households in Jatiluhur Reservoir, Sukasari District, Purwakarta Regency. The research was conducted in February – August 2022 in Sukasari District. This study used a survey method with a total of 41 respondents who were determined using the Slovin formula and determined the respondents based on the *purposive sampling method*. The analysis of the level of welfare is guided by the criteria set by the Central Statistics Agency in 2015 which contains 10 indicators (household income, household consumption or expenditure, living conditions, housing facilities, health of household members, ease of use of health personnel facilities, quality of education). household members, ease of entering children into educational levels, a sense of security from the interference of crime, ease of accessing information and communication technology) and for the variables used to determine the factors that influence there are 5 variables including age, formal education, number of dependents, experience of fishermen and household income which is followed by the regression model. This study found that fisherman households in Sukasari District got a welfare level of 2.17 (medium welfare) and the factors that influenced the welfare level of fishermen's households in the regression model obtained were Household Welfare Level = $2.343 - 0.003 \text{ Age} + 0.005 \text{ Formal Education} - 0.038 \text{ Family Dependents} + 0.000 \text{ Fisherman Experience} + 5.848\text{E-}8 \text{ household income}$. Based on the partial coefficient test (t-test) only age and household income have a significant effect, but simultaneously these 5 variables affect the level of welfare significantly. The coefficient of determination obtained is 43.7%, which means that 56.3% is influenced by other factors.

INTRODUCTION

Sukasari District is the least populated district and is located at the western end of Purwakarta Regency. Currently, Sukasari District has 2 tourist sites, the first is Parang Gombong (which is the Jatiluhur Reservoir as the selling point of this tour) and there is also Curug Tilu tourism where the river water flows into it. in Jatiluhur Reservoir. This is an advantage for local residents, namely from this tour, many residents of Sukasari District use it for their livelihoods (restaurants, managers, trades, and others). Sukasari sub-district is a remote area where access to travel is difficult, the community is still thick with local wisdom.

Jatiluhur fishermen based on data from the Fisheries and Livestock Service Office of Purwakarta Regency are traditional fishermen and the fishing gear used is classified into 3 types of fishing gear including fishing rods, ongoh nets, and nets. The number of fishermen in Sukasari District is the largest in Purwakarta Regency and even experienced a significant increase in 2022, this is inversely proportional to the number of fishermen in other sub-districts who experienced a decrease in the number of fishermen. According to data from the Jatiluhur Marine and Fisheries Research and Development Agency [1] the number of fishermen in the Jatiluhur Reservoir from 2005-2015 fluctuated, the peak of the decline was in 2010-2015 which decreased significantly. The decline in the number of fishermen coincided with the decline in catches, the cause of the decline in catches was the poor quality of the waters in the Jatiluhur Reservoir. The impact of the declining catches of fishermen in the Jatiluhur Reservoir had an impact on capture fisheries, namely *fishermen* water hyacinth blooms which made it difficult for to drive the boat, damage to the fishing gear (nets) used, as well as the decline in fish availability due to polluted water. Another problem is that fishermen in Jatiluhur Reservoir are usually fishermen who are not far from where to find their fish (local native fishermen), and the supply chain that occurs to fishermen in Jatiluhur Reservoir is from fishermen to fish collectors and directly to consumers, this is a barrier factor from welfare because they are unable to compete with outsiders [1].

RESEARCH METHODS

This research uses research methods in the form of survey methods, survey methods are methods that obtain data naturally (not artificially) in a place and for research treatment in the form of conducting interviews with respondents, distributing questionnaires, conducting tests, and so on without conducting interviews. an experiment [2]. **method used is *purposive sampling method***. The number of respondents needed is 41 respondents from a total population of 456 people, this number of respondents is obtained from calculations using the Slovin formula with an accuracy level of 85%.

analysis was carried out based on the reference of welfare indicators according to the Central Statistics Agency in 2015, the criteria contained 10 discussion points, including household income, household consumption/expenditure, living conditions, housing facilities, member health, ease of utilization of health personnel facilities, quality of education of household members, ease of entering children into education level, sense of security from the interference of crime, and ease of accessing information and communication technology.

The next data analysis is using multiple linear regression analysis which previously tested classical assumptions and hypothesis tests. This analysis is used to determine a regression model that describes the factors that affect the welfare level of fishermen's households in Sukasari District.

RESULT DAN DISCUSSION

Sukasari district is one of the district in the administrative area of Purwakarta Regency which has 5 villages including Sukasari Village, Parung Banteng Village, Kertamanah Village, Ciririp Village, and Kutamanah Village. at least in Purwakarta Regency. This district is located in the West End of Purwakarta Regency which geographically, Sukasari District is directly adjacent to the Jatiluhur Reservoir in the East, Cirata Reservoir in the South, Joggol, Bogor Regency in the West, Kutajati, Karawang Regency and Cianjur Regency in the North. The distance from the capital city of Purwakarta Regency is approximately 10-15 km to Sukasari District

Analysis Of Welfare Level Based on BPS 2015

1. Indicators of Household Income Household

income is the provision of production activities in the form of remuneration or compensation provided. Household income will be used to meet daily needs in a certain period, hereinafter referred to as household expenditure. As many as 41 fishermen are categorized as very poor, because their per capita income is smaller than the UMK in Purwakarta Regency, which is Rp. 4,173,568.61/month.

2. Indicators of Expenditure/Consumption

Expenditure/consumption is also an important aspect that can represent in the calculation of welfare in this study, household expenditure/consumption is very closely related to the number of dependents, the more the number of dependents, the more expenses will be [9], in this study as many as 18 fishing households are categorized as not poor (43.90%) and the highest number is 20 people (48.78%) in the poor category and the remaining 3 people in the very poor category.

3. Indicators of Living Conditions

A place to live or which is categorized as a board that has a function as a place of shelter and shelter so that it can be categorized as an indicator of welfare, the condition of the place of residence that is measured includes the roof, walls, house status, and type of floor. The condition of the living conditions of fishermen in Sukasari District on average is classified as prosperous, because as many as 80.49% of the houses have tile roofs, the status of the houses is 100% own.

4. Indicators of Housing Facilities

facilities will have an influence on the level of household welfare, the condition of the fisherman's residence facilities in Sukasari District is in sufficient criteria, this is evidenced by several criteria showing good criteria such as 100% lighting sources using electricity, toilets 85.37% stated that using their own bathroom, 80.49% used gas as fuel. Meanwhile, water sources are adjusted according to their respective regions.

5. Health of Household Members

The health conditions of fishermen's households in Sukasari Sub-district are quite good, marked by 68.29%, including the criteria for < 25% of family members who experience illness in 1 month. Diseases suffered in general are mild illnesses such as cough, flu, fever, and heart-burn. So that for the prevention it is usually enough to use medicines that are available at local stalls or taken to the nearest Puskesmas.

6. Ease of use of health personnel facilities

facilities used by fishermen are adjusted to the closest distance to their homes, but in general fishermen do not choose hospitals because of the far distance. Some fishermen also stated that they were unable to pay for BPJS health so that they used conventional means to pay for treatment.

7. Quality of education of household members

The quality of education of members of fishing households in Sukasari District, more than 50% of the members have not completed elementary school (SD), this event is based on the community's frame of mind that has been indoctrinated that in the end they will become fishermen, so that education is not a priority factor. However, almost all fishermen in Sukasari District, all of their members can read and count.

8. Ease of entering children into education levels

In general, fishermen in Sukasari Sub-district stated that it was easy to enter their children to education level, but this indicator was closely related to the number of dependents because there were fishermen who stated that it was not affordable to pay for their children because there were too many. The Government of Purwakarta Regency also provides a one-roof school (9 years) so that this reduces the cost burden and the difficulty of the community to enter their children at every level of education.

9. Sense of Security from Crime Disorder

Security conditions based on interviews with local fishermen depend on the location, if the location is further away from the urban center, the fisherman declares unsafe, the cause is the number of fishing locations visited by non-local people (outside the area) so that fishermen convey the perpetrators of crime what happened was not from the local community of Sukasari District.

10. Ease of Accessing Information and Communication Technology

The technology access tool used by fishermen's households is a mobile phone, so that it is included in the moderately prosperous category. Several households stated that they had used internet access in the form of Wifi which they paid Rp. 50,000 per month. Jatiluhur Reservoir fishermen are traditional fishermen [10] so they do not use sophisticated tools (GPS, ecosounder, and others). Fishermen prefer to use their instincts in determining the presence of fish and provide information to each other between fishermen when there are locations that have a

lot of fish.

11. Average recapitulation of welfare level indicators for fishermen's households

Based on the table below, fishermen's households in Sukasari District get a score of 2.17. The following is in accordance with the calculation results, which are included in moderate welfare. the biggest factor of welfare is income, [11] states that income is very influential in explaining welfare, because the greater the income, the greater the ability to finance all expenses and needs. In the study [12] which was entitled the effect of income on family welfare, the result was 79.4%, the effect was large. The data above states that all respondents get a score of 0.25 or a rating of 1 (below the UMR of Purwakarta Regency).

No.	Indicator	weight	Score
1	household income	25%	0,25
2	Consumption/Expenditure	16%	0,38
3	Living condition	13%	0,37
4	Housing facilities	4%	0,11
5	Health of household members	10%	0,26
6	Ease of use of health personnel facilities	4%	0,07
7	The quality of education of household members	10%	0,24
8	Ease of entering children into education levels	10%	0,28
9	Sense of Security from Crime Disorder	4%	0,11
10	Ease of accessing information and communication technology	4%	0,10
		jumlah	2,17

* Analysis Primary Data

Factors Affecting the Level of Household Welfare

Based on data processing using SPSS, the results showed that the data had passed the classical assumption test and based on the T-test there were only 2 variables that had a significant effect and the results of the F-Test showed that all independent variables simultaneously had a significant effect on the dependent variable. The value of the coefficient of determination obtained is 43.7%. And the multiple regression model obtained is as follows:

$$\text{Household Welfare Level} = 2.343 - 0.003 \text{ Age} + 0.005 \text{ Formal Education} - 0.038 \text{ Number of dependents} + 0.000 \text{ Fisherman Experience} + 5.848\text{E-}8 \text{ household income} + e$$

The above formula can be explained as follows

- The constant value is 2.343, meaning that if the independent variable (age, formal education, number of dependents, fishing experience, and household income) is 0 (zero) then the value of the dependent variable (Household Welfare) is 2.343.
- The value of B1 = -0.003 and has a value of sig = 0.237 > 0.05, it means that the age variable has a negative and insignificant effect.
- The value of B2 = 0.005 and has a value of sig = 0.935 > 0.05, it means that the formal education variable has a negative and insignificant effect.
- The value of B3 = -0.038 and has a value of sig = 0.001 < 0.05, it means that the variable number of dependents has a negative and significant effect.
- The value of B4 = 0.000 and has a value of sig = 0.822 > 0.05, it means that the fishermen's experience variable has a positive and insignificant effect.
- The value of B5 = 5.848E-8 and has a value of sig = 0.001 > 0.05, it means that the household income variable has a positive

and significant effect.

1. Effect of Age on Welfare Levels

Based on the results of multiple regression analysis, the age of fishermen in Sukasari District partially has no negative and insignificant effect, which means that the higher the age, the lower the level of welfare, [13] states that age 15 years and under and 64 and above are not a productive age, based on data in the field, the age of the respondent is approaching the age of 64 and there is no age of the respondent under the age of 15 years. This insignificant effect is not in accordance with research [14] which states that age has a significant influence on improving welfare. however, conditions in the field do not seem to have much effect because as they age, fishermen will diversify their businesses, such as returning to farming and entrepreneurship.

2. The Effect of Education on Welfare Levels

Education is an important factor in improving the quality of life, in research [15] education has a positive and significant influence on family welfare, the higher the education, the welfare value will increase. The result of this research is that it has a positive but not significant effect.

3. Effect of Number of Dependents on Welfare Levels

The results of the regression model obtained are that the number of dependents has a negative and significant influence, this is similar to other studies which basically the more the number of dependents, the greater the amount of expenditure as well as the amount of income that must be higher. improved, as well as other indicators that require additions.

4. The Effect of Fisherman's Experience on Welfare Levels

The results obtained in this study are that the experience of fishermen has a positive but not significant effect, based on field conditions, it is true that the longer the experience of fishermen, the better, but in fact experience is very closely related to the increasing age of the fishermen, which forces fishermen reduce their working hours in the field. results of research [14] also get similar results.

5. Effect of Income on Welfare Levels

Household Welfare Levels in meeting their needs is closely related to the income generated, so that it will be able to affect the level of household welfare [16]. [17] In his research, he said that income had a positive and significant effect, the results were similar to this study which found a positive and significant effect, these results were obtained because basically a large income would be able to meet other needs that support welfare, some fishermen in Sukasari Sub-district who have sufficient income will try to increase business opportunities (diversification) such as making fishing stalls and inland aquaculture which will increase the welfare of their households.

Conclusion

Based on the results of the study, it can be concluded that:

- The level of household welfare of fishermen in Jatiluhur Reservoir, Sukasari District, got a score of 2.17 (medium welfare category).
- The factors that affect the welfare of fishermen households in Jatiluhur Reservoir, Sukasari Subdistrict, which have a significant effect are the number of dependents who have a negative effect (-) and household income which has a positive effect (+), while the rest have no significant effect (age has a negative effect). , formal education and experience of fishermen positive influence). The value of the influence of the four variables on the welfare of fishermen's households in Jatiluhur Reservoir, Sukasari District (coefficient of determination / R^2) is 43.7%, while 56.3% (100-43.7%) is influenced by other factors.

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