

WELFARE OF THE FISHERMEN COMMUNITY OF SOUTH TABULO VILLAGE, MANANGGU DISTRICT, BOALEMO REGENCY, GORONTALO

Kesejahteraan Masyarakat Nelayan Desa Tabulo Selatan Kecamatan Mananggu Kabupaten Boalemo Gorontalo

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(Received June 11th 2024; Accepted September 24th 2024)

ABSTRACT

South Tabulo Village is one of the coastal areas of Gorontalo where most of the community are fishermen. This research aimed to determine the level of welfare of fishermen in South Tabulo Village, Mananggu District, Boalemo Regency, using Fisherman Exchange Rates (NTN) and modified Central Statistics Agency (BPS) indicators. The research was carried out from July to September 2022. Structured interviews were conducted with 46 respondents. The data obtained was analyzed quantitatively descriptively using two approaches, namely NTN and modification of welfare indicators according to BPS. The results of the research show that based on the NTN analysis, the fishing community in South Tabulo Village, Mananggu District, Boalemo Regency, has a fairly good level of welfare and the potential to save for non-primary needs with a score of 132. Based on the modified BPS welfare indicator, the fishing community is at a medium welfare level with a score of 2.6.

Keywords: Gorontalo, BPS Welfare Indicators, Fisherman Exchange Rates

ABSTRAK

Desa Tabulo Selatan merupakan salah satu wilayah pesisir Gorontalo yang mayoritas penduduknya adalah nelayan. Penelitian ini bertujuan untuk menentukan tingkat kesejahteraan nelayan Desa Tabulo Selatan Kecamatan Mananggu Kabupaten Boalemo menggunakan Nilai Tukar Nelayan (NTN) dan indikator Badan Pusat Statistik (BPS) yang dimodifikasi. Penelitian dilaksanakan sejak Juli hingga September 2022. Wawancara terstruktur dilakukan terhadap 46 orang responden. Data yang diperoleh dianalisis secara deskriptif kuantitatif menggunakan dua pendekatan yaitu NTN dan modifikasi indikator kesejahteraan menurut BPS. Hasil penelitian menunjukkan bahwa berdasarkan analisis NTN masyarakat nelayan Desa Tabulo Selatan

Kecamatan Mananggu Kabupaten Boalemo memiliki tingkat kesejahteraan cukup baik dan potensi untuk menabung kebutuhan non primernya dengan skor 132. Adapun berdasarkan indikator kesejahteraan BPS hasil modifikasi, masyarakat nelayan berada pada tingkat kesejahteraan sedang dengan skor 2,6.

Kata Kunci: Gorontalo, Indikator Kesejahteraan BPS, Nilai Tukar Nelayan

INTRODUCTION

Welfare is a social, material, and spiritual order of life and livelihood that is filled with a sense of safety, morality and inner and outer peace that allows every citizen to make efforts to fulfill the best physical, spiritual, and social needs for themselves, their households and the community (Suprianoor *et al.*, 2021). The level of community welfare reflects the quality of life of family groups in society because community welfare is the essence of development. Families with a higher level of welfare mean they have a better quality of life, so that basically these families are considered able to meet their living needs and create better conditions for improving welfare (Sriyono *et al.*, 2021).

Firdaus & Witomo (2014) states that the lives of coastal communities, especially fishermen, are highly dependent on environmental conditions, resources, and seasons. Fishermen are people whose livelihood is fishing (Law No. 31 of 2004). Meanwhile, traditional fishermen or small fishermen are people whose livelihood is fishing to meet their daily needs. Fishermen can also be said to be people who fish at sea, who depend on the weather, and depend on the sea for their livelihood (Rosni, 2017). According to Firdaus & Witomo (2014), capture fisheries activities have a high risk, considering shared resources, open management and dependence on weather, seasons, migration characteristics and fish characteristics. These conditions have an impact on the uncertain income of fishermen, both in terms of time and quantity. The income of fishermen on each trip fluctuates and the number of fishing trips each month has a different impact on the level of welfare.

Gorontalo is one of the provinces in Indonesia that is geographically bordered by sea waters in the north and south. South Tabulo Village is one of the coastal areas in the Gorontalo area whose majority population are fishermen. The profession of fishermen in regions of Indonesia is identical to relatively low welfare, although generally the condition of the place of residence which is sometimes an indicator of family welfare does not reflect low welfare. Many approach instruments have been developed in Indonesia to assess the status of family welfare. This study aims to determine the level of welfare of fishermen in South Tabulo Village, Mananggu District, Boalemo Regency using the Fishermen's Exchange Rate (NTN) and modified Central Statistics Agency (BPS) indicators.

METHODS

Place and Time

The research was conducted from July to September 2022 in South Tabulo Village, Mananggu District, Boalemo Regency, Gorontalo Province (Figure 1).

e-ISSN: 2622-1934, p-ISSN: 2302-6049

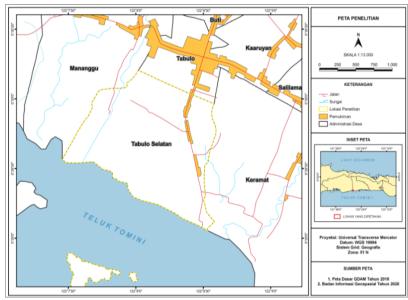


Figure 1. Map of the Location of South Tabulo Village, Gorontalo Province

Data Analysis

Data were obtained from surveys and structured interviews with respondents using questionnaires. Survey research is defined as research conducted by recruiting participants, collecting data, and utilizing various instrumentation methods to collect information related to the behavior and preferences of a sample of individuals about the characteristics, actions, or opinions of a large group of people through their responses to questions (Jarrett & Krug, 2021). Interviews are a method used to find primary data and are widely used in interpretive and critical research. Interviews are conducted when researchers want to dig deeper into the attitudes, beliefs, behaviors, or experiences of respondents towards social phenomena (Hartono, 2018). The data obtained were then analyzed using two methods, namely the analysis of the Fishermen Exchange Rate (NTN) and the Family Welfare Indicator (IKS) according to the modified BPS (2015).

Fishermen Exchange Rate (NTN)

Fishermen Exchange Rate (NTN) is the ratio of total income to total expenditure of fishermen's households during a period of time as understood by Audidina (2020). NTN is used as a comparison in determining the level of welfare, so it is necessary to carry out an elaboration regarding the determination of the level of welfare by using NTN. According to Buidiono *et al.* (2015) the formulation of the NTN calculation is formulated as follows:

$$Yt = YFt + YNFt \rightarrow NTN = \frac{Yt}{Et} \times 100$$

$$Et = EFt + Ekt$$

Description:

Yt = Total income (IDR)

Et = Total income (IDR)

Yft = Total income of fishermen from fishing business (IDR)

YNFt = Total income of fishermen from non-fishing (IDR)

EFt = Total income of fishermen from fishing business (IDR)

EKt = Total income of fishermen from consumption of fishing families (IDR)

T = Time period (year).

Audidina (2020) stated that the amount of NTN provides a picture of whether a fishing community is able to meet the needs of its subsistence needs. The category of community welfare level based on NTN value can be grouped as follows:

 $NTN \ge 100$ means the level of welfare is quite good and there is potential to meet non-primary maternal needs

NTN = 100 means the level of community welfare is moderate and only able to meet its subsistence maternal needs

NTN \leq 100 means the level of welfare is very good and unable to meet its primary maternal needs.

Family Welfare Indicator (IKS)

According to the Central Statistics Agency (2015), the indicators used to measure the level of welfare of a family include aspects of income, expenditure, domicile, family health, and ease of access to community living facilities. The scores for each criterion in each indicator used are presented in Table 1. The scores obtained from each indicator in Table 1 are then multiplied by the indicator weight value in Table 2 to obtain the average score.

Table 1. Family Welfare Indicators Modified from BPS (2015)

No	Welfare Indicators	Criteria	Score
1	Income	High (>IDR 10,000,000)	3
		Medium (>IDR 5,000,000– IDR 10,000,000)	2
		Low (<idr 5,000,000)<="" td=""><td>1</td></idr>	1
2	Expenditure	High (>IDR 5,000,000)	3
		Medium (IDR 1,000,000– IDR 5,000,000)	2
		Low (<idr 1,000,000)<="" td=""><td>1</td></idr>	1
3	Availability of residence	Permanent (17-24)	3
		Semi permanent (9-16)	2
		Non permanent (1-8)	1
4	Residence facilities	Complete (17-24)	3
		Enough (9-16)	2
		Less (1-8)	1
5	Health of family	Good (17-24)	3
	members	Enough (9-16)	2
		Less (1-8)	1
6	Ease of obtaining health	Easy (7-9)	3
	services	Enough (4-6)	2
		Difficult (1-3)	1
7	Ease of entering children	Easy (17-24)	3
	to the next level of	Enough (9-16)	2
	education	Difficult (1-8)	1
8	Ease of obtaining	Easy (9-12)	3
	transportation facilities	Enough (5-8)	2
		Difficult (1-4)	1

Table 2. Weighting of Welfare Indicators According to BPS (2015)

No	Indicator	Weight (%)
1	ncome	24

No	Indicator	Weight (%)
2	Expenditure	18
3	Availability of residence	9
4	Residence facilities	9
5	Health of family members	8
6	Ease of obtaining health services	12
7	Ease of entering children to the next level of education	12
8	Ease of obtaining transportation facilities	8
· · · · · · · · · · · · · · · · · · ·	Total	100

The score of each indicator is multiplied by the weight as stipulated in Table 2. The results of the multiplication of each indicator and the weight are summed and then matched with the welfare criteria as presented in Table 3.

Table 3. Criteria for Welfare Levels (BPS, 2015)

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Welfare Criteria Score	Description	
2.61 - 3.4	High	
1.81 - 2.60	Medium	
1.0 - 1.80	Low	

RESULT

Respondent Characteristics

The age category of fishermen in South Tabulo Village as respondents interviewed in this study is presented in Table 4. Meanwhile, the education level of fishermen respondents in South Tabulo Village can be seen in Table 5.

Table 4. Age of Respondents of Fishermen in South Tabulo Village

Age Group (Years)	Number of Respondents	Percentage (%)
20–29	4	8.70
30–39	11	23.91
40–49	23	50.00
50–59	6	13.04
70–75	2	4.35
Total	46	100

Table 5. Education Level of Respondents of Fishermen in South Tabulo Village

Level of Education	Frequency	Percentage (%)
Elementary School	40	86.95
Junior High School	4	8.70
Senior High School	2	4.35
Total	46	100

Fishermen's Welfare Criteria

The household income of fishermen in South Tabulo Village obtained from fishing and non-fishing businesses can be seen in Table 6, while the criteria for per capita income indicators can be seen in Table 7. Furthermore, the average per capita expenditure of fishermen per year is presented in Table 8. The criteria for output indicators and living conditions can be seen in Table 9 and Table 10, respectively.

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Table 6. Average Income of Fishermen in South Tabulo Village

Source of Income	Income (IDR)	
Fisheries Income	2,861,957	
Non-Fishery Income	1,281,923	
Average Monthly Income	4,143,880	
Average Annual Income	49,726,560	
Average Per Capita Income	43,036,087	

Table 7. Criteria for Per Capita Income Indicators for Fishermen in South Tabulo Village

Welfare Indicators	Score -	Fishermen		
wenare indicators		Fishermen (Man)	Percentage (%)	
High	3	46	100	
Medium	2	0	0	
Low	1	0	0	
Total		46	100	

Table 8. Average Household Expenditure of Fishermen in South Tabulo Village

Types of Expenditures	Income (IDR)
Fishery Business Expenditure	1,079,217
Family Consumption Expenditure	1,686,217
Total Expenditure Per Month	2,765,434
Total Expenditure Per Year	33,185,208
Total Expenditure Per Capita Per Year	33,184,174

Table 9. Criteria for Expenditure Indicators for Fishermen Families in South Tabulo Village

Welfare Indicators	Score -	Fishermen	
werrare indicators		Fishermen (Man)	Percentage (%)
High	3	46	100
Medium	2	0	0
Low	1	0	0
Total		46	100

Table 10. Criteria for the Living Conditions of Fishermen in South Tabulo Village

Welfare Indicators	Score -	Fishermen		
werrare indicators		Fishermen (Man)	Percentage (%)	
Permanent	3	45	97.83	
Semi Permanent	2	1	2.17	
Non Permanent	1	-	-	
Total		46	100	

Based on the results of the interviews conducted, most of the fisherman respondents have complete housing facilities and some are quite complete as presented in Table 11. Furthermore, the health indicator criteria for family members can be seen in Table 12.

Table 11. Criteria for Housing Facilities for Fishermen in South Tabulo Village

Welfare Indicators	Score —	Fishermen		
wenare indicators		Fishermen (Man)	Percentage (%)	
Complete	3	45	97.83	
Enough	2	1	2.17	
Less	1	-	-	
Total		46	100	

Table 12. Health Criteria for Family Members of Fishermen in South Tabulo Village

Welfare Indicators	Score —	Fishermen		
		Fishermen (Man)	Percentage (%)	
Good	3	19	41.30	
Enough	2	27	58.70	
Less	1	-	-	
Total		46	100	

Medical treatment costs based on the opinions of 46 fishermen respondents, 10 respondents felt it was still affordable, 34 respondents said it was quite affordable and 2 other respondents said it was difficult to afford. The criteria for the ease of obtaining health services indicators can be seen in Table 13. The number of respondents regarding the ease of entering children into education levels can be seen in Table 14. The criteria for the ease of obtaining fishermen transportation facilities can be seen in Table 15.

Table 13. Ease of Obtaining Health Services for Fishermen in South Tabulo Village

Welfare Indicators	Score -	Fishermen		
		Fishermen (Man)	Percentage (%)	
Easy	3	21	45.65	
Enough	2	24	52.18	
Difficult	1	1	2.17	
Total		46	100	

Table 14. Ease of Entering Children Into the Fishermen Education Level in South Tabulo Village

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Welfare Indicators	Score	Fishermen	
		Fishermen (Man)	Percentage (%)
Easy	3	30	65.22
Enough	2	12	26.08
Difficult	1	4	8.70
Total		46	100

Table 15. Ease of Obtaining Transportation Facilities for Fishermen in South Tabulo Village

Welfare Indicators	Score -	Fishermen		
wenare indicators		Fishermen (Man)	Percentage (%)	
Easy	3	24	52.17	
Enough	2	16	34.79	
Difficult	1	6	13.04	

Total	46	100

Level of Welfare of Fishermen Community

Based on eight welfare indicators by BPS, the welfare classification of all respondents of fishermen families is obtained as shown in Table 16.

Table 16. Analysis of the Welfare Level of Fishermen in South Tabulo Village

Indicator		Weight	Total Score
		(%)	(%)
Income	3	24	0.72
Output	3	18	0.54
Residence conditions	3	9	0.27
Residence facilities	3	9	0.27
Health of family members	2	8	0.16
Ease of obtaining health services	2	12	0.24
Ease of admitting children to education level	2	12	0.24
Ease of obtaining transportation facilities	2	8	0.16
Total	22	100	2.6

DISCUSSION

Age is one of the important factors in work productivity, because at a productive age a person can do maximum work. Age is one of the factors that supports fishing efforts because at a productive age a person can do work optimally and the productive age based on BKKBN data ranges from 15 - 64 years Repelita V Book III (1989) in Pratama *et al.* (2012). Based on the data obtained in Table 5, it can be seen that the number of fishermen respondents who work the most is from the age range of 40-49 years or 50.00%. This is because when basically the age range is in the capital city, the ability and realisation that a person has is still in its productive period to carry out all activities in working.

The level of education is one of the indicators that becomes the intuition of the quality of human resources and the balance of a region so that it makes it easier for a person to utilize the potentials that exist in their region. Based on Table 5, it can be seen that the level of education of the fishermen community in South Tabulo Village varies, this is evidenced by the final education attained by the fishermen respondents, including 2 respondents only up to the level of senior high school (SMA), while 4 respondents only up to junior high school (SMP), and most of the fishermen with a total of 46 respondents, their education is limited to elementary school (SD) only. Some even did not finish elementary school. This is because the people of South Tabulo Village who work as fishermen are less concerned with education, the reason being that they are constrained by educational costs and some of them want to help their parents earn a living so that the family's financial needs can be met.

Fishermen Welfare Indicators Fishermen Income

Family income also affects the level of family welfare, the existence of differences in income is influenced by the number of family dependents. According to Devita *et al.* (2023), income is defined as total receipts or increased capacity that will be used for consumption or savings. For business actors, the income generated from their main activities increases the value of their assets. Income is also the main goal of fishing activities, as an economic entity, fishermen who are profit-oriented, income plays an important role because it is used with the

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hope of ensuring the welfare and survival of fishermen. Based on Table 6, it can be seen that the average income of South Tabulo Village fishing families is IDR 49,726,560 per year, while the average income per capita per year is IDR 43,036,087. The income of the South Tabulo Village fishing community is obtained from fishing and non-fishing income as seen in (Table 6). Fishing businesses come from selling catches from fishing. While the income of non-fishing fishing communities is obtained from other jobs such as farming, waruing, copra and tuikang.

The income level of South Tabulo Village fishermen measured using the NTN calculation method, obtained from the average of the total number of fishermen respondents shows the number 132. When viewed from the NTN definition, if their total income is >100, it means that the level of welfare is quite good and there is potential to save for non-primary needs. The results of the analysis using the indicator criteria approach from BPS (2015) which was modified based on the results of per capita income, namely comparing per capita income with the standard of living with the local price. Based on Table 7, it can be seen that the comparative results of the per capita income of fishermen can be seen that 100% are included in the category of high welfare indicators adjusted to the BPS indicator criteria (2015) where their per capita income is more than IDR 10,000,000/year. This shows that most of the fishermen respondents are categorized as being in high welfare.

Fishermen Family Expenditure

The expenditure of the South Tabulo Village fishermen community is grouped into two parts consisting of fishing business expenditure and fisherman's family consumption. Fishing business expenditure includes part of the expenditure used for the fishermen's work system, while family consumption expenditure is part of the expenditure used for basic food and non-food needs. Based on Table 7, it can be seen that the expenditure of the South Tabulo Village fishermen's fishery business is IDR 1,079,217 while the expenditure of family consumption is IDR 1,686,217. The average income of fisherman respondents is IDR 33,185,208. Based on Table 7, the income of family consumption motherhood is greater than that of fishing business motherhood. This is due to the increasingly high price of basic necessities and fishermen prioritize the basic necessities of family consumption compared to other necessities.

The level of household expenditure of fishermen in South Tabulo Village is measured using BPS (2015) indicator criteria, namely by looking at the level of family consumption and income from fishing businesses per capita or equivalent to the income per capita of fishing families. The average income per capita of South Tabulo Village fishing households is generally categorized as not poor with a value of IDR 33,184,174 with an average number of family members of three people. Per capita income per year is obtained by dividing the total of household income by the number of household members (Ontei, 2017). In Table 9, it can be seen that the fishermen's family of South Tabulo Village is included in the high income category criteria adjusted to the prosperous family indicator based on BPS (2015), where the amount of per capita income from all fishermen's families is more than IDR 5,000,000/year.

Condition of Residence

Based on the results of interviews with fisherman respondents South Tabulo Village, the condition of residence is still quite good. According to observations, almost all fisherman respondents have residences that are categorized as permanent. Based on Table 10, it can be seen that 45 fisherman respondents with an index value of 97.83% have permanent residences and 1 respondent with an index value of 2.17% has a residence similar to permanent. This can be seen from the items seen such as ownership status, type of roof, walls, floor area and yard area of the house.

This condition illustrates that the South Tabulo Village fishermen family is very

concerned about the condition of their residence. Basically, the existence of a house not only functions as a place of protection, but the house has become a symbolic part of a lifestyle that greatly influences the socio-economic status of the household and even shows the identity of its owner. The better the condition of the residence, the better the socio-economic condition of the family. In general, the existence of the respondent's residence is at a score of 3, namely a comfortable house.

Residential Facilities

Residential facilities are part of the completeness of a house in a family that can increase security and comfort for the life of the family in the mother (Fithri, 2016). Based on Table 11, it can be seen that one of the components of residential comfort is adequate residential facilities. The lighting source used by fishermen in South Tabulo Village has almost used lighting from electricity in their respective homes. The electronic electronic device that they use as a means of entertainment is similar to each fishing family's experience.

The cooling facilities used by the fishermen's family, as many as 32 fishermen's staff, require fans. Meanwhile, some people still prefer to use natural cooling, because the wind around the area of the sea is already quite strong and some of them feel like they are blowing out fans. While the fuel used by fishermen, most people still want gas, although some people still want tuingkui. The water source of fishermen in South Tabulo Village all use springs or springs and each household has its own bathroom.

Fishermen's households in South Tabulo Village already have good and fairly good housing facilities. The facilities with housing facilities that are categorized as complete are 45 fishermen respondents with a percentage of 97.83% and those that are said to be sufficient are 1 fisherman respondent with a percentage of 2.17%. The calculation results show that the average total score of the residential facility indicator is in accordance with the welfare indicator criteria according to BPS (2015). The score obtained is 3, this shows that their welfare level is high.

Family Members' Health

Health is one of the most important factors for a person's life. According to Husin (2014), health is one of the important factors for human life because with healthy conditions, humans can be active comfortably and do many good deeds that provide benefits to others. Based on Table 12, it can be seen that the health of fisherman family members is included in the good criteria where all sick families in a month are around 19 respondents with a percentage of 41.30%. Meanwhile, 27 respondents with a percentage of 58.70% were categorized as quite good. The dominant types of diseases were headaches, body aches and colds. The calculation results showed that most of the fishermen's families were in the position with a score of 2. This score is similar to the criteria for the welfare indicator of BPS (2015).

Ease of Obtaining Health Services

The BPS indicator (2015), which is used to obtain the convenience of health services, consists of 3 items, namely medical costs, ease of obtaining contraceptives and family planning consultations, and the price of medicines. Based on the research conducted, it is known that all fishermen families said that the distance to the hospital is quite far from South Tabulo Village because the hospital is located in the district center. While the distance to the health center is quite easy to reach because the distance is around 2 km. The cost of treatment based on the opinions of 46 fishermen respondents, 10 respondents felt it was still affordable, 34 respondents said it was quite affordable and the remaining 2 respondents said it was difficult to reach.

Ease of Entering Children into Education

Education is a human right and a fundamental tool to achieve a goal in achieving equality, balance, and peace. According to the World Bank (2023), education is not only a human right, but also a powerful driving force for development. By providing broad access to education, we can create a healthier, gender-equal, peaceful, and stable society. In a global context, education not only provides individual benefits, but also contributes to economic growth, innovation, institutional strength, and social cohesion. Individuals who receive education tend to have better job opportunities, higher incomes, better health, and a lower likelihood of poverty. Sugiyanto *et al.* (2023) stated that the principle of education as the truth that is the basis for the design and implementation of education, has a significant meaning in the context of education in Indonesia.

From the results of the study, most respondents assume that education is very important for the lives of their children and their future. Based on Table 14, it can be seen that the balance of fishermen's education looks relatively good in South Tabulo Village. This is shown by the enthusiasm of the fishermen as many as 30 respondents (65.22%), in sending their children to a better level of education, because most of their children are still in elementary and junior high schools which means that the school fees, the distance to the school and the procedure for sending children to school are still relatively easy, besides that there is support from the government by inviting free education programs so that it is easier for fishermen to send their children to school. Meanwhile, 12 respondents (26.08%) stated that it was quite easy because they thought that more education would be needed when children started to enter school levels such as high school and then continued to higher education levels.

Ease of Obtaining Transportation Facilities

Based on the results of interviews and direct surveys, the fishermen community said that the ease of obtaining transportation facilities is one of the important things in the daily lives of the community. The types of transportation used by the fishermen community of South Tabulo Village are using their own motorbikes and using public transportation for long-distance travel. Based on Table 16, it can be seen that 24 respondents from fishermen families (52.17%) stated that it was easy, while 16 respondents from fishermen families (34.79%) stated that it was quite easy to obtain transportation facilities. Meanwhile, 6 respondents of fishermen's families (13.04%) found it very difficult to obtain transportation facilities. The indicators used to obtain the convenience of transportation facilities consist of 3 items of transportation costs or fees, vehicle facilities, and vehicle ownership.

Level of Welfare of Fishermen's Communities

In accordance with the BPS (2015) indicators used to determine the level of welfare include 8 items, namely income, income, housing, housing facilities, health of family members, convenience of obtaining health services, convenience of entering children, level of education, and convenience of obtaining transportation facilities. Based on Table 16, the BPS welfare level criteria, the total score obtained is 2.6, so the fishermen of South Tabulo Village are included in the criteria for medium welfare. The welfare criteria are adjusted to the weight of the BPS welfare indicator (2015), namely the fishermen of South Tabulo Village are scored between 1.81–2.60 which is included in the category of medium welfare level.

The results of this study indicate that the average fisherman of South Tabulo Village is already at the level of family welfare indicators, which means that they can already fulfill their daily needs, such as eating at least 3 times a day or more, having various clothes both at home and at work, school uniforms or traveling, having a decent place to live with adequate facilities. In terms of health and medical expenses, fisherman families feel that it is still easy to access,

through the distance of the health center located around the village and still affordable. Meanwhile, the problem of children's education is currently quite easy for fishermen because for fishermen, they can send their children to the level of education that has been made easier with the existence of financial assistance from the government in the form of free schools and scholarships. Furthermore, some fishermen also have private vehicles. In general, their living conditions and level of welfare are included in the moderate level.

CONCLUSION

Based on the analysis of Fishermen's Exchange Rate (NTN), the fishermen community of South Tabulo Village, Mananggu District, Boalemo Regency, Gorontalo has a fairly good level of welfare and there is potential to save non-primary needs (NTN score = 132). Meanwhile, based on the Family Welfare Indicator (IKS) modified from the Central Statistics Agency (2015), the welfare category of the fishermen community of South Tabulo Village is at a moderate level (IKS score = 2.6).

ACKNOWLEDGEMENT

The author would like to thank the Faculty of Marine and Fisheries Technology, Gorontalo State University for funding this publication through the Collaborative Research scheme of Lecturers and Students of the Faculty of Marine and Fisheries Technology in 2024 with Decree number 1312/UN47.B10/HK.04/2024.

REFERENCES

- Audina, R. (2020). Tingkat Kesejahteraan Masyarakat Nelayan Desa Olimoo'o Kecamatan Batudaa Pantai Kabupaten Gorontalo. *Skripsi*. Fakultas Perikanan dan Ilmu Kelautan, Jurusan Manajemen Sumberdaya Perairan, Universitas Negeri Gorontalo.
- Badan Pusat Statistik. (2015). *Indikator Kesejahteraan Rakyat (Welfare Indicators*) 2015. Jakarta: BPS.
- Budiono, E., Mahyudin, I., & Bandung, A. R. (2015). Pengukuran Nilai Tukar Nelayan Di Kabupaten Tanah Laut Provinsi Kalimantan Selatan. *Fish Scientiae* 5(9), 26-26.
- Devita, D., Meilani, E. H., & Astutiningsih, E. T. (2023). Analisis Pendapatan Masyarakat Nelayan Di Desa Cikahuripan Kabupaten Sukabumi. *Jurnal Ilmiah Mahasiswa AGROINFO GALUH 10*(2), 1196-1205
- Firdaus, M., & Witomo, C. M. (2014). Analisis Tingkat Kesejahteraan Dan Ketimpangan Pendapatan Rumah Tangga Nelayan Pelagis Besar Di Sendang Biru, Kabupaten Malang, Jawa Timur. *Jurnal Sosial Ekonomi Kelautan dan Perikanan*, *9*(2), 155-167. http://dx.doi.org/10.15578/jsekp.v9i2.1218.
- Fithri, D. L. (2016). Model Data Mining dalam Penentuan Kelayakan Pemilihan Tempat Tinggal Menggunakan Metode Naïve Bayes. *Jurnal Teknik Mesin, Elektro dan Ilmu Komputer*, 7(2), 725-730. https://doi.org/10.24176/simet.v7i2.787.
- Husin, A. F. (2014). Islam dan Kesehatan. Jurnal Islamuna, 1(2), 195-201.
- Jarrett, C. & Krug, S. (2021). Surveys That Work: A Practical Guide for Designing and Running Better Surveys. New York: Rosenfeld Media
- Jogiyanto, H. M. (Ed.). (2018). *Metoda pengumpulan dan teknik analisis data*. Penerbit Andi. Onte, W. D. (2017). Tingkat Kesejahteraan Nelayan di Desa Torosiaje Laut Kecamatan Popayato Kabupaten Pohuwato. *Skripsi*. Jurusan Manajemen Sumberdaya Peraiaran, Fakultas Perikanan dan Ilmu Kelautanm, Universitas Negeri Gorontalo.

- Pratama, D. S., Gumilar, I., & Maulina, I. (2012). Analisis pendapatan nelayan tradisional pancing ulur di Kecamatan Manggar, Kabupaten Belitung Timur. *Jurnal Perikanan dan Kelautan Unpad*, *3*(3), 107-116.
- Rosni. (2017). Analisis Tingkat Kesejahteraan Masyarakat Nelayan Di Desa Dahari Selebar Kecamatan Talawi Kabupaten Batubara. Jurusan Pendidikan Geografi Fakultas Ilmu Sosial Universitas Negeri Medan. *Jurnal Geografi*, 9(1), 53-66.
- Sari, D. M., Ridwan. M., & Yusnida. (2015). Identifikasi Faktor-Faktor yang Mempengaruhi Tingkat Kesejahteraan Masyarakat Nelayan di Provinsi Bengkulu. *Jurnal Ekonomi dan Perancangan Pembangunan*, 6(2), 15-32.
- Sriyono, S., Dewi, S. R., & Handayani, P. (2021). Meningkatkan Kesejahteraan Masyarakat Nelayan Di Era New Realiti Melalui Model Pembiayaan Inklusif: Prespektif Al Mudharobah. *Jurnal Ilimiah Ekonomi Islam*, 7(1), 81-89. http://dx.doi.org/10.29040/jiei.v7i1.1697.
- Sugiyanto., Syamsu, & Mamat. (2023) The Implementation of Tut Wuri Handayani Values at Taman Muda Elementary School Jetis Yogyakarta. *Jurnal Prima Edukasia*, 11(2), 303-318.
- Suprianoor, W., Hanafie. U., & Rosni, M. (2021). Tingkat Kesejahteraan Keluarga Petani Karet di Desa 7 Wonorejo, Kecamatan Kusan Hulu, Kabupaten Tanah Bumbu, Provinsi Kalimantan Selatan. *Jurnal Frontier Agribisnis*, 5(1), 206-213. https://doi.org/10.20527/frontbiz.v5i1.6020.
- World Bank. https://www.worldbank.org/en/topic/education/overview (2023).