International Journal of Marine Engineering Innovation and Research, Vol. 11(2), Jun. 2026. 665-672
(pISSN: 2541-5972, eISSN: 2548-1479)

Household Financial Management and the Welfare Level of Coastal Communities in Pasar Sorkam Village, Tapanuli Tengah

Mansur Tanjung [1*], Riwayani [2], Delita Sihotang [3], Yenni Sofiana Tambunan[4], Diana Maya Sari[5]
(Received: 20 May 2026 / Revised: 30 May 2026 / Accepted: 7 June 2026 / Available Online: 12 June 2026)

***Abstract*—**Communities that are still considered poor often identify with fishermen's households. This impression arises due to the simple condition of their houses and a lifestyle that often appears unbalanced between their income and expenses. This research focuses on exploring the level of welfare of the Pasar Sorkam community in Tapanuli Tengah from the aspect of their household financial management. The research employs a mixed methodology approach, supported by measurements of the community's welfare index. The research results indicate that the income level of the fishing community is classified as low, while the expenditure level is high. The fishing community in Pasar Sorkam Village has a welfare index value of 55.6, indicating that they fall into the low welfare category. The research is expected to serve as a reference for relevant future studies and as a guideline for policy formulation for the local government of Tapanuli Tengah Regency.

Keywords— Coastal Communities,Financial Management,Fishermen,Welfare.

[*]*Corresponding Author: mansurtanjung14@gmail.com*

I. INTRODUCTION

The socioeconomic conditions of the fishing community are clear and generally poor. Most fishing communities lack adequate future planning. This situation is due to a lack of recognition of the importance of education and an economic model that prioritizes immediate needs [1]. The socioeconomic conditions of the fishing community in Pasar Sorkam Village, Tapanuli Tengah Regency, illustrate this.

Geographically, Pasar Sorkam Village is located on the west coast of Sumatra facing the Indian Ocean. Due to this condition, most of the town's inhabitants engage in fishing [2][3]. The houses, mainly wooden on stilts, provide basic living conditions. While some access roads in the hamlet are concrete or cement, most of the roads in the Pasar Sorkam hamlet are made of sandy soil. The community commonly travels to various places in boats or overland along village roads [4].

The climate and seasons in Pasar Sorkam Village greatly affect the fishermen's catch. Sometimes fishermen may have very heavy hauls, but in times of scarcity, their financial situation suffers greatly due to few catches. [5]. The main source of income for the people of the coast is the catch from the sea, and at times, it results in financial hardships.

Fishermen's households are often associated with communities considered poor. Their humble dwellings and modest way of life are proof of this. It is a problem for the residents of Pasar Sorkam Village, because the local authority of Tapanuli Tengah Regency seems to not pay attention to them in recent years. Their main desire is to achieve a better quality of life through improved financial management and to seek alternative ways to raise their living standards. Based on the results of similar studies, there is a lack of evidence about the real-life condition in the Pasar Sorkam community. In fact, more evaluations of the real situation can give insight to the local administration and other stakeholders.

The writer will do a study of the socioeconomic conditions of the community of Pasar Sorkam Village because of the abovementioned problems and the lack of data related to it. The purpose of this study was to identify the level of welfare of the Pasar Sorkam Village Fishing Community based on the observation of household financial management. The main goal of this project is to collect initial data that can be used by relevant stakeholders as a basis for formulating policies to improve well-being in Tapanuli Tengah Regency.

II. METHOD

A. Description

Research was conducted from February to June 2025. Data collection was conducted at Pasar Sorkam Village, Tapanuli Tengah Regency. Most of the people living here are fishermen. That's why this place has been chosen. The researchers chose Pasar Sorkam Village for their study because it is pure and natural in its appearance and faces directly the water.

To determine the degree of community welfare, the study used an observational and measurement approach using income and expenditure levels. The research utilises a mixed-methods approach[6][7] to data analysis.

Mansur Tanjung, Departement of Entrepreneurship Study program, Al Washliyah Institute of Business and Technology Sibolga, 22622, Indonesia. E-mail: mansurtanjung14@gmail.com
Riwayani, Departement of Entrepreneurship Study program, Al Washliyah Institute of Business and Technology Sibolga, 22622, Indonesia. E-mail: riwayanigultom9625@gmail.com
Delita Sihotang, Departement of Entrepreneurship Study program, Al Washliyah Institute of Business and Technology Sibolga, 22622, Indonesia. E-mail: delitasihotang@gmail.com
Yenni Sofiana Tambunan, Departement of Entrepreneurship Study program, Al Washliyah Institute of Business and Technology Sibolga, 22622, Indonesia. E-mail: yennisofiana@gmail.com
Diana Maya Sari, Departement of Entrepreneurship Study program, Al Washliyah Institute of Business and Technology Sibolga, 22622, Indonesia. E-mail: dmayas3566@gmail.com

The primary data was collected through direct observation, and the secondary data was collected from the relevant government papers and literature. The data on financial management are collected directly from interviews of fishermen and their spouses. At the same time, secondary data is collected from the government documents, literature reviews, and other supportive sources.

The research is conducted using a mixed method. The techniques of qualitative and quantitative research are combined. The data were collected by interviewing participants and giving them questionnaires. The data are then analyzed to determine the amount of income and spending. [8]. The wellbeing level of the fishing community is then determined using a specific index based on the collected data. Using the Slovin[9][10] formula, data sampling was carried out. The formula for Slovin is as follows:

$$n = \frac{N}{1 + (N\ x\ e^2)}$$

Note:
n : Number of elements / sample members
N : Number of elements / population members
e : Error level
*In this study, the researcher uses a tolerated error margin of 10%.

$$n = \frac{N}{1 + (N\ x\ e^2)} = \frac{80}{1 + (80\ x\ 0{,}1^2)} = \frac{80}{1{,}8} = 44{,}44 = 44\ respondent$$

The total respondents that identified in the sample calculation were 44 respondents. The data collection was carried out on all Pasar Sorkam Village community members, including fishermen and their wives.

Descriptive statistical analysis such as minimum, maximum, average, standard deviation, and frequency is used to characterize the following:

1. The family characteristics are the age of the husband and wife, their occupations, their employment status, years of schooling, family size, and per capita income.
2. Planning (13 questions)[11], execution (15 questions)[12], and monitoring and evaluation (4 questions)[13] comprise the three subitem levels of family financial management. Three answers—never scored 1, occasionally scored 2, and frequently scored 3—are given for each question.

Since the three subitem levels differ in the number of questions, each score is converted to index format by means of the following formula:

$$Index = \frac{Achieved\ Score - Lowest\ Score}{(Highest\ Score - Lowest\ Score)}\ X\ 100$$

The overall financial management index score is then calculated by averaging the index[14] of each subitem level. The implementation of family financial management has generally been divided into three distinct segments where cutoffs are clearly defined for each variable interval:

1. Low = < 60
2. Medium = 60–80
3. High = > 80

Income level analysis and spending level analysis are carried out utilising qualitative tests based on respondents' responses in phases of data analysis. The welfare level data is then statistically examined using Ms Excel Software and basic statistics based on the scoring index method.

III. RESULTS AND DISCUSSION

A. Respondent characteristics

Education is a major determinant of the economic status of a society. Education is a crucial element in the welfare of the country. Societal attitudes towards managing money are likely to improve, and with increased education, people will also better understand financial literacy and responsible spending. [15][16].

TABLE 1.
RESPONDENT CHARACTERISTICS

Description	Frequency	Proportion (%)
Gender		
Female	20	45,45
Male	24	54,54
Age		
20 – 34 years	14	31,81
35 – 49 years	24	54,54
50 – 64 years	6	13,63
Education		
Primary (elementary)	2	4,54
Junior High School	10	22,72
Senior High School	32	72,72

Improving the education of fishing families involves character education, exemplary education, and habitual education. According to the field observations, the educational level of the interviewees ranged from elementary to secondary school. The highest level of education of the 32 respondents is senior high school, as shown in Table 1. The data shows that the people of Pasar Sorkam Village cannot continue their education to a higher level due to their financial status. This situation has pushed the fishing community of Pasar Sorkam Village to seek alternative livelihoods, perpetuating the cycle of poverty and limiting their economic mobility.

There are 24 responses; most of them are people aged between 35 and 49 years of age. The second age group

includes 14 respondents aged 20 to 34. Generally, the life span of the fishing community of Pasar Sorkam Village is between five and forty years. The main reason most people in Pasar Sorkam Village continue to work as fishermen is because of their broad experience. Fishing seems to be a profession that families pass down through generations. The next generation will take over a boat, fishing gear, or skills from the patriarch of the family.

B. Fishing Communities' Income Level

The research results indicate that the average annual income received from fishing activities in the area of Pasar Sorkam Village is Rp 87,475,000. The maximum monthly catch during the peak season is 200 kg, and the minimum monthly catch is 110 kg. The highest monthly capture during the lean season is 120 kilograms, while the lowest monthly capture is 30 kg. The same situation also occurs in the district of Sungai Limau, West Sumatra, during the lean season for fishermen from April to December.

Strong winds and large waves will prevent fishermen from going out to sea, so the catches will be relatively low. The fishermen who dominate in Pasar Sorkam Village are Pamukek fishermen; they use small boats or canoes to catch fish with circular and spread nets. In some areas of Indonesia, government intervention is sometimes needed to assist fishermen by providing facilities or larger fishing equipment, which can help increase their yields, particularly during bad weather that limits fishing time.

The season influences the yield of the fishermen; the yield in the peak season is better than in the lean season. Net income, or business profit, is the income earned less the expenses incurred in the course of the fishing operation. Changes in the environment, economy, or socio-economic aspects of society can have significant implications for fishing resources. The Social and Ecological Market Economy (SEME) concept can be used to achieve effective economic management[17].

The results of the study showed that the average income of each fishing household in Pasar Sorkam Village was Rp 2,727,083. The level of income of the fishing community in Pasar Sorkam Village is relatively low, with the Regional Minimum Wage of Tapanuli Tengah Regency being Rp 3,019,194.74. The following table shows the distribution of data for respondents according to income per month (Table 2 and Table 3):

TABLE 2.
DATA ON INCOME DISTRIBUTION FOR FISHERMEN COMMUNITIES IN PASAR SORKAM VILLAGE

Income Range (Rp)	Frequency
< 1.000.000	0
1.000.000– 2.000.000	17
2.000.000– 3.000.000	20
> 3.000.000	7
TOTAL	44

TABLE 3.
THE DISTRIBUTION OF INCOME SOURCES

Income Variable	Averages Income (Rp)	Proportions (%)
Husband's Income from Fishing	1.312.500	48,13
Husband's Non-Fishing Income	439.583	16,12
Wife's Income From Fisheries	592.500	21,73
Wife's Income From Non-Fisheries	382.500	14,03
TOTAL	2.727.083	100

'Revenue' is the financial value of the catch obtained by fishermen in the area of Pasar Sorkam Village. There are two fishing seasons, a high season and a lean season, and income is linked to both. Fishermen in Pasar Sorkam Village said the lean season is from June to December, while the high season is from January to May. In Pasar Sorkam village, fishermen decide on their access to fishing locations based on changes in weather and climate.

The source of income of the fishing community in Pasar Sorkam Village comes from four sectors, namely, the income of the husband from fishing; the income of the husband from non-fishing activities (working in a motorcycle workshop, selling coconuts, and seasonal trade); the income of the fisherman's wife from the fisheries sector (salting and drying fish); and the income of the wife as a farm laborer. As shown in the table above, the largest contribution is the husband's income from fishing to meet household requirements, namely, 48.13%. This is justified by the fact that the spouse has the greatest responsibility for satisfying the family's needs in the domestic setting. However, in meeting the daily needs, the role of the wife also holds the same importance, but the contribution is only about 36.03% of the family's income. The wife's contribution to the Pasar Sorkam Village community is big. So wives are also there to bring in more money and control the money in the household[18][19][20].

The rising sea surface temperatures due to climate change, excessive sunlight, and severe rains negatively affect the fishermen's livelihood sustainability in meeting their daily needs. The condition has caused the fishing community of Pasar Sorkam Village to think strategically to find other job opportunities over time. In addition to fishing results, the fishing community can also make money through ancillary enterprises like ecotourism or the sale of local crafts, which can provide additional income streams to support their families. [21].

On the other hand, limitations of knowledge and capacities may sometimes be barriers, especially for women in the fishing community who may be denied training and resources that could better their skills and prospects[22][23].

Women's roles are important to the resilience of fishing families. There should be improvements in the education system for the fishing families. The government through the Social Service, Education, and Culture Office and other related agencies should be able to equip and educate the families of fishermen in Pasar Sorkam Village. The training being discussed covers all segments of the community, starting with elementary school students, moving through secondary education, and into adulthood.

C. Fishing Communities' Spending Level

The study's findings show that the fishing community in Pasar Sorkam village has a high level of expenditure, averaging Rp. 1,444,318 per month and Rp. 17,331,818 per year. Until then, the people of Pasar Sorkam Village are forced to save or borrow from various sources to meet their basic and other needs. Normally loans are taken from cooperatives or national banks. The fisherman's cooperative in Pasar Sorkam Village has not fully realised its potential, which restricts financial support for local fishermen and their capacity to invest in improved equipment or sustainable methods.

TABLE 4.
HOUSEHOLD EXPENDITURE DISTRIBUTION

Respondent	Basic Needs (Rp)	Fishing Capital (Rp)	School Expenses (Rp)	Other Expenses (Rp)	Total by Month (Rp)	Total by Year (Rp)
1	350.000	450.000	300.000	200.000	1.300.000	15.600.000
2	450.000	550.000	300.000	200.000	1.500.000	18.000.000
3	400.000	400.000	250.000	200.000	1.250.000	15.000.000
4	500.000	600.000	200.000	200.000	1.500.000	18.000.000
5	600.000	400.000	300.000	200.000	1.500.000	18.000.000
6	400.000	400.000	500.000	200.000	1.500.000	18.000.000
7	400.000	600.000	300.000	200.000	1.500.000	18.000.000
8	600.000	700.000	300.000	250.000	1.850.000	22.200.000
9	500.000	300.000	250.000	200.000	1.250.000	15.000.000
10	400.000	600.000	200.000	200.000	1.400.000	16.800.000
11	400.000	400.000	300.000	200.000	1.300.000	15.600.000
12	500.000	600.000	300.000	200.000	1.600.000	19.200.000
13	600.000	400.000	300.000	200.000	1.500.000	18.000.000
14	400.000	400.000	250.000	200.000	1.250.000	15.000.000
15	300.000	500.000	200.000	200.000	1.200.000	14.400.000
16	400.000	600.000	300.000	200.000	1.500.000	18.000.000
17	400.000	400.000	500.000	200.000	1.500.000	18.000.000
18	450.000	650.000	500.000	200.000	1.800.000	21.600.000
19	400.000	600.000	300.000	200.000	1.500.000	18.000.000
20	400.000	400.000	300.000	200.000	1.300.000	15.600.000
21	350.000	450.000	250.000	200.000	1.250.000	15.000.000
22	400.000	600.000	200.000	200.000	1.400.000	16.800.000
23	400.000	400.000	300.000	200.000	1.300.000	15.600.000
24	500.000	600.000	300.000	200.000	1.600.000	19.200.000
25	500.000	500.000	300.000	200.000	1.500.000	18.000.000
26	600.000	700.000	250.000	250.000	1.800.000	21.600.000
27	500.000	500.000	200.000	200.000	1.400.000	16.800.000
28	450.000	350.000	300.000	200.000	1.300.000	15.600.000
29	350.000	450.000	300.000	200.000	1.300.000	15.600.000
30	400.000	600.000	300.000	200.000	1.500.000	18.000.000
31	400.000	400.000	250.000	200.000	1.250.000	15.000.000
32	500.000	600.000	200.000	200.000	1.500.000	18.000.000
33	500.000	500.000	300.000	200.000	1.500.000	18.000.000
34	400.000	400.000	300.000	200.000	1.300.000	15.600.000
35	350.000	450.000	300.000	200.000	1.300.000	15.600.000
36	400.000	600.000	250.000	300.000	1.550.000	18.600.000
37	400.000	400.000	200.000	200.000	1.200.000	14.400.000
38	500.000	600.000	300.000	200.000	1.600.000	19.200.000
39	400.000	600.000	300.000	200.000	1.500.000	18.000.000
40	500.000	300.000	300.000	200.000	1.300.000	15.600.000
41	400.000	700.000	250.000	200.000	1.550.000	18.600.000
42	350.000	450.000	200.000	200.000	1.200.000	14.400.000
43	300.000	500.000	300.000	200.000	1.300.000	15.600.000
44	450.000	850.000	500.000	350.000	2.150.000	25.800.000
TOTAL	63.550.000	762.600.000				
AVERAGES	1.444.318	17.331.818				

The Fishermen's Cooperative, or Joint Business Cooperative, is a key facilitator in providing fishermen access to capital loans and other financial sources. Some wives of fishermen were seen to be engaged in secondary employment such as sorting fish or selling vegetables in order to meet their financial commitments on a monthly basis. The share of total expenditure spent on food consumption can be an indicator of the welfare of households.

In fishing communities, family members often contribute to livelihoods, savings are prioritized in lean seasons, and constructive relationships are built with

resource managers, including financial capital. Fishing families, who are victims of multidimensional poverty, require a holistic and comprehensive approach. The following table presents the distribution of the standard expenditure category for the fishing community in the Village of Pasar Sorkam:

The observations indicate that the high level of family expenditures reduces the opportunity for the society to save money. This situation has led some respondents to say that they are compelled to borrow money to maintain their monthly expenses. Poor economic management of fishing communities is sometimes the result of lack of financial management skills.

The major issues in the socioeconomic life of fishing villages are income volatility and poor management of finances. An over-capitalization of the fishing industry can result in a drop in production and expected results, leading to losses for fishermen. Poor financial management in fishing communities is affected by factors like education, age, experience, number and size of vessels, and fishing capital. Low-income fishing families will find it difficult to see their children through education.

D. The Welfare Level of Fishing Communities

Before analyzing the welfare status of fishing households, evaluation of the reliability and validity of data is done. Statistical analysis was performed using IBM SPSS Statistics version 30. The table above indicates that the r data values for reliability and validity meet the criteria, as they exceed the Table r values. The welfare level of the fishing community in Pasar Sorkam Village is measured by the pre-determined welfare index value.

TABLE 5.
THE SPENDING LEVEL OF THE FISHERMEN COMMUNITY IN PASAR SORKAM VILLAGE

Type of Expenditure	Percentage (%)
Fishing capital	72
School Expenses	2
Basic Needs	24
Other Expenses	2
TOTAL	100

TABLE 6.
THE RESULTS OF STATISTICAL DATA VALIDITY FOR EACH SUB-LEVEL ITEM

Planning	r	Execution	r	Monitoring & evaluation	r	r Table 5%
1	0,732	1	0,551	1	0,574	0,297
2	0,627	2	0,796	2	0,804	0,297
3	0,735	3	0,669	3	0,706	0,297
4	0,547	4	0,618	4	0,645	0,297
5	0,429	5	0,805			0,297
6	0,710	6	0,788			0,297
7	0,484	7	0,812			0,297
8	0,713	8	0,457			0,297
9	0,742	9	0,680			0,297
10	0,742	10	0,532			0,297
11	0,710	11	0,694			0,297
12	0,326	12	0,735			0,297
13	0,409	13	0,547			0,297
		14	0,572			0,297
		15	0,341			0,297

TABLE 7.
THE RESULTS OF STATISTICAL TESTS ON DATA RELIABILITY FOR EACH SUB-LEVEL ITEM

Sub Item Level	r	r Table 5%
Planning	0,848	0,297
Execution	0,900	0,297
Monitoring and Evaluation	0,607	0,297

TABLE 8.
RESULTS OF THE ANALYSIS OF THE WELFARE LEVEL OF THE FISHERMEN COMMUNITY IN PASAR SORKAM VILLAGE

Sub Item Level	Index Value
Planning	60
Execution	48
Monitoring and Evaluation	59
Averages	55,6

The results of the analysis of the level of welfare of the fishing community in Pasar Sorkam Village, Sorkam Barat District, Tapanuli Tengah Regency are as on Table 8.

The above statistics indicate that the overall value of the household index of fishermen is 55.6. It is clear from the graph that the welfare level of fishermen's households is not enough. The level of income and expenditure of fishing households in Pasar Sorkam Village is in line with the findings. If you spend more than 80% of your income, there may be no future initiatives for the community, which can lead to a cycle of poverty and limit opportunities to invest in education or economic advancement. The improvement of

fisherman welfare can be done by developing facilities, regional infrastructure, and alternative economies that are in accordance with the potential of the area.

The findings in the field show that the fishing hamlet of Pasar Sorkam Village is still in a rudimentary economic condition. Most of the houses are wood, and the roads are mostly sand and dirt. The community's simple way of life reflects their economic situation. The index score mentioned above clearly indicates that the community's income level is always below their basic monthly requirements. The dominant farming and fishing groups in Indonesia have difficulties meeting their basic needs (economic, social, and others), which indicates that family well-being is not sufficient. Income and consumption patterns constitute more than fifty percent of the welfare derived from fishing[25][26].

The households' financial planning and management are also not appropriate due to unpredictable income that is very much dependent on meteorological factors, fishing seasons and changes in the catch prices. Such a situation leads to reduced savings potential, less productive investments and greater economic vulnerability of fishing households to multiple social and economic threats. Local governments, financial institutions and a wide range of stakeholders should pay more attention to improving the financial management capacities of fishing households through financial literacy education programmes, business mentoring, strengthening community economic institutions and increasing access to affordable and accessible financing options.

These activities are aimed at improving the economic resilience of fishing families and promoting sustainable development of the welfare of coastal communities. From the results of research on household financial management of fishermen in Sorkam Market, Tapanuli Tengah Regency, it can be concluded that most of the fishermen households are still experiencing various constraints in managing their financial management. Income is unpredictable and largely dependent on the weather, fishing seasons, and changes in the price of the catch, making it difficult to plan and manage household finances. This situation results in low saving capacity, limited productive investments and increased economic vulnerability of fishing households to a range of social and economic hazards.

The results of the study on financial management of fishermen's households in Sorkam Market, Tapanuli Tengah Regency, show the value of the community welfare index is 55.6, which means that the level of welfare of fishermen's households is still in the relatively low category. The results show that the majority of the families of fishermen still have many difficulties in satisfying their basic needs and those related to improving their quality of life. This syndrome is intrinsically linked to the characteristics of the fishing industry – characterised by high volatility of earnings caused by seasonal changes, meteorological conditions, the availability of fish stocks, and fluctuations in the market prices of the catches. From the perspective of household financial management, low welfare means that the basic financial management processes, that is, budgeting, controlling expenditures, managing savings and family investment, are not functioning well.

Most fishing households usually use their income to cater for their daily consumption needs and therefore have little capacity to create assets and save. This makes fishing households highly vulnerable to economic shocks such as a fall in the catch, a rise in the price of basic commodities or a sudden urgent need. The welfare index (55.6) indicates the limited economic capacity which limits the capacity of the households to access education and health and create productive businesses. The level of income is not the sole factor affecting the home environment but also, in principle, the family's ability to manage economic resources effectively and efficiently. So even if fishermen earn more in certain periods, if they are not good at managing money, this rise in income is unlikely to have a significant impact on their longer-term welfare.

The outcome of this research is consistent with some studies on the economy of coastal towns which indicate that the main problem affecting the welfare of fishermen is poor financial literacy. The variable revenues make it difficult for fishing communities to tackle such problems because they don't know how to keep financial records, plan expenditure, manage debt and use formal financial institutions. As such, fishing households are often under serious economic hardship during the lean season or when the fish catch is low. This research suggests that to improve the well-being of fishing communities, it is not enough to increase fishery production but also to implement programmes to improve household financial management capabilities.

The local government shall initiate different empowerment programmes to improve financial literacy, to provide financial management education to families, to develop alternative companies based on local potential and to improve community access to official financial institutions. The establishment of community economic organisations and fishermen's cooperatives can enhance the capacity of the community to manage income and increase the resilience of household economies. The welfare index value is 55.6, which shows that the fishing households in Pasar Sorkam are in a condition that needs attention and more extensive policy action. To improve community welfare, the initiatives should be integrated by improving household financial management, improving financial literacy, increasing sources of income and creating economic empowerment programmes for the coastal communities. This method is expected to improve the economic resilience of fishing households in order to achieve the sustainable welfare of the coastal population in Tapanuli Tengah Regency.

Due to the structural constraints in rural and semi-urban areas in Indonesia where the institutional coverage is still limited and dependency ratios are high, the link is becoming more and more important. Indonesian fishing villages, characterized by a low-income population, urgently require government assistance to access material and educational resources[27][28]. Government aid often does not accurately reach all of the fishermen in every region. The government can organize measures

that consider various factors, including the promotion of fishermen's welfare and economic conditions.

1. Fisheries resources
2. Human resources
3. Government policy (budgeting)

The following measures may be used to improve the welfare of fishing communities, including: Developing alternative businesses using local resources. Building amenities and infrastructure. Establishing a capital system and improving manpower.

IV. Conclusion

Poor communities are often associated with fishermen's households. This can be seen by their simple homes and simple lifestyle. This is a problem for the residents of Pasar Sorkam Village because the local authority of Tapanuli Tengah Regency seems to not care for them in recent years. Their most important wish is to enjoy a better quality of life by managing their money better and to learn other ways of improving their standard of living. A similar study indicated that there was no evidence of the real living condition in the Pasar Sorkam community. In fact, more evaluation of the real situation may provide insights to the local administration and other stakeholders.

Acknowledgements

The author thanks the Al Washliyah Institute of Business and Technology Sibolga for its financial support, which made this study possible. The author also expresses gratitude to the research colleagues and all those involved in the research's execution, whose substantial assistance made this work possible.

References

[1] R. Maya, M. Mardiharini, Saptana, B. Sudjarmoko, E. Kasymir, L. G. Nur'aini & A. Wahyudi. "Livelihood vulnerability household fishermen household due to climate change in Lampung Province, Indonesia." Plos one 19.12. e0315051. 2024.

[2] S. N. Adiprayoga, H. Yaqin, and T. Anugerah. "Marine Ecotourism Development Strategy Based on Creative Local Potential in Binasi Beach." The International Journal of Marine Engineering Innovation and Research (IJMEIR) 8.3, pp. 501-508, 2023.

[3] I. Pane, M. Tanjung, S. N. Adiprayoga, T. & Anugerah. PARIPEDAS: A Smart Rural Tourism Model Using SEM Analysis Through The Coastal Village Community Empowerment. International Journal of Marine Engineering Innovation and Research.10(4), 1177-1183, 2025.

[4] A. S. Silalahi, B. Hutagalung, A. Lubis, & A. E. Putra. Optimization of turnover through digital marketing training for fisherman products in Desa Pasar Sorkam District Sorkam Barat Regency Tapanuli Tengah. ABDIMAS TALENTA: Jurnal Pengabdian Kepada Masyarakat. 7(2), 738-744, 2022.

[5] N. Ulhasanah, A. Rahman, E. Sofiyah, I. W. Koko, and M. M. Sari, "Preliminary Analysis Of Governance, Social Norms, and Behavioral Determinants of Household Participation in Marine-Linked Waste Management in Gorontalo Province, Indonesia", IJMEIR, vol. 10, no. 4, pp. 1133–1145, Dec. 2025.

[6] Taherdoost, H. What are different research approaches? Comprehensive review of qualitative, quantitative, and mixed method research, their applications, types, and limitations. Journal of management science & engineering research. 5(1), pp 53-63, 2022.

[7] J. W. Creswell, & V. L. P. Clark. Revisiting mixed methods research designs twenty years later. Handbook of mixed methods research designs.1(1), pp 21-36, 2023.

[8] S. Sujarwo, A. I. Maulidah, & B. Setiawan. Factors affecting expenditure and income of small fisherman households: evidence from Jember, Indonesia. pp 249-260, 2022.

[9] N. Nurkholis, Wilarso, P. Sukamto, M. A. Sobarnas, S. Jamaludin, & A. U. Tsani. Digital survey for customer satisfaction of regional drinking water companies (PDAM) using the mWater application and the Slovin formula method. In BIO Web of Conferences.Vol. 144, p. 03006). EDP Sciences, 2024.

[10] P. Sukamto & F. D. P. Kusuma 2026. Student satisfaction survey at XYZ Campus using the Slovin formula method and mwater application. TEKNOSAINS: Jurnal Sains, Teknologi dan Informatika.13(1), pp 107-116, 2026.

[11] M. A. Limi, S. R. Ningsih, S. A. Fyka, P. Syarni, Hidrawati, H. S. Dewi, & U. Attamimi. Analysis of crab fisherman's household structure and livelihood strategy after the Kendari Bay revitalization. In IOP Conference Series: Earth and Environmental Science. (Vol. 1118, No. 1, p. 012075). IOP Publishing, 2022.

[12] E. Erlansyah, L, M. Yapanto, K. D. Tolosang, & B. BAHAR. Analysis of Income and Impact on the Welfare of Fisherman's Household Boalemo District. European Journal of Business Startups and Open Society. 2(11), 57-72, 2022.

[13] L. L. A. U. Ni'mah, W. Sumekar & A. M. Legowo. Analysis of factors affecting food security of fisherman's household in Tayu district, Pati Regency. In AIP Conference Proceedings. (Vol. 2586, No. 1, p. 070010). AIP Publishing LLC, 2023.

[14] M. A. Harahap, R. Hasibuan, and H. Y. Harahap, "Analysis of the Livelihood Shift of Sea Cucumber Fishermen on Local Economic Mobility in Sitardas Village ", IJMEIR, vol. 10, no. 4, pp. 1237–1243, Dec. 2025.

[15] H. Umam, R. W. Fuah, R. Rahayu, and Muhammad, "Population Dynamics of Mackerel Scad (Decapterus macarellus) Landed at the Sibolga Archipelago Fishing Port", IJMEIR, vol. 10, no. 4, pp. 1316–1323, Dec. 2025.

[16] H. Y. Harahap, T. Anugerah, F. R. Tambunan, and S. N. Adiprayoga, "Coastal Waste Management Strategies to Preserve the Sea and Strengthen Fishing Family Economies in Tapanuli Tengah", IJMEIR, vol. 10, no. 4, pp. 1353–1360, Dec. 2025.

[17] R. P. K. Sahu and R. Doppalapudi, "Blue Economy: Framework for Integrating Economic Growth with Marine Ecosystem", IJMEIR, vol. 10, no. 1, pp. 165–174, Jul. 2025.

[18] D. A. Sihombing, Z. Umar, T. Anugerah, S. N. Adiprayoga, and T. Mahaji, "Actors in Preservation Local Wisdom: Mangure Lawik for Sustaining Marine Resources", IJMEIR, vol. 10, no. 1, pp. 188–195, Jul. 2025.

[19] S. N. Adiprayoga, H. Yaqin, T. Anugerah, and T. Nisari. "Green Tourism Concept Implementation Based On Tourist Satisfaction Level In Tapanuli Tengah Regency", IJMEIR, vol. 9, no. 4, pp 637-644, Dec. 2024.

[20] T. Anugerah, J. P. Siburian, T. Nisari, H. Yaqin, and S. N. Adiprayoga, "A Study on the Livelihood Sources and Welfare Levels of Small-Scale Fishing Households in Tapanuli Tengah Regency, Sumatera Utara", IJMEIR, vol. 9, no. 4, pp. 659–666, Jul. 2025.

[21] Z. Muna, "Relationship Between Mangrove Condition and Socio-economic Livelihoods of Fishermen Traps in Central Tapanuli", IJMEIR, vol. 9, no. 4, pp. 804–808, Jul. 2025.

[22] N. D. Novikarumsari, R. Rokhani, S. Sofia, & N. U. Luthfiyana. Woman productive role in fisherman households (A case study in Jember). Agrisocionomics: Jurnal Sosial Ekonomi Pertanian, vol. 7 no.2, pp. 383-392, 2023.

[23] S. Husni, and M. Nursan. "Income of labor fishermen households and the adaptation strategy that was contained in fulfiled the prominent needs in West Monsoon (Case Study in Village of West Sekotong, West Lombok Regency West Nusa Tenggara Province)." IOP Conference Series: Earth and Environmental Science. vol. 1253, no. 1. IOP Publishing, 2023.

[24] M. A. Limi, S. R. Ningsih, S. A. Fyka, P. Syarni, Hidrawati, H. S. Dewi, & U. Attamimi. "Analysis of crab fisherman's household structure and livelihood strategy after the Kendari Bay revitalization". In IOP Conference Series: Earth and Environmental Science. IOP Publishing, vol. 1118, no. 1, pp. 012075. Dec. 2023

[25] A. R. Atmaja, I. Lubis & R. L. Sari. "Analysis of the Welfare of the Fisherman Community of Sibolga City (Comparative Study of Traditional Fishermen and Modern Fishermen)". Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE). vol. 7 no. 1, pp. 581-603, 2024.

[26] E. Erlansyah, L. M. Yapanto, K. D. Tolosang, & B. Bahar. "Analysis of Income and Impact on the Welfare of Fisherman's Household Boalemo District". European Journal of Business Startups and Open Society, vol. 2, no.11, pp. 57-72, 2022.

[27] S. Saraswathi, C. Parthiban, M. Elangovan, M. Selvendran & M. S. Nisha. "Socio-Economic and Occupational Status of The Fisherman Community in Thoothukudi District". Journal of Advanced Zoology, vol 44, no. 902, 2023.

[28] A. Rahim, A. Malik & D. R. D. Hastuti. "The Response to Fishing Decisions and Changes in Fishing Income during Extreme Weather: A Behavioural Economy Study of Small-Scale Coastal Fisher Households". Jurnal Ilmiah Perikanan dan Kelautan, vol. 17, no.1, pp. 190, 2025.