STUDY OF INCREASING COMMUNITY WELFARE THROUGH OPTIMIZING HUMAN CAPITAL IN LANGKAT DISTRICT

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Abstract
This study aims to determine factors (income, consumption, education, capital, number of dependents, production experience on the welfare of fishermen's families in Pantai Cermin Village, Tanjung Pura District, Langkat Regency. The number of samples used was 200 families. The data was collected by distributing questionnaires and data processing. using Multiple Linear Regression Analysis.High unemployment, low education, low wages, greatly affect the welfare of the people in Langkat district. The results of multiple linear regression testing, the results of partial hypothesis testing show that consumption, experience, production and the number of dependents is significant to the welfare of fishermen in Pantai Cermin Village, Tanjung Pura District.

Keywords : Consumption, Experience, Production and Number of Dependents, Welfare.

1. Introduction

This section describes the background to the issue or problem as well as the urgency and rationalization of the research. This section also describes the purpose and contribution of research and the organization of article writing (if deemed necessary).

Fishermen are one part of the community members who have the lowest level of welfare. In other words, fishing communities are the poorest compared to members of other subsistence communities (Kusnadi, 2017). Following exposed data family according to level well-being each Subdistrict in the Regency Sign up as following:
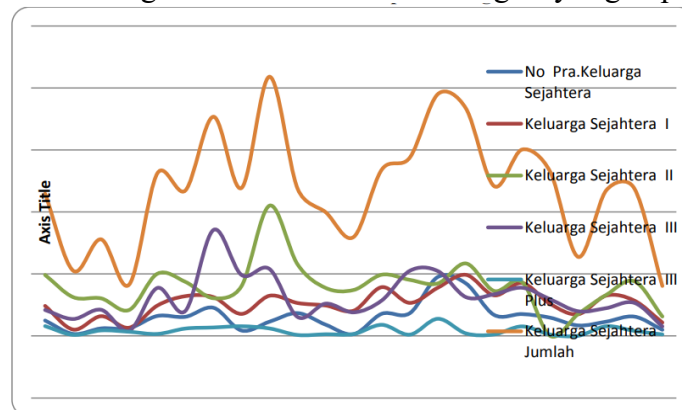

Figure 1. Number of Pre-Prosperous Families and Prosperous Families I, II, III, Plus According to District In Regency Step up Year 2021

The graph shows that Stabat has a higher level of welfare, followed by Secanggang, Finish, and Gebang. The lowest level of welfare is from the Sei Bingei area, followed by the Salapian area. The factors that affect welfare are social demography, family income, age, savings, family debt burden, and location of residence.
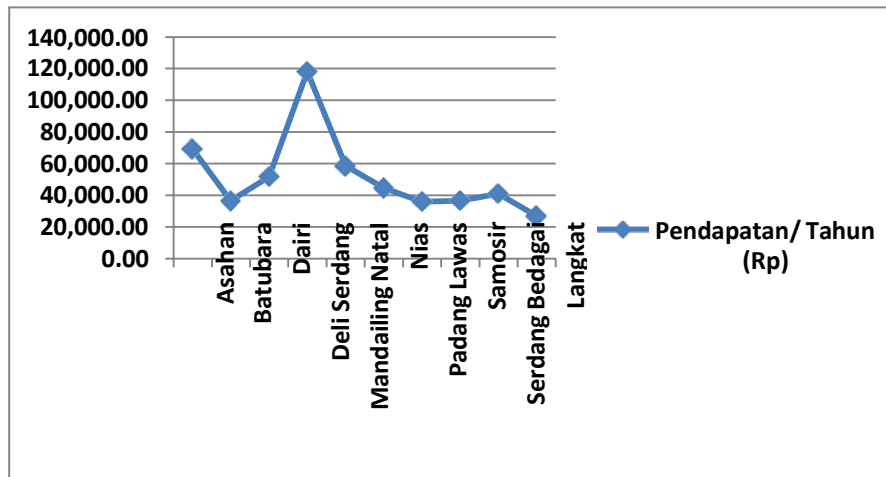
Figure 2. Level Income According to Regency in Sumatra North

From the data above it can be seen that Langkat Regency has a level income Which low with with average income as big Rp. 26,938,801 per the year, followed with level income Which low Padang Lawas Regency Rp. 36,058,383, Coal Regency for Rp. 36,569,969, Samosir Regency Rp. 36,676,708. can be concluded that Langkat Regency become a district with most income low. The phenomenon found is the high behavior of consumption patterns, but this is not comparable to the welfare of the fishermen's families in Pantai Cermin Village, Langkat Regency. Apart from that, the average education level of the fishing family community in Pantai Cermin Village, Langkat Regency is quite low. People's income is low so they are unable to meet the social demographics of Pantai Cermin Village, Langkat Regency. Instability of fish production factors often occurs due to climate change factors.

2. Theoretical Background

Well-being

Welfare or prosperity can have four meanings (Big Indonesian Dictionary). In economics, prosperity is associated with material benefits. Prosperity has a special formal or technical meaning (see welfare economics), as in the term social welfare function. In social policy, social welfare refers to the range of services to meet community needs. This is a term used in the idea of a prosperous state (Wulandari, 2017).

Income

Talking about income, it is actually important to know about the benefits of income itself, because increasing one's income will create prosperity. The main objective of running a trading business is to obtain income, where this income can be used to meet living needs and the survival of the trading business. Income can also be used as a tool to measure the economic condition of a person or household. Income shows all money or other material results achieved from the use of wealth or services received by a person or household during a certain period of time in an economic activity and to obtain income, income obtained from activities carried out to obtain profit. Profits are determined by subtracting fixed costs (plowing depreciation costs, equipment depreciation costs) and variable costs (fuel oil, consumption, etc.) incurred during the work process (Desi, 2021).

3. Methods

This research is an analysis of consumption patterns on the welfare of fishing families in Pantai Cermin Village, Tanjung Pura District, Langkat Regency, North Sumatra Province. With the consideration that fishermen's catches do not meet/optimally. This research was conducted in Pantai Cermin Village, Tanjung Pura District, Langkat Regency, North Sumatra Province. Primary data is data that has never been collected before, and is collected solely for investigative purposes. Primary data refers to data that comes from researchers for the first time (Rusiadi, 2015). The sample in this study is the community in Pantai Cermin Village, Tanjung Pura District who work as fishermen. The sampling method was using the Slovin formula with a total sample of 200 respondents.
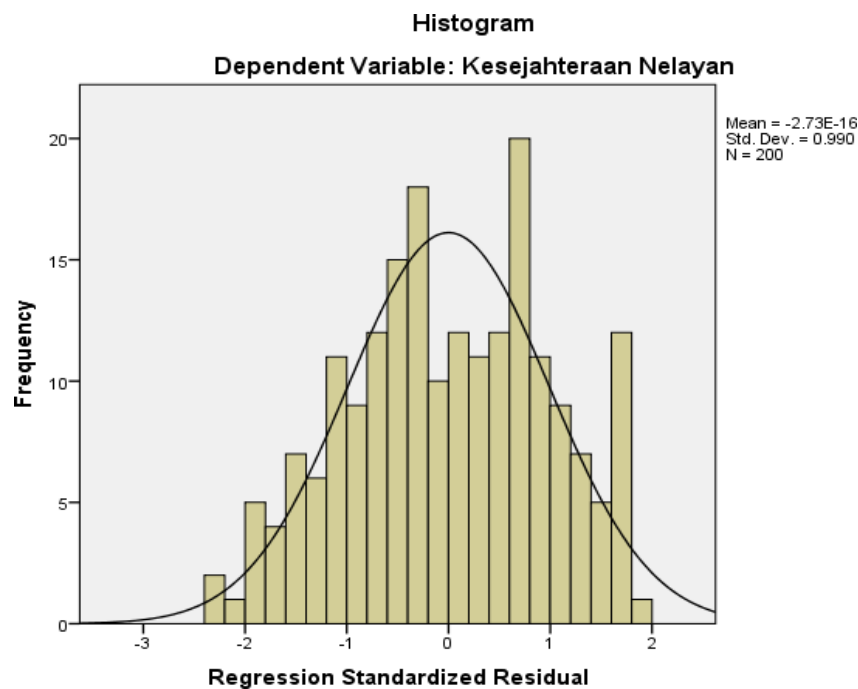
4. Results and Discussion

Research result

Before testing the hypothesis of this study, first formerly done testing assumption classic For ensure that multiple linear regression test tool is feasible or not for use in testing hypothesis.

Test Normality data

Test normality aim For test is in A regression, variable bully or residual distributed normal or No. Regression models that have good or close to normal data distribution normal.

Source: Results SPSS 23.0 Management

Figure 3. Test Histogram Normality

In this study the data was normally distributed, which can be seen from the histogram image which has a balanced convexity in the middle and also seen from the normal pp plot image, it can be seen that the points are between the diagonal lines, so it can be concluded that the data distribution is normally distributed.

Multicollinearity Test

The multicollinearity test aims to test whether the regression model finds a correlation between the independent variables. This test was carried out by looking at the tolerance value and variance inflation factor (VIF) from the results of the analysis using SPSS. If the tolerance value is > 0.10 or VIF <5, it is concluded that there is no multicollinearity. Multicollinearity test of the results of the financial statements can be seen in the following table.
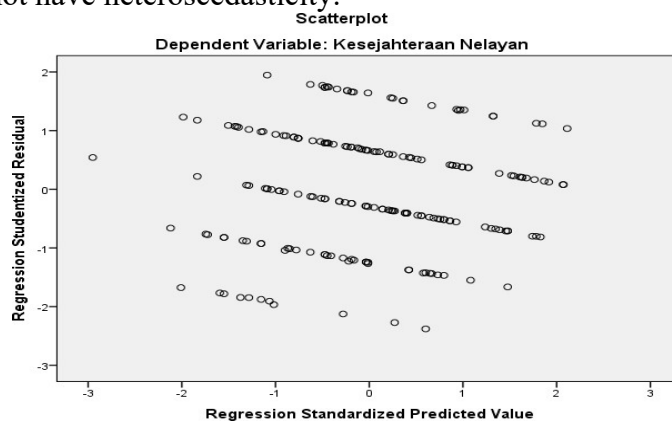
Table 1. Multicollinearity Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	std. Error	Betas	t	Sig.	tolerance	VIF
(Constant)	3,133	,961		3,260	,000		
Consumption	.173	,081	,147	2,129	,000	,992	1,008
Experience	.200	.064	.219	3.131	,000	,971	1,029
Production	045	,078	.041	1,582	,000	,961	1040
Amount dependents	084	.071	,082	1,179	,000	,994	1006

a. Dependent Variables: Fishermen's Welfare

Based on the table above, it can be seen that the Variance Inflation Factor (VIF) number is less than 5, including consumption 1.008 < 5, experience 1.029 < 0.005, production 1.040 < 5, number of dependents 1.006 < 5 and consumption tolerance value 0.992 > 0.10, experience 0.971 > 0.10, production 0.961 > 0.10, number of dependents 0.994 > 0.10 so it is free from multicollinearity.

Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from one residual observation to another. A good regression model is one that does not have heteroscedasticity.

Source: SPSS Processing Results Version 23.0
Figure 4. Heteroscedasticity Test Scatterplot

Based on the picture above, the scatterplot image shows that the resulting points spread randomly and do not form a particular pattern or trend line. The picture above also shows that the distribution of data is around the zero point. The results of this test indicate that the regression model is free from heteroscedasticity problems, in other words: the variables to be tested in this study are homoscedastic in nature.

Multiple Linear Regression
Table 2. Multiple Linear Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	std. Error	Betas			Tolerance	VIF
(Constant)	3,133	,961		3,260	,000		
Consumption	.173	,081	,147	2,129	,000	,992	1,008
Experience	.200	.064	.219	3.131	,000	,971	1,029
Production	045	,078	.041	1,582	,000	,961	1040
Amount dependents	084	.071	,082	1,179	,000	,994	1006

Based on the table above, multiple linear regression is obtained as follows:

$$Y = 3.133 + 0.173 X_1 + 0.200 X_2 + 0.045 X_3 + 0.084 X_4 + \varepsilon$$

The interpretation of the multiple linear regression equation is:
1. If everything in the independent variables is considered constant, the fishermen's welfare value is 3.133.
2. If consumption decreases, the fishermen's welfare will increase by 0.173 one value unit.
3. If the experience increases, the fishermen's welfare will increase by 0.200 per unit value.
4. If there is an increase in production, the fishermen's welfare will increase by 0.045 one value unit.
5. If the number of dependents is small, the fishermen's welfare will increase by 0.084 one value unit.

t test (Partial Hypothesis Test)
Table 3. Coefficients t-test (Partial Hypothesis Test)

Model	Unstandardized coefficientS		Standardized Coefficients	t	Sig.	Collinearitey Statistics	
	B	std. Error	Betas			Tollerance	VIF
(Constant)	3,133	,961		3,260	,000		
Consumption	.173	,081	,147	2,129	,000	,992	1,008
Experience	.200	.064	.219	3.131	,000	,971	1,029
Production	045	,078	.041	1,582	,000	,961	1040
Amount dependents	084	.071	,082	1,179	,000	,994	1006

Based on the table above it can be seen that:
1. The calculated t value for consumption is 2.129 > 1.652 (n-2=200-2=198 a 5%) then the sig value is 0.000 <0.05, so Ha is accepted and H0 is rejected, meaning that consumption significantly affects fishermen's welfare.
2. The calculated t value of experience is 3.131 > 1.652 (n-2=200-2=198 a 5%) then the sig value is 0.000 <0.05, so Ha is accepted and H0 is rejected, meaning that experience significantly affects fishermen's welfare.

3. The calculated t value of production is 1.582 > 1.652 (n-2=200-2=198 a 5%) then the sig value is 0.000 <0.05, so that Ha is accepted and H0 is rejected, meaning that production significantly affects fishermen's welfare.
4. The calculated t value for the number of dependents is 1.179 > 1.652 (n- 2=200-2=198 a 5%) then the sig value is 0.000 < 0.05, so that Ha is accepted and H0 is rejected, meaning that the number of dependents significantly influences the welfare of fishermen.

Discussion
The Influence of Consumption on Family Welfare Fisherman
    Based on the partial hypothesis test carried out, it was obtained that the calculated t value for consumption was 2.129 > 1.652 (n-2=200-2=198 a 5%) then the sig value is 0.000 < 0.05, so Ha is accepted and H0 is rejected, meaning that consumption significantly influences fishermen's welfare. Apart from that, it has a beta coefficient of 0.173, which means that if consumption decreases, fishermen's welfare will increase by 0.173 percent. Thus, it can be concluded that consumption has a positive and significant effect on the welfare of fishing families in Pantai Cermin Village, Tanjung Pura District. Consumption is a spending activity carried out by purchasing goods or services. Where consumption is an absolute necessity for everyone to fulfill all their needs and desires in an effort to maintain their welfare. Humans as individual and social creatures have unlimited needs, both in number and type of needs. Thus it can be concluded that the more consumption needs are met, the higher the level of family welfare, conversely, the lower consumption needs are met, the lower the level of family welfare. In line with research (Syahrul 2019) where the results of the study show that consumption has a significant and positive effect on the welfare of coastal communities in Lamongan Regency.

The Influence of Experience on the Welfare of Fishing Communities
    Based on the partial hypothesis test carried out, the calculated t value for experience was 3.131 > 1.652 (n-2=200-2=198 a 5%) then the sig value was 0.000 < 0.05, so that Ha was accepted and H0 was rejected, meaning that experience significantly influenced fishermen welfare. Apart from that, it has a beta coefficient of 0.200, which means that if experience increases, the welfare of fishermen will increase by 0.200 percent. Thus, it can be concluded that experience has a positive and significant effect on the welfare of fishing families in Pantai Cermin Village, Tanjung Pura District. Work experience has a major influence on the efforts made by fishermen. Every fishing effort is supported by work experience. In this case, every job carried out by fishermen must have knowledge and experience so that they can help in carrying out each job and determine the results they obtain as their main job so that they can improve their welfare. This research is in line with previous research conducted by Desi Astuti (2015) which stated that for traditional fishermen, the level of education is not very important for them to prepare for fishing in the sea because work as a fisherman is a rough job that relies more on muscles and prioritizes for welfare.

The Influence of Production on the Welfare of Fishermen's Families
    Based on the partial hypothesis test carried out, it was obtained that the calculated t value for production was 1.582 > 1.652 (n-2=200-2=198 a 5%) then the sig value was 0.000 < 0.05, so that Ha was accepted and H0 was rejected, meaning that production was significant affect the welfare of fishermen. Apart from that, it has a beta coefficient of

0.045, which means that if production increases, fishermen's welfare will increase by 0.045 percent. Thus, it can be concluded that production has a positive and significant effect on the welfare of fishing families in Pantai Cermin Village, Tanjung Pura District. The level of welfare of fishermen is largely determined by their catch or what is usually called catch production. The number of catches also directly influences the amount of income received so that fishermen are able to meet their daily needs and improve their welfare. This can mean that the necessities of life are available so that in turn the population increases their welfare. In line with research (Idran 2018) the results show that production has a significant and positive effect on the income and welfare of fishermen in Takalar Regency.

The Influence of the Number of Responsibilities on the Welfare of Fishermen's Families

Based on the partial hypothesis test carried out, the calculated t value for the number of dependents was $1.179 > 1.652$ (n-2=200-2=198 a 5%) then the sig value was $0.000 < 0.05$, so Ha was accepted and H0 was rejected, meaning the number of dependents significantly affects the welfare of fishermen. Apart from that, it has a beta coefficient of 0.084, which means that if the number of dependents is small, the welfare of fishermen will increase by 0.084 percent. Thus, it can be concluded that the number of dependents has a positive and significant effect on the welfare of neayan families in Pantai Cermin Village, Tanjung Pura District. The number of dependents can influence the level of people's welfare, this does not happen directly but involves other aspects, namely the level of income, the number of dependents will influence the number of dependents, this helps in fishing activities so that the amount of production or income increases, which ultimately increases welfare. In line with research by Agung Purwanto (2018), the results of the research show that the number of dependents will influence the level of fishermen's welfare.

5. Conclusion

Meanwhile, from the results of research on the factors that influence the welfare of fishermen in Pantai Cermin Village, Tanjung Pura District, several conclusions can be expressed as follows:

a) The results of the CFA test in the KMO and Bartlett's Test tables show that the data is valid and can be analyzed further with factor analysis. The Barltet test value states that the correlation matrix formed is an identity matrix, or in other words, the factor model used is good and in the Rotated Matrix table it is known that of the seven factors, there are 4 factors that have a significant influence on the welfare of fishermen's families, namely:

b) Consumption is significant for the welfare of fishermen's families in Pantai Cermin Village, Tanjung Pura District because consumption is the main thing for fishermen to make a living in fulfilling their family's pagan and clothing needs.

c) Significant experience with the welfare of fishermen's families in Pantai Cermin Village, Tanjung Pura Subdistrict because fishermen's experience can know weather conditions and which locations to go to sea so when going to sea it is not in vain

d) Sia. Production is significant for the welfare of fishermen's families in Pantai Cermin Village, Tanjung Pura District because production is the benchmark for how much income fishermen get every day when they go to sea.

e) The number of dependents is significant for the welfare of the fishermen's families in Pantai Cermin Village, Tanjung Pura District because the number of dependents is

small and the dependents of the fishermen in Pantai Cermin Village become members to help load the catch.

f) The results of multiple linear regression show that if consumption decreases, fishermen's welfare will increase, if experience increases, fishermen's welfare will increase, if production increases, fishermen's welfare will increase, if the number of dependents increases, fishermen's welfare will increase. The results of the partial hypothesis test show that consumption, experience, production and number of dependents have a significant and positive effect on the welfare of fishermen in Pantai Cermin Village, Tanjung Pura District.

At the end of the writing, the author provides suggestions that can later be used to develop and become a study for us so that we can improve the factors that influence the welfare of the fishing community in Pantai Cermin Village, Tanjung Pura District. The suggestions given include:

a) To the fishermen in Pantai Cermin Village, Tanjung Pura Subdistrict, to be active at sea and get a lot of results to meet the needs of family dependents such as daily needs, school fees, health and other costs needed by the family.

b) To fishermen in Pantai Cermin Village, Tanjung Pura District, to pay more attention to sea and weather conditions before going out to sea in order to avoid the dangers that come such as storms, sea waves and also to pay attention to marine sustainability, starting from not polluting the marine environment, maintaining coral reefs, not using drugs. drugs and bombing fish.

c) Fishermen in Pantai Cermin Village, Tanjung Pura District, for more experience at sea to make it easier and easier to go to sea, due to unpredictable natural situations and conditions that come suddenly which can pose a danger to fishermen and everyone.

d) For the government in Pantai Cermin Village, Tanjung Pura District to help fishermen in fishing capital by facilitating the provision of good and correct fishing equipment in accordance with maritime safety standards.

e) For further research to discuss fishermen's welfare factors, for example using community participation variables, community purchasing power variables, environmental variables, potential variables, or fish resource variables and using different research methods.

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