

THE EFFECT OF HUMAN CAPITAL INVESTMENT AND WORKFORCE IN THE FISHERIES SECTOR ON THE WELFARE OF THE COASTAL COMMUNITIES OF TANJUNGBALAI CITY, NORTH SUMATRA

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Abstract: *This research aims to assess the impact of investment in human resources and labor in the fisheries sector on the welfare of residents in Tanjungbalai City, North Sumatra. This research approach uses quantitative methods by collecting data through questionnaires to respondents. The results of the research show that investment in human resources has positive impact on welfare, which was confirmed by the t-test results with a significance value of $0.009 < 0.05$. This indicates a significant influence, with an influence of 0.05 based on the coefficient. However, Labor does not have a significant impact on community welfare, as stated It can be seen from the t calculated probability value of 0.016 which is greater than 0.05 at the 5% significance level. Therefore, it can be concluded that labor does not have a significant effect on the welfare of coastal residents.*

Keywords: *Human Capital Investment, Fisheries, Community Welfare.*

1. Introduction [Times New Roman 12 bold]

The growth of the fisheries sector in Tanjungbalai has a very significant role in advancing the economy and improving the welfare of its population. Located in a coastal area rich in fisheries resources, Tanjungbalai has great potential to make this sector one of the main sources of income for its residents. The city of Tanjungbalai is on the East Coast of North Sumatra with geographic coordinates 20°58'00" North Latitude and 99°48'00" East Longitude, and an altitude of between 0 and 3 meters above sea level. The Tanjungbalai City area covers an area of 6,052 hectares consisting of 6 sub-districts and 31 definitive sub-districts, namely Datuk Bandar, Datuk Bandar Timur, Tanjungbalai Selatan, Tanjungbalai Utara, Sei Tualang Raso, and Teluk Nibung.

Because it is located on the coast, Tanjungbala has the opportunity to manage the fisheries sector thanks to the vast ocean and various types of fish with high selling value. In 2017, marine fisheries production in Tanjungbalai City reached 33,873 tons, while land fisheries production reached 533.6 tons. During the period 2013 to 2017, fisheries production in the city experienced a significant increase, indicating the importance of this sector in the local economy. (Bank Indonesia, 2018)

Table 1. Tanjungbalai City Fisheries Production.

Tabel 3.AB.II.6. Produksi Perikanan Kota Tanjungbalai				
Tahun	Perikanan			Jumlah
	Laut	Darat		
		Budidaya	Perairan Umum	
2013	31,106.0	34.3	33.3	31,173.6
2014	32,849.1	48.9	-	32,898.0
2015	33,019.3	105.4	2.8	33,127.5
2016	33,019.3	105.4	2.8	33,127.5
2017	33,873.0	183.6	17.2	34,073.8
Tanjungbalai	163,866.7	477.5	56.2	164,400.4
Sumber : Kota Tanjungbalai Dalam Angka 2018				

The local government, especially the fisheries department, has initiated various programs aimed at providing significant support to fishermen in the area. One of the superior programs that has been designed is the Coastal Community Economic Empowerment Program (PEMP). This program includes various forms of assistance, such as providing capital in the form of nets, fish seeds and other resources needed by fishermen. This assistance aims to help coastal communities, especially fishermen who may experience limited capital, or even those who have no capital at all. To fulfill the requirements to receive assistance from the Fisheries Service, fishermen are asked to form a joint business group (Kelompok Usaha Bersama or KUB). This program also includes the provision of various types of nets, such as 500-200 eye type nets. It is important to note that this assistance is provided every year by the Tanjungbalai City Fisheries and Maritime Service, showing the government's ongoing commitment to supporting the fisheries sector. Apart from capital assistance, this program also includes various training aimed at fishing communities on the coast of Tanjungbalai City. One example is training to strengthen the ability of fishing groups to market caught products, such as shellfish. The processed products from these shellfish are then made into craft products with a higher selling value, enabling fishermen to compete better in local and regional markets. This is a positive step to improve the economy of coastal communities and support their welfare. It is important to note that this assistance is provided annually by the Tanjungbalai City Fisheries and Maritime Service, demonstrating the government's ongoing commitment to supporting the fisheries sector. Apart from capital assistance, this program also includes various training aimed at fishing communities on the coast of Tanjungbalai City. One example is training to strengthen the ability of fishing groups to market caught products, such as shellfish. The processed products from these shellfish are then made into craft products with a higher selling value, enabling fishermen to compete better in local and regional markets. This is a positive step to improve the economy of coastal communities and support their welfare. It is important to note that this assistance is provided annually by the Tanjungbalai City Fisheries and Maritime Service, demonstrating the government's ongoing commitment to supporting the fisheries sector. Apart from capital assistance, this program also includes various training aimed at fishing communities on the coast of Tanjungbalai City. One example is training to strengthen the ability of fishing groups to

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However, when this research was conducted, there were still gaps and social problems among the fishing community of Tanjungbalai City. Some of them are caused by educational factors. Most coastal communities who work as fishermen have only completed school at the elementary school (SD) and junior high school (SMP) levels. The low quality of education means that most of the available human resources do not have the skills and knowledge to process existing fishery products, resulting in an abundance of available natural resources that are unable to be processed and used optimally. Apart from that, there are other things faced by fishermen, such as limited access and information related to markets, lack of access to capital.

The aim of this research is to determine the influence of human capital investment and the workforce in the fisheries sector on the welfare of the people of Tanjungbalai City, North Sumatra. It is hoped that the results of this research can become a useful reference for academics in the future.

2. Research Method

In this research, the author used a quantitative type of research. Quantitative research is a research approach that primarily uses the postpositivism paradigm in the development of science such as thinking about cause and effect, reduction to variables, hypotheses and specific questions, using research strategies such as experiments and surveys that require statistical data

(Sugiyono, 2017). The population used for this research used Random Sampling. To determine the research sample, the Random Sampling method was used using the Slovin formula. This research focuses on the fishing population in Teluk Nibung District and uses a questionnaire as a data collection instrument. Data analysis in this research includes panel data modeling and multiple linear regression. In the multiple linear regression approach, several tests are carried out such as the T-statistic test and the coefficient of determination test. The data processing was carried out using SPSS software.

The data collection techniques in this research using populations and samples include:

a. Population

Population is an object or subject with certain qualities and characteristics determined by the researcher to make it easier to draw conclusions.

b. Sample

The samples taken in this research were the community and coastal fishermen of the city of Tanjungbalai. So the total is 80 respondents from the results that have been determined using the Slovin formula.

3. Results and Discussion

1. Respondent identity based on age

Table 2.
Data on Respondents' Income by Age

No	Age	Respo ndent	Percentag e(%_
1	25-30	4	6.7%
2	35-40	54	73.3%
3	45-50	21	18.3%
4	55-60	1	1.7%
5	65-70	0	0%
Amount		80	100%

From the results of the analyzed questionnaire, it can be concluded that within the respondent group, there is a diverse age distribution. A total of 4 people (6.7%) were aged between 25 to 30 years, 11 people (18.3%) were aged between 45 to 50 years, 1 person (1.7%) was aged 55 to 60 years, while the age group 35 to 40 years old is the largest group with 73.3%. In addition, there were no respondents aged between 65 and 70 years.

2. Respondent's monthly income

Table 3.
Respondents' Monthly Income Data

No	Monthly income	Respondent	Percentage(%_
1	<1,000,000	0	0%
2	1,000,000-1,500,000	53	71.7%
3	2,000,000-2,500,000	27	28.3%
4	3,000,000-3,500,000	0	0%
Amount		80	100%

From the questionnaire data we obtained, we can see that the majority of respondents have a monthly income in the range of 1,000,000 to 1,500,000, with a total of 53 people (71.7%). A total of 27 people (28.3%) had a monthly income between 2,000,000 and 2,500,000. In addition, none of the respondents had a monthly income of less than 1,000,000 or between 3,000,000 and 3,500,000.

1. Reliability Test

A questionnaire is declared reliable if a person's answers to questions are consistent or stable over time. Reliability testing for the variables in this study used Cronbach Alpha. The variables in this research can be categorized as reliable if the Cronbach Alpha value is greater than 0.60.

Table 4.
Reliability Test Results

Variable	Cronbach's alpha	Reliability limits	Information
Human capital investment	253	0.60	Reliable
workforce	377	0.60	Reliable
Public welfare	207	0.60	Reliable

Based on the table above, it can be concluded that all questions and statements on all research variables are declared reliable because they have a Cronbach's alpha value greater than 0.60

2. One Sample Kolmogorov-Smirnov Test Results

Table 5
One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residuals
N			60
Normal Parameters, b	Mean		.0000000
	Std. Deviation		.93124214
	Most Extreme Absolute Differences		.126
	Positive		.126
	Negative		-.111
Statistical Tests			.126
Asymp. Sig. (2-tailed)			.019c

- a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

From the results of the normality test carried out on all variables using Kolmogorov-Smirnov calculations, the Sig and P-Value values are $0.19 > 0.05$, so the variable data is normally distributed.

3. Multiple linear regression test

Table 6
Multiple Linear Regression Test Results

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1,592	,932		1,709	,091
Total_X1	,604	,061	,543	9,864	,000
Total_X2	,508	,059	,471	8,547	,000

- a. Dependent Variable: Total_Y1

The results of this multiple linear regression equation:

$$\hat{Y} = 1.592 + 0.604 X_1 + 0.508 X_2 + e$$

Which is explained as follows:

- a. The constant value $a = 1.592$ means that if variables X_1 and
- b. The coefficient value $b_1 = 0.604$ means that if variable
- c. The coefficient value $b_2 = 0.508$ means that if the variable

4. Coefficient of Determination Test

The small R^2 coefficient of determination test (close to 0) means that the ability of independent variables simultaneously to explain variations in the dependent variable is very limited.

Table 7
Coefficient of Determination Test Results
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.944 ^a	.891	.888	.500

a. Predictors: (Constant), Total_X2, Total_X1

If we look at the R-Square value, which is 0.891, it shows that the proportion of influence of the Human Capital Investment and Labor Force variables on the welfare of the Tanjungbalai Coastal Community is 24.7%. This means that Human Capital Investment and the Labor Force have a proportion of influence on the welfare of the Tanjungbalai Coastal Community of 89.1% while the remaining 10.9% is influenced by other variables that are not in this linear regression model.

5. t-test

The t-table test will be tested at a significance level of 0.05 (two-sided test) with degrees of freedom $df(nk-1)$ or $80 - 3 - 1 = 76$ (n is the amount of data and k is the number of independent variables). Significance Testing is 0.05 and t-table is 1.991

Table 8
t Test Results (Partial)

Coefficients ^a		
Model	Q	Sig.
1 (Constant)	1,709	,091
Variable_X1	9,864	,000
Variable_X2	8,547	,000

a. Dependent Variable: Total_Y1

The regression coefficient value of variable X1 (calculated t) is 9,864 with a t table of 1.991, the significance of variable In conclusion, the calculated t value < t table and significance is $0.000 < 0.05$, meaning that variable X1 has a significant effect on community welfare or H1 is accepted and H2 is rejected.

Meanwhile, the regression coefficient value for the variable X2 is (t calculated) at 8.547 with a t table of 1.991, the significance of the variable So it can be said that the calculated t value > t table and the significance is $0.000 < 0.05$, meaning that variable X2 has an influence and is significant on employee performance or H1 is accepted and H0 is rejected.

6. Simultaneous F Test

The F test is carried out to determine whether all the independent variables included in the model have a joint or simultaneous influence on the dependent variable. The F table value that will be tested at the significant level is 0.05, then the way to determine the F table is $df(n1) = k - 1$ or $4 - 1 = 3$ and $df(n2) = n - k$ or $80 - 4 = 74$. So we can get an F table of 3.12.

Table 1.9
F Test Results
ANOVA^a

Model		Sum of Squares	F	Sig.
1	Regression	157.133	314,183	,000b
	Residual	19,255		
	Total	176,388		

a. Dependent Variable: Variable_Y1

b. Predictors: (Constant), Variable_X2, Variable_X1

The SPSS output table above shows an F value of 314.183 > table f value 3.12 and a significance of 0.000 < 0.05 H3 accepted H0 rejected. It can be concluded together that the Human Capital Investment and Labor Force variables have a significant effect on the Welfare of the Coastal Communities of Tanjungbalai City.

4. Conclusion

Based on this research, researchers can conclude the following:

1. The influence of Human Capital Investment on Welfare is positive. The t-test results show a value of 0.009, which is smaller than the significance level of 0.05. This shows that the effect is statistically significant. Apart from that, the influence coefficient of 0.05 shows that Human Capital Investment has quite a large influence on welfare.
2. The influence of the Labor Force variable on Community Welfare is not significant. The calculated t probability value of 0.016 is greater than the significance level of 0.05. Therefore, it can be concluded that the Labor Force variable does not have a significant influence on the welfare of coastal communities.
3. The influence of the Human Capital Investment and Labor Force variables together on the welfare of coastal communities can be observed. The R-Square value of 0.247 indicates that around 24.7% of the variation in the welfare of coastal communities can be explained by Human Capital Investment and the Labor Force. The remainder, namely 75.3% (100% - 24.7%), is influenced by other variables that are not in this linear regression model. This conclusion is strengthened by the F test, which shows an F value of 9.340 with a calculated F probability value (sig.) of 0.000. Because the calculated F probability value is smaller than the significance level of 0.05, it can be concluded that the linear regression model used is suitable for explaining the influence of Human Capital Investment and the Labor Force together on the Welfare of Coastal Communities.

The final conclusion is that Human Capital Investment has a significant positive influence on the Welfare of Coastal Communities, while the Labor Force does not have a significant influence. However, it should be remembered that other variables not included in this linear regression model also influence the welfare of coastal communities. Therefore, further research is needed to understand other factors that play a role in improving the welfare of coastal communities.

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