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RESEARCH ARTICLE

The Influence of Cultural Factors on the Socio-Economic Welfare of Society

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ABSTRACT

The socio-economic welfare of the community is influenced by cultural factors such as livelihood systems, knowledge, social systems, and technology. This manuscript comprehensively examined the influence of cultural factors on the level of socio-economic welfare of coastal communities simultaneously and partially to determine the most dominant factors. The study was conducted using a quantitative survey research approach. The research design used is survey research. The survey activity measures the level of community response to factors that influence the level of socio-economic welfare of the community in Kondo Village, Merauke, South Papua Province, Indonesia.The study focused on measuring the level of influence of cultural factors, such as livelihood systems (X1), knowledge (X2), social systems (X3), and technology factors (X4) on the level of socio-economic welfare of the community in Kondo Village, Naukenjerai District, Merauke Regency, South Papua Province-Indonesia (Y). Data were analyzed using quantitative analysis, namely multiple linear regression with a significance level of 95%. The results of the study showed a phenomenon that simultaneously, the measured cultural factors influenced the increase in the socio-economic welfare of the community by 95.6%. Partially, the measured cultural factors influenced the level of socio-economic welfare of the community, namely the livelihood system factor at 33%, knowledge at 22.5%, social organization 34.5%, and technology factor 26.6%. Social organizations are more dominant in influencing the improvement of the socio-economic welfare of the community. This study found that community culture has an essential role in the socio-economic welfare of rural communities, and improving the quality and quantity of cultural factors needs to be done by involving stakeholders. The socio-economic conditions of the community require the availability of adequate instructors and intervention by local governments and the private sector in border areas must be given priority for development so that the community's livelihood system, knowledge, social organization, and mastery of community technology can guarantee the sustainability of socio-economic welfare and the improvement of sustainable community welfare.

INTRODUCTION

Culture is a human activity that develops, is shared by a group of people, and is passed down from generation to generation in social and economic activities (Mawaddah, 2021). Coastal communities are a group of people who live in coastal areas, with sources of economic life depending on marine and coastal resources (Nikijuluw, 2001). Most coastal communities work as traditional fishermen(Untari, Malino, et al., 2021; Untari, Darma, Betaubun, Arief, et al., 2022). The potential for abundant marine and coastal resources in Indonesia has so far not significantly impacted the level of welfare of coastal communities (Fatmasari, 2016). Likewise, the living conditions of coastal communities in the southern region of Papua Island who still live below the poverty line (Untari, Darma, Betaubun, Arief, et al., 2022; Untari, 2023; Al-khresheh, 2024). This condition is because the income level of coastal communities is low (Wasak, 2012), and the level of vulnerability to the sustainability of community livelihoods is very high (Umamaheswari et al., 2021). The sustainability of coastal community livelihoods is affected by climate change (Uddin et al., 2021; Umamaheswari et al., 2021), which will have an impact on poverty and reduced marine catches for fishermen (Akbar & Huda, 2017).

Changes in social and cultural conditions or community behavior also play a role in influencing the level of community welfare. Social conditions include the involvement of fishing communities in social organizations or social actions with their groups to encourage the level of welfare of coastal fishermen [3]. Meanwhile, community culture or behavior can be seen from the use of technological tools used for fishing (Fitriyah & Widodo, n.d.); in addition, some coastal communities still inherit traditions inherited from their ancestors, such as attitudes and ecologically aware behavior can form ecological intelligence in managing coastal resources to avoid excessive exploitation of resources and as a form of conservation and preserving culture (Camara et al., 2021; Escamilla-Perez et al., 2021; Fatmasari, 2016; Moita, 2017; Utina, 2012). The cultural performance will form a model of acculturation strategy as evidence of the process and structure of identity called the local wisdom value of a region (Juniata et al., 2013; Weinreich, 2009; Rahman et al., 2024). The development approach using a cultural approach is one approach that must used in cultural development on Papua Island (Enos H Rumansara, 2015).

Coastal natural resource management usually has an impact on the sustainability of life from the social and economic aspects of fishing communities (Untari, Darma, Betaubun, Arief, et al., 2022; Jam et al., 2011), but land degradation and the impact of climate change cause structural poverty to occur in coastal communities in Merauke (Untari, Darma, Betaubun, Fudjaja, et al., 2022; Al-khresheh, 2024b). This condition also occurs in Kondo Village, Naukenjerai District, Merauke Regency. The Kondo Village community is dominated by most local Papuans, who mainly work as traditional fishermen and hunt animals in the forests around their villages. The same applies to local communities living in coastal areas in Naukenjerai District, namely Kuler Village, Onggaya Village, Tomer, and Tomerau Village. For coastal villages in the Naukenjerai District, Kondo Village is very isolated because it needs access to land transportation routes and does not have a road. The main road construction obstacle is caused by the transportation route planned for the road construction being customary land and having a high sacred value according to the community, so it has not been permitted for construction until now. The only route to Kondo village is by sea transportation using a speedboat.

Studies on coastal communities in Bangladesh show that coastal communities often lose assets, which impacts household welfare with loss of income and consumption(Verschuur et al., 2020). Different studies conducted in Barishal, Bangladesh, which looked at ecosystem vulnerability, socio-economic vulnerability from the impacts of climate change on adaptive capacity. Natural-based solutions (NbS) provide solutions to community livelihoods by reducing salinity, increasing soil

fertility, increasing crop fertility, and increasing community participation. NbS has a positive impact on local community livelihoods, public health, and the sustainability of agriculture as a livelihood, thus offering a resilience strategy in a specific context in dealing with climate change(Saddaf et al., 2024). Meanwhile, other studies conducted studies on socio-economic development in two urban areas, where the results showed that the socio-economic growth of coastal areas compared to other areas had slower economic development (Szaja, 2022). Studies on other socio-economic conditions conducted in coastal villages in Bangladesh found that women's empowerment can support sustainable development. The results of the study on the group of women who save and the group of women who do not save have an impact on the socio-economic conditions of coastal families. Community savings groups can have an impact on savings, gross household income, income from fishing, alternative income, expenditure, and women's empowerment. Community savings groups play a role in economic welfare(Palash et al., 2024). Social sustainability in fisheries focuses on maintaining or improving the welfare of people in the fisheries system without threatening long-term financial benefits and socio-cultural welfare. In a study examining social sustainability in the management of Bangladeshi marine fisheries in the Hatiya Upazila community which focused on the marine fishing ban program. The results of the study showed that the fishing ban had a positive impact on fish production but had a negative impact on household socio-economic conditions, family health, and children's opportunities to go to school decreased(Islam et al., 2024). There is another study that reviews the conditions of socio-economic vulnerability from a number of published cases, that socio-economic vulnerability emerges as a concept of political economic perspective that links community vulnerability as a result of larger socio-political conditions and lack of community access to resources to overcome the adverse impacts of disasters and climate change. The results of this study indicate that there is a large dependence on quantitative approaches and index-based methods(Biswas & Nautiyal, 2023). Based on several socio-economic studies conducted in several countries, there has been no study that empirically analyzes quantitatively cultural factors on the level of welfare of coastal communities. In previous studies that have been conducted in coastal areas, it was identified that 4 cultural elements that influence the lives of coastal communities in the study area, namely livelihood systems, knowledge, social systems, and technology(Untari & Rahim, 2023; Untari, 2022).

This paper presents the research results on the influence of cultural elements on the socio-economic welfare of coastal communities, namely Kondo Village, Merauke Regency, South Papua Province. The purpose of the study was to determine the level of influence of cultural elements on the level of socio-economic welfare of the community in Kondo Village simultaneously and partially. In addition, the study aims to determine the most dominant cultural elements influencing the socio-economic welfare of the Kondo Village community, which resides in Papua's southern coastal area.

METHODOLOGY

Research Design

The study used a quantitative research design approach with a survey research approach. Survey research provides a quantitative picture of trends, attitudes, or opinions of a population by studying samples from the observed population. This quantitative research relies on participants' views of the situation being studied to describe the socio-economic conditions of the community(Creswell J W, 2009). The study was conducted in Kondo Village, Naukenjerai District, Merauke Regency, South Papua Province, Indonesia. Kondo Village is one of the marginalized villages on the southern coast of Papua Island and borders directly with Papua New Guinea (PNG).

Data Types and Sources

The research data consists of primary and secondary data. Primary data was obtained using a questionnaire technique. The variables observed were independent variables and dependent

variables. The independent variables of the study were the livelihood system (X1); knowledge (X2); social organization (X3); and technology (X4). While the dependent variable (Y) observed was the socio-economic welfare of coastal communities. Secondary research data in the form of Naukenjerai District data in figures for 2024, Kondo Village data, and literature sources from books and national and international journals that were relevant to the title and objectives of this study. Primary research data came from 40 respondents.

Data Analysis Techniques

The research data were collected using a questionnaire. In quantitative research, research data uses variables that indicate the socio-cultural status that will impact the socio-economic welfare of the community observed using a score or scale approach (Creswell JW, 2009). The variables used in the study are independent variables and dependent variables. The independent variables observed are the livelihood system (X1); knowledge (X2); social organization (X3); and technology/equipment (X4). At the same time, the dependent variable (Y) is the socio-economic welfare of coastal communities (Y). The research data is in the form of 5-1 scale score data to describe the respondent's response to the condition of the independent variable to the dependent variable.

The research data were analyzed using multiple linear analysis with a confidence level of 95% (0.05). The analysis was carried out using the SPPS 22 analysis tool. The mathematical formula used in the study in multiple linear analysis is as follows:

$$Y = \alpha + b1X1 + b2X2 + b3X3 + b4X4$$

Where:

Y = Socio-economic welfare of coastal communities

α = constant (intercept)

X_1 = livelihood system

X_2 = Knowledge

X_3 = Social organization

X_4 = technology/equipment

b1, b2, b3, and b4 = coefficients of the independent variables

RESULTS AND DISCUSSION

Validity Analysis

Validity testing is a method used to determine the extent to which a measurement instrument, such as a questionnaire or test, is able to measure what it is supposed to measure. Validity is important in research to ensure that the data obtained is accurate and reliable. The basis for decision making:

If $r_{count} > r_{table}$, then the question is declared valid;

If $r_{count} < r_{table}$, then the question is declared invalid;

The level of validity of each question instrument for each variable X_1, X_2, X_3, and X_4 is as follows:

Table 1Validity of Questions on Dependent and Independent Variables

Question Number	R Count	R Table	Information
Livelihood System (X_1)			
P1	0.924**	0.312	Valid
P2	0.694**	0.312	Valid
P3	0.393*	0.312	Valid

P4	0.861**	0.312	Valid
Knowledge (X_2)			
P1	0.928**	0.312	Valid
P2	0.928**	0.312	Valid
P3	0.963**	0.312	Valid
P4	0.963**	0.312	Valid
P5	0.601**	0.312	Valid
P6	0.601**	0.312	Valid
Social Organization (X_3)			
P1	0.814**	0.312	Valid
P2	0.464**	0.312	Valid
P3	0.721**	0.312	Valid
Equipment/technology (X_4)			
P1	0.579**	0.312	Valid
P2	0.788**	0.312	Valid
P3	0.803**	0.312	Valid
P4	0.797**	0.312	Valid
P5	0.797**		

Bivariate correlation analysis shown in Table 1, it shows that the question instrument on variables X_1, X_2, X_3, and X_4 is declared valid because the calculated r_{count} is > r_{table}. So the questions can be continued and used for research.

Reliability Test

Reliability testing is a process for measuring the consistency and reliability of a measurement instrument, such as a questionnaire or test. The goal is to ensure that the instrument produces stable and consistent results when used repeatedly under the same conditions.

Table 2Reliability Test Results

No	Variables	Cronbach's Alpha	R_{table}	Information
1	Livelihood system (X_1)	0.787	0.60	Reliable
2	Knowledge (X_2)	0.866	0.60	Reliable
3	Social Organization (X_3)	0.692	0.60	Reliable
4	Equipment/technology (X_4)	0.800	0.60	Reliable

Based on the results of the reliability test presented in Table 2, it shows that the Cronbach Alpha value for variables X_1, X_2, X_3, and X_4 is greater than the R_{table} value, which is 0.69. It is concluded that the instrument used is stable and consistent if used repeatedly under the same conditions.

Classical Assumption Test

The classical assumption test in regression analysis aims to ensure that the regression model used meets a number of basic assumptions so that the analysis results can be trusted. Some classical assumptions that need to be tested include:

Table 3Normality Test

Tests of Normality						
	Kolmogorov-Smirnov [a]			Shapiro Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Socio-economic welfare	.281	40	.000	.772	40	.000
Livelihood system	.505	40	.000	.448	40	.000

Knowledge	.191	40	.001	.844	40	.000
Social organization	.244	40	.000	.872	40	.000
Equipment\technology	.272	40	.000	.863	40	.000
a. Lilliefors Significance Correction						

Based on the analysis results, the significant values obtained were Y (0.000), X_1 (0.000), X_2 (0.000), X_3 (0.000), and X_4 (0.000) < 0.05, so it was concluded that it was not normally distributed.

Table 4Results of the One-Sample Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		40
Normal Parameters [a,b]	Mean	.0000000
	Std. Deviation	.23975937
Most Extreme Differences	Absolute	.162
	Positive	.116
	Negative	-.162
Test Statistics		.162
Asymp. Sig. (2-tailed)		.010 [c]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Based on the results of the Kolmogorov-Smirnov analysis presented in the table above, the sig value (2-tailed) 0.10 > 0.05 was obtained, so the data is normally distributed.

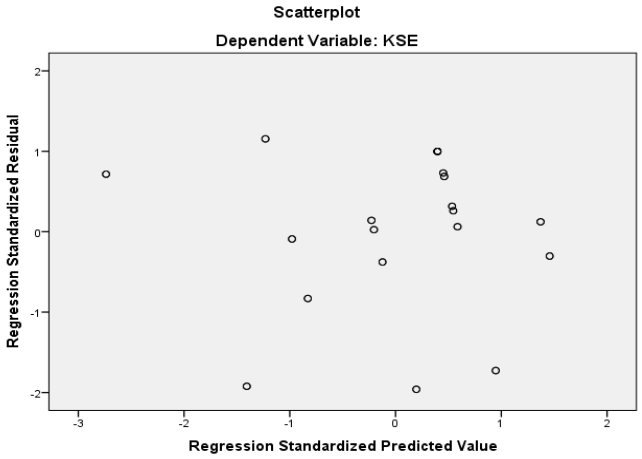

Figure 1Heterotypic Test Results

Based on the results of the analysis, it was concluded that the pattern formed did not form a clear pattern, such as dots spreading above and below the number 0 on the Y axis, so it can be concluded that there is no heteroscedasticity.

Multicollinearity Test

Multicollinearity test is an analysis used to detect the presence of a very strong relationship (high correlation) between two or more independent variables in a regression model. Multicollinearity can

interfere with the estimation of regression coefficients, making them unstable and difficult to interpret. Criteria for testing multicollinearity include:

Variance Inflation Factor (VIF): measures how much the variance of the estimated regression coefficients increases due to multicollinearity. If the VIF value is more than 10, it indicates significant multicollinearity.

Tolerance: is the opposite of VIF (Tolerance = 1/VIF). A low tolerance value (<0.1) indicates a multicollinearity problem.

Pearson Correlation: calculates the correlation between pairs of independent variables. If there is a high correlation (> 0.8), it indicates multicollinearity.

Table 5Multicollinearity test results

Coefficients [a]								
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**Collinearity Statistics**	
		B	**Std. Error**	**Beta**			**Tolerance**	**VIF**
1	(Constant)	2.169	.744		2.916	.006		
	Livelihood system (X_1)	.330	.026	.501	12,861	.000	.665	1,503
	Knowledge (X_2)	.225	.018	.485	12,376	.000	.657	1,523
	Social organization (X_3)	.345	.024	.496	14.301	.000	.837	1.194
	Technology (X_4)	.266	.013	.682	20,380	.000	.901	1.110
a. Dependent Variable: Socio-economic welfare								

Based on the results of the analysis of the table above, the tolerance values obtained were X_1 (0.665), X_2 (0.657), X_3 (0.837), and X_4 (0.901) > 0.100 while the VIF values X_1 (1.503), X_2 (1.523) X_3 (1.194) and X_4 (1.110) < 10.00, so it is concluded that there are no symptoms of multicollinearity.

Hypothesis Testing

Coefficient of determination test

According to Ghazali, this coefficient shows the percentage of independent variables.

If the R result approaches 0, it indicates that the contribution of the independent variable to the dependent variable simultaneously is getting weaker, so the model is said to be lacking.

If the R result approaches 1, it shows that the contribution of the independent variable to the dependent variable simultaneously is getting stronger, so the model is said to be strong.

Table 6Hypothesis Test Results

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.982 [a]	.965	.961	.253
a. Predictors: (Constant), Technology, Knowledge, social organization, livelihood system				

The results of the analysis show that simultaneously the factors of livelihood systems, knowledge, social systems, and equipment/technology factors influence the socio-economic system of the community in Kondo Village by 0.965 or 96.5%, while the rest is influenced by other factors not analyzed in this study by 0.035 or 3.5%. Culture is a human activity that develops and is shared by a group of people and is passed down from generation to generation in social and economic activities. Other factors that can affect the level of community welfare in Kondo Village are religious systems,

language, and arts that are not included in the variables studied (Mawaddah, 2021). The development of the socio-economic welfare of coastal communities is also influenced by the fisheries resource management system.

Multiple Linear Regression Test

Mathematical model:

$Y= -2.169 + 0.330X_1 + 0.225X_2 + 0.345X_3 + 0.266X_4$

Table 7Multiple Linear Regression Test Results

Coefficients [a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-2.169	.744		-2.916	.006		
	Livelihood system (X_1)	.330	.026	.501	12,861	.000	.665	1,503
	Knowledge (X_2)	.225	.018	.485	12,376	.000	.657	1,523
	Social organization (X_3)	.345	.024	.496	14.301	.000	.837	1.194
	Equipment/technology (X_4)	.266	.013	.682	20,380	.000	.901	1.110
a. Dependent Variable: Social and economic welfare								

The constant is -2.167, this shows that if X_1, X_2, X_3, and X_4 have a value of 0, then the predicted value of Y or the social and economic welfare of the community is negative. This means that the variables X_1, X_2, X_3, and X_4 are at a very low level, even 0. The socio-economic welfare of the Kondo Village community, which lives in coastal areas, is based on the results of the study, which shows that the community still lives below the poverty line. They need government attention from human resource development and basic infrastructure development that supports community welfare such as constructing main roads from and to Kondo Village. The limitations of infrastructure development are because the community still maintains the traditions of their ancestors, one of which is prohibited from doing or building anything in sacred or sacred places. The road routes that will be built by the government have so far been in sacred or sacred areas. This is what causes infrastructure development on existing routes to always be rejected by the community. This is in line with the study that most people living in coastal areas still maintain the traditions of their ancestors (Fatmasari, 2016). The level of socioeconomic welfare of coastal communities will have an impact on the management and conservation of sustainable environmental areas (Haenssgen et al., 2021).

Based on variable X, the results of the regression test show that the livelihood system variable (X_1) has a positive coefficient with a b value of 0.330 or 33%. This means that if there is an increase in the value of variable X_1 by 1 point, there will also be an increase in variable Y by 0.330 or 33%. The livelihood system of the community in Kondo Village, Naukenjerai District, which is directly adjacent to the coast and natural forests. They have been converted into protected forests that are included in the Wasur Merauke National Park area, namely as traditional fishermen and hunting wild animals in the forest. Activities as farmers cultivating rice and tubers have not contributed to the family economy because the results of cultivation on agricultural land are only used for family food consumption. This is different from the village areas in Naukenjerai District and several areas where the results of cultivation have contributed to the economy of coastal communities (Untari, Darma, Betaubun, Fudjaja et al., 2022; Untari et al., 2021).

The results of the analysis of this variable indicate that the community's livelihood system still needs to be improved and has the potential to increase the level of social and economic welfare of the Kondo Village community by 33%, if the behavior or culture of the community in managing resources is

improved in terms of the use of technology in the form of improving the quality of fishing gear (Azis & Wisnu, 2021), increasing the ability to process fishery and agricultural products, openness of market access from the Village and outside Kondo Village, and increasing community business capital assets. This is believed to be able to increase community adaptation to climate change, which can cause land degradation (Iriadenta, 2015; Utami et al., 2020).

Based on variable X, the results of the regression test show that the knowledge variable (X2) has a positive coefficient with a value of b = 0.225 or 22.5%. This means that if there is an increase in the value of variable X_2 by 1 point, there will also be an increase in variable Y by 0.225 or 22.5%. Knowledge, in this case, coastal community education, is very important in the implementation of resource management for the welfare of coastal communities, most of whom work as fishermen (Sutrisno, 2014). Mastery of science and technology can optimize the implementation of coastal resource management and provide community welfare (Sutrisno, 2014). The results of the analysis show that the quality of knowledge of the Kondo Village community in managing coastal resources in improving the social and economic welfare of the community still needs to be improved. Efforts to improve knowledge can potentially increase the welfare of the Village community by 22.5%.

Transformation of knowledge or improvement of coastal community education using cultural approaches and improvement of local institutions can reduce the community's social and economic vulnerability to support the sustainability of coastal community livelihoods. Coastal community productivity can be increased through training and education (Rahmadanih et al., 2014).

Based on variable X, the results of the regression test show that the social organization variable (X3) has a positive coefficient with a b value of 0.345 or 34.5%. This means that if there is an increase in the value of the social organization variable (X3) by 1 point, there will also be an increase in the Y variable by 0.345 or 34.5%. Every community life is organized or regulated by customs and written and unwritten rules (norms) regarding various kinds of units in the environment where individuals live and socialize from day to day because the inequality of the distribution of power environment results in the breakdown of social structures in society (Sangadji et al., 2021). The results of observations in the field show that social organizations in Kondo village have been formed, either on the initiative of the community or at the behest of the government. Social organizations that contribute and have strong social ties with the Kondo community are church and traditional organizations. In Kondo Village, all the communities have a religion dominated by Christians, and the rest are Catholic. Religious and traditional leaders have a fairly large role in creating the community's social life. Research results related to the role of church organizations as spiritual capital can be entrepreneurial activities in a community group (Alemayehu et al., 2023). In addition, the church as an existing religious institution can be a source of social change and challenges, a source of social order, and play a role in shaping character and personality that reflects church life values (Wanmut, 2021). In addition to church and customary organizations, several social organizations that already exist in Kondo Village are fishermen's groups, farmer groups, family welfare empowerment, integrated service posts (Posyandu), and Kondo Village apparatus organizations. Several social organizations, based on the results of observations and interviews with traditional and community leaders, found that not all social organizations have carried out their functions such as increasing community empowerment, coordination, advocacy, education and training, increasing social networks, community development, and social services. Relevant research results show that external organizations and partnerships can increase community participation in technology adoption and encourage development programs in rural areas (Datoon et al., 2023). In addition, social and cultural values can also influence the economic values of society (Johnsen & Vik, 2013).

Based on variable X, the results of the regression test show that the equipment/technology variable (X4) has a positive coefficient with a value of b = 0.266 or 26.6%. This data means that if there is an increase in the value of variable X4 by 1 point, there will also be an increase in the social and economic

welfare variable of the Kondo Village community (Y) by 0.266 or 26.6%. Technology and community culture have a positive relationship with increasing community welfare(Widodo et al., 2020). The quality of technology will affect the catch for coastal communities whose livelihoods are fishermen, so people must know about technological developments to understand and solve social problems(Azis & Wisnu, 2021; Yapanani et al., 2013). The Kondo Village community is communal or indigenous. Most people live in poverty, and their mastery of technology is still low. The technology used daily to work as fishermen, farmers, hunters, and utilize forest products only uses simple technology. The equipment owned by families in Kondo Village includes machetes, bows, kamboti (woven bags made from coconut leaves), and nets used to catch fish on the coast using a pulling and sticking system.

CONCLUSION

Cultural factors play an important role in the level of social and economic welfare of the community in Kondo Village. The results of the quantitative analysis were based on multiple linear regression analysis with a significance level of 95%. The results of the study simultaneously showed that the cultural factors studied in the study, namely the livelihood system factor (X1), knowledge (X2), social organization (X3), and knowledge (X4) had a significant effect on socio-economic welfare (Y) of 96.5%. While partially, the factors observed each had an effect on the socio-economic welfare of the community, namely the livelihood system factor (X1) had a significant effect of 0.330 or 33%, the knowledge factor (X2) had a significant effect of 0.225 or 22.5%, the social organization factor (X3) had a significant effect of 0.345 or equivalent to 34.5%, and the equipment/technology factor had a significant effect of 0.266 or equivalent to 26.6%. The results of this study indicate that social organization is the most dominant factor influencing the level of socio-economic welfare of the community in Kondo Village. Social organizations have an important position in the lives of people who still live traditionally. Social values and social norms apply in the Kondo Village community, so the strengthening of internal and external organizations in the community needs to be optimized in improving the social and economic welfare of the community in Kondo Village, Naukenjerai District, Merauke Regency, which borders directly with Papua New Guinea.

The recommendations of the study results for the socio-economic welfare of coastal communities based on the cultural elements studied are 1) the need for basic infrastructure development such as road access to villages, increasing access to business capital, increasing the quality and quantity of technology to support coastal community employment, optimizing the performance of social organizations in the village, and increasing the community's ability to utilize and manage natural resources that have high economic value and are competitive with processed products; 2) it is considered important to conduct a study that measures the economic valuation of natural resources that have the potential to contribute to household income in the research location.

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