THE EFFECT OF SOZIONA (Somi-Bozihona-Onolimbu-Nalawo) TOURISM ECONOMIC AREA ON INCREASING COMMUNITY WELFARE, NIAS REGENCY, NORTH SUMA-TRA PROVINCE, INDONESIA

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Abstract

The purpose of this study was to analyze the influence of the tourism economic area on the welfare of the people in Nias Regency, North Su-matra Province. The research was carried out in the Soziona tourism economic area, Nias Regency, North Sumatra Province, namely Gido District, Idanogawo District, and Bawolato District. The analytical method used in this research is multiple linear regression analysis.The results showed that simultaneously the Soziona tourism economic area had a positive and significant impact on the welfare of the people in Nias Regency. Partially, it shows that the variable natural resources and the variable resources of facilities and infrastructure have a negative effect on the welfare of the people in Nias Regency. The variables of human resources and sectoral development policy variables have a pos-itive effect, but only sectoral development policy variables have a sig-nificant impact on the welfare of the people in Nias Regency.

Keywords: Nias regency, Regional planning, Tourism economic.

1. Introduction

The development of tourism in a tourist destination, either locally, regionally or nationally in a country, is closely related to the economic development of the region or country. It is realized that in a tourist destination, a well-developed tourism industry will naturally have a positive im-pact on the area, because it can create ample employment opportunities for the local population. Directly with the construction of tourism facilities and infrastructure in the area, a lot of labor will be sucked in by projects: construction of roads to tourism objects, bridges, power plants, clean water supply, construction of recreational areas, tourist attractions, tourist transportation, terminals and airports, hotels, restaurants, travel agencies, boutiques, shopping centers, souvenir shops, art studios and other entertainment venues. In fact, it will indirectly arise a new demand for agricultural products, livestock, plantations, home furnishings industry, small crafts and weaving as well as education to serve the tourists who come. The money that tourists spend in a tourist destination has a very big influence on a tourist destination or a country that develops tourism as an industry. Not only will it be able to increase state foreign exchange receipts, na-tional income, tax revenues, but at the same time it will strengthen the position of the country's balance of payments [1].

The potential for tourism objects owned by Nias Regency are natural/special interest, cultur-al/historical, and agro, which are spread throughout the sub-districts. Several tourism destinations in the Nias Regency area based on the decision of the Nias Regent Number 556/134/K/2011 dat-ed 30 May 2011 concerning the Designation of Tourism Destinations in the Nias Regency Re-gion in 2011 are the SOZIONA area [2]. One of the

efforts to develop tourism areas carried out by the Nias Regency government is to determine strategic areas, which are carried out through regional development according to the functions of each region in supporting the function of regional economic development and the environment. The development strategy referred to is carried out through developing fast-growing economic zones, including Gido, Idanogawo, Bawolato and Sogae'adu sub-districts which are merged into the Minapolitan area and the SOZIONA (Somi-Bozihona-Onolimbu-Nalawo) tourism economic area.

From the various studies that have been carried out, research has not focused on the influence of the economic tourism area on the welfare of the community and has not focused on using the dimensions of natural resources, human resources, infrastructure and facilities resources, and sectoral development policies. The community welfare variable has not focused on using the dimensions of income, health and education variables simultaneously, so further research is needed to analyze the "Effect of the Soziona Tourism Economic Zone on Community Welfare in Nias Regency, North Sumatra Province" which has never been done before.

Tourism area is an area that has the main function of tourism or has the potential for tourism de-velopment that has an important influence in one or more aspects such as economic, social and cultural growth, empowerment of natural resources, environmental carrying capacity, and de-fense and security. The development of tourism areas is very dependent on the resources and carrying capacity of the area by looking at the factors of attraction, access, and other supporting facilities (attraction, accessibility, and amenities) [3].

The development of the Soziona tourism economic area (Somi-Bozihona-Onolimbu-Nalawo) towards the welfare of the people in Nias Regency, North Sumatra Province is based on BPS cri-teria [4]. Welfare in this study is measured by the extent to which indicators of income, expendi-ture, living conditions, housing facilities, health of family members, ease of obtaining health services, enrolling children in education, and ease of obtaining transportation facilities can be met. So that from these eight indicators it can determine the level of community welfare.
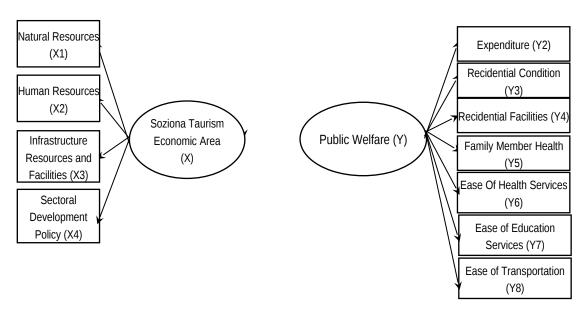

Figure 1. Conceptual Framework

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Based on the conceptual framework in Figure 1 above, it is suspected that the Soziona tourism economic area (X) has a positive effect on community welfare (Y) in Nias Regency, North Sumatra Province.

2. Material and Methods

The research was conducted in the Soziona tourism economic area, Nias Regency, North Suma-tra Province. The Soziona tourism economic area is located in 3 (three) sub-districts, namely Gido District, Idanogawo District, and Bawolato District. The research was conducted from Mei 2010 to Juli 2020. The location selection was based on the Soziona tourism economic area, which is one of the strategic areas of Nias Regency for the sake of economic growth with the criteria of having fast-growing economic potential and having a leading sector that can drive economic growth, namely the tourism sector.

The sample is a subset (subset) of the population unit [5]. The sample size was determined using the Slovin formula [6] as follows:

$$n = \frac{N}{1 + Nd^2}$$

$$= \frac{2775}{1 + (2775 \times 0{,}0025)}$$

$$= 349{,}68 = 350 \text{ households}$$

Sampling of respondents was taken proportionally in each sub-district and village, as shown in Table.

Table 1. Population and Sample of Research Respondents

No	District	Village	Population (household)	Sample (household)
1.	Gido	Somi	472	472/2775 x 350 = 60
		Somi Botogo'o	428	428/2775 x 350 = 54
		Lasela	149	149/2775 x 350 = 19
2.	Idanogawo	Laira	248	248/2775 x 350 = 31
		Maliwaa	344	344/2775 x 350 = 43
		Bozihona	287	287/2775 x 350 = 36
3.	Bawolato	Tagaule	192	192/2775 x 350 = 24
		Siofa Ewali Selatan	312	312/2775 x 350 = 40
		Gazamanu	344	344/2775 x 350 = 43
		Jumlah	2775	350

To find out the Soziona tourism economic area on the welfare of the community, a multiple linear regression function is used, with the formula [7] as follows:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \acute{\varepsilon}_3$$

Information:

Y = Community Welfare (Dependent Variable)

X1 = Natural resources (Independent Variable)

X2 = Human Resources (Independent Variable)

X3 = Infrastructure and facilities resources (Independent Variable)

X4 = sectoral development policy (Independent Variable)

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a   = Constant

$\beta_{1,2,3,4}$ = Predictor Coefficient

$\acute{\epsilon}$ = Error term/ error rate

3.   Result and Discussion

Quantitative descriptive analysis was carried out on respondents' answers to questions regarding the Soziona tourism economic area and community welfare. Quantitative descriptive analysis was carried out with the help of a frequency distribution table where the answer criteria with the highest frequency of occurrences were considered as the dominant criteria against other criteria, so that public knowledge about the development of tourism economic areas could be known.

Furthermore, the answers given by respondents to the questionnaire given for analysis purposes are given a score or weight with a certain value as shown in Table 2.

Table 2. Scores and Criteria for Respondents' Alternative Answers

Alternative Answers	Scores	Criteria
(a)	5	Strongly agree/Very good
(b)	4	Agree/Good
(c)	3	Fairly agree/Fairly good
(d)	2	Disagree/Not Good
(e)	1	Strongly Disagree/Bad

From the results of testing research instruments both in terms of validity and reliability of 350 respondents, it shows that the research instrument used is valid where the correlation value is greater than 0.3 and the reliability coefficient (Cronbach Alpha) is greater than 0.6 [8]

To find out the relationship between the variables of the Soziona tourism economy area which includes natural resources, human resources, facilities and infrastructure resources, sectoral development policies and community welfare in Nias Regency, it can be seen through the magnitude of the coefficient of determination. The coefficient of determination is used to test the goodness-fit of the regression model which can be seen from the R Square value as shown in Table 3.

Table 3. Coefficient of Determination of the Effect of Tourism Economic Zones

on Community Welfare

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.211[a]	.045	.034	.19681

a. Predictors: (Constant), Natural Resources, Human Resources, Infrastructure Resources, Sectoral Development Policy

b. Dependent Variable: Community Welfare (Y)

The calculation result of the R Square value is 0.045, this means that 4.5 percent of the welfare of the community can be explained by the variables of the Soziona tourism economic area (natural resources, human resources, facilities and infrastructure resources, and sectoral development policies)

above, while the rest ie 95.5 percent is explained by other variables not examined in this study. These results indicate that the Soziona tourism economic area has a very low relationship with community welfare in Nias Regency. The Soziona tourism economic area through the variable dimensions of natural resources, human resources, facilities and infrastructure resources, and sectoral development policies has a positive and very low relationship with the welfare of the people in Nias Regency, this is due to the absence of the development of the Soziona tourism economic area. social welfare will not be achieved.

Simultaneous effect test is used to determine whether the independent variables simultaneously or simultaneously affect the dependent variable. For more details can be seen in Table 4.

Table 4. Simultaneous Test Results (Test F) The Effect of the Soziona Tourism Economic Zone

on Community Welfare

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.625	4	.156	4.032	.003[a]
	Residual	13.364	345	.039		
	Total	13.989	349			

a. Predictors: (Constant), Natural Resources, Human Resources, Infrastructure Resources, Sectoral Development Policy

b. Dependent Variable: Community Walfare (Y)

Simultaneous statistical tests can be seen from the probability level of 0.003. which < = 0.05, which means Ha is accepted. This means that the independent variables of the Soziona tourism economic area (Natural Resources, Human Resources, Facilities and Infrastructure Resources, and Sectoral Development Policies) are simultaneously significant in explaining the welfare of the people in Nias Regency.

In the partial statistical test with a critical value of t (critical value) at df = (n-k), where n is the number of samples and k is the number of independent variables including constants. To test the individual partial regression coefficients of each independent variable, it can be seen in Table 5.

Table 5. Results of Partial Test (T Test) The Effect of Tourism Economic Zones

on Community Welfare

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	93.210	.530		175.793	.000
	Natural Resources	-.001	.020	-.004	-.070	.944
	Human Resources	.018	.016	.059	1.128	.260
	Infrastructure Resources	-.014	.017	-.043	-.819	.414
	Sectoral Development Policy	.079	.021	.194	3.682	.000

a. Dependent Variable: Community Welfare (Y)

In Table 5, the results of the partial test are obtained as follows:

1. The dimensions of the natural resource variable have a negative and insignificant effect on the welfare of the community in Nias Regency.
2. The dimensions of the human resource variable have a positive and insignificant effect on the welfare of the community in Nias Regency.
3. The dimensions of the facilities and infrastructure resources variable have a negative and insignificant effect on the welfare of the people in Nias Regency.
4. Dimensions of sectoral development policy variables have a positive and significant impact on community welfare in Nias Regency.

Based on Table 5, multiple regression equations can be arranged as follows:

$$Y = 93{,}210 - 0{,}001X_1 + 0{,}018 X_2 - 0{,}014 X_3 - 0{,}079 X_4$$

The multiple regression equation model means:

1. The constant value is 93.210 which means that if there is no independent variable value for the development of the Soziona tourism economic area, in this case natural resources, human resources, facilities and infrastructure resources, and sectoral development policies are equal to 0 (zero) then the score value community welfare in Nias Regency will be 93,210.
2. Natural resources variable (X1) has a beta coefficient of -0.001 and is negative. This means that each addition or increase of one unit score for the dimension of the natural resource variable will reduce the value of community welfare in Nias Regency by 0.001 score unit.
3. Human resources variable (X2) has a beta coefficient value of 0.018 and is positive. This means that each addition or increase of one unit score for the dimension of the human resource variable will increase the value of community welfare in Nias Regency by 0.018 unit score.
4. Facility and infrastructure resource variable (X3) has a beta coefficient value of -0.014 and is negative. This means that each addition of one unit score for the variable dimensions of facilities and infrastructure resources will reduce the value of community welfare in Nias Regency by 0.014 score units.
5. Sectoral development policy variable (X4) has a beta coefficient value of 0.079 and is positive. This means that each additional one unit score of the sectoral development policy variable dimension will increase the value of community welfare in Nias Regency by 0.079 score units.

4. Acknowledgement

Simultaneously the Soziona tourism economic area has a positive and significant impact on the welfare of the people in Nias Regency. Partially shows that the dimensions of the variables of natural resources and resources of facilities and infrastructure have a negative effect on the welfare of the people in Nias Regency. The dimensions of human resources and sectoral devel-opment policies have a positive effect, but only sectoral development policies have a signifi-cant impact on community welfare in Nias Regency. For this reason, the Nias Regency Govern-ment must optimize the development of the Soziona tourism economic area including natural resources, human resources, facilities and infrastructure resources, to improve the welfare of the people in Nias Regency.

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