

# Development of Mount Sinabung Refugee Relocation Areas Through Tourism Villages in the Siosar Area, Karo District, North Sumatra Province

Osland Herijon Lingga<sup>1</sup>, Sirojulizam Sirojulizam<sup>2</sup>, Agus Purwoko<sup>3</sup>, Achmad Siddik Thoha<sup>4</sup>

## Abstract

*Regional development planning is aimed at achieving harmony and balance in development between regions in accordance with their natural potential and utilizing this potential in an efficient, orderly and safe manner. For this reason, based on Law no. 24 of 1992 concerning Spatial Planning, a National Spatial Plan (RTRWN) has been drawn up which has been stipulated through Government Regulation no. 47 of 1997 as a reference for national development planning. The development of the relocation area for Siosar Village, Karo Regency, requires support from relevant stakeholders, namely the Karo Regency Government, the Karo DPRD and Entrepreneurs. It is hoped that this will further strengthen the development of the Siosar Village relocation area into a Tourism Village. The urgency of this research is to find out the potential for opening the Siosar tourism village to become a tourist village and from a socio-economic point of view of the community. The data collection technique is to distribute questionnaires to stakeholders including the public and visitors. The data analysis technique used uses the smartPLS approach and the result is that there are socio-economic influences on the community in regional development. The socio-economic community also has an influence on tourist villages. The tourism village has an influence on regional development and through the Sobel test, the tourism village variable is able to mediate the socio-economic conditions of the community towards regional development.*

**Keywords:** Regional development; tourism village; spatial planning; regional development.

## Introduction

Area Development is a movement in part or in whole to improve the function of land and structuring social, economic, cultural, educational and community welfare life to advance the region Budiharsono (2005). Regional development planning is aimed at seeking harmony and balance in development between regions in accordance with their natural potential and utilizing this potential in an efficient, orderly and safe manner. In principle, the spatial division approach can be carried out based on functions, activities and administrative aspects. Based on function, space is divided into protected areas, namely areas that can guarantee environmental sustainability; and cultivation areas, namely areas whose utilization is optimized for cultivation activities.

Development so far has reduced the illiteracy rate, increased the level of education and public health in the region. However, the quality of human beings in underdeveloped regions is generally still below the national quality average. For this reason, the sectoral development approach that has raised the quality standard of Indonesian people to a certain level, in the future needs to be followed by a development approach that pays more attention to regional conditions and aspirations, not by a uniform approach. Future human development strategies must be able to identify the types of education and training that can place a workforce and educated graduates in the market for job opportunities that constantly demand increased skills.

Regional planning is a container that includes land space, sea space, and air space, including space on earth as a single territory, where humans and other creatures live, carry out activities, and maintain their survival. Regional planning certainly requires a feasibility study so that the direction of development is in accordance with the aspirations and mandate of the law, namely for the welfare of the community. Natural resources and human resources are important elements in regional planning. The social condition of the community is the

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<sup>1</sup> Student of Regional Planning Doctoral Program, University of Sumatra Utara, Indonesia. Email: osland.herijon.lingga@students.usu.ac.id

<sup>2</sup> Regional Development Study Program, Graduate School, University of Sumatra Utara, Indonesia. Email: sirojulizam@usu.ac.id

<sup>3</sup> Regional Development Study Program, Graduate School, University of Sumatra Utara, Indonesia. Email: agus9@usu.ac.id

<sup>4</sup> Regional Development Study Program, Graduate School, University of Sumatra Utara, Indonesia. Email: a.siddik@usu.ac.id

basis for setting government policies, thus the policies taken by the government will provide benefits to the community. Regional development planning must also refer to central government laws so that they do not conflict with regional government policies.

Based on observations on 24 February 2016, based on observations on 24 February 2016, the existing conditions of settlements and agricultural land for Sinabung refugee relocations include 370 type 36 houses for three villages, namely: Bekerah; Simacem and Sukameriah have been completed. A total of 80% of the total number of houses have been occupied by refugees. It is also visible that 185 hectares of agricultural land, which was previously a production forest with pine tree vegetation, has been cut down.

The relocation area for Mount Sinabung refugees in the Siosar area is considered to have the potential to become a tourism village. The topography of the relocation site has predominantly undulating topography (65.19%) with a slope of 8-15%, flat to sloping topography (33.9%) and hilly topography (0.82%) with a slope of 15-25%. Based on the topographical conditions, this area is suitable for residential and cultivation areas (Rauf et al. 2015) as well as agricultural land. As a form of post-disaster disaster management program, the Mount Sinabung refugee relocation village can be developed into a Tourism Village that carries the theme of ecotourism, which empowers disaster victims in its implementation. Ecotourism options that can be offered are, for example, agrotourism, culturetourism or volcanotourism activities.

The development of the world tourism industry has developed quite rapidly which can be seen from the data on the number of world tourists. According to the World Tourism Organization (UNWTO) the number of world tourists has grown by 3% -4% annually. Travelers to the Middle East and Africa grew above the world average of 6%, with a 10% increase in the Middle East and a 7% jump for Africa. The Asia Pacific and European tourist destinations grew by 6%. Meanwhile, destinations to America grew below the world average of 3%, while destinations to Central and South America experienced a decline of 2%. From the same data source, in 2018 the number of world tourists was recorded at 1.4 billion tourists, this figure shows an increase of 3% from the previous year. From the above data it can be said that the tourism industry is one of the drivers of the national economy apart from other economic sources.

In Indonesia, according to the Ministry of Tourism the projected figure for foreign exchange earnings of US\$17.6 billion in 2018 will place the tourism sector in the top position as a foreign exchange earner or possibly outperform CPO (Crude Palm Oil), which currently ranks first with an export value of US\$17 billion. The tourism sector is believed to be a mainstay sector capable of contributing to increasing the country's foreign exchange, both directly and indirectly. Therefore, the tourism sector is still considered feasible and important to develop. The implementation of Indonesian tourism is the result of the work of the government, private sector and society. The policy for implementing national tourism is endeavored to encourage tourism actors to achieve the vision and mission that has been set.

The potential of Indonesia's territory consists of tens of thousands of islands, hundreds of customs and cultures, each of which has its own uniqueness, so this can be an asset in tourism development. The current trend of world tourists is that they are very fond of things or destinations that are local wisdom or local architecture. Tourists want to enjoy and experience a new experience with different facilities and services, of course, far from being luxurious and modern. An important aspect in tourism development is the socio-cultural aspect. The meeting of tourists and local communities in the implementation of tourism is a meeting of individuals or communities with different socio-cultural backgrounds so that they have various influences on people's lives. Tourism will provide new things in society and the conditions that exist in a destination will influence the social processes of society (Qomarudin, 2013; Leung & Chan, 2023; Li, 2023). In Law No. 10 of 2001 concerning Tourism, namely one of the objectives of implementing tourism is to increase regional income in the context of increasing the welfare and prosperity of the people, also expanding and equalizing business opportunities and employment and encouraging regional development.

North Sumatra is a province in Indonesia which is located in the northern part of the island of Sumatra where this province is geographically located between the Malacca Strait and the Indian Ocean. It is inhabited by

various well-known ethnicities, namely Malays in the western lowlands, Batak tribes in the highlands and there are Nias tribes on Nias Island in the Indian Ocean. One of the tourist destinations in North Sumatra that has been known since the colonial era is Karo Regency in the Karo highlands.

The eruption of Mount Sinabung is often followed by damage to the area around the volcano. One of them is the settlements and plantations of residents around the mountain. The damage is often so severe that these areas are no longer habitable, therefore a relocation settlement is needed for residents. One of the locations chosen as the relocation area is Siosar Village which is a hilly area that has the potential to become a tourist area.

The Siosar relocation village was born through Presidential Decree Joko Widodo No. 21 of 2015 concerning Management of Sinabung Eruption Disaster Victims in Karo District, North Sumatra Province. After the letter was circulated, the establishment of a shelter for victims of the Sinabung eruption was carried out immediately. One of the contents of the presidential decree was to issue a lease-to-use permit for the Siosar Protected Forest Area, Brand District, Karo Regency, as a new residence for the victims of the Sinabung eruption.

The development of Siosar Village is intended for refugees. As a new village, it is necessary to know what are the potential development areas for the Siosar relocation area which will be used as a tourism village. The development of the relocation area for Siosar Village, Karo Regency, requires support from relevant stakeholders, namely the Karo Regency Government, the Karo DPRD and Entrepreneurs. It is hoped that this will further strengthen the development of the Siosar Village relocation area into a Tourism Village

## Conceptual Framework

### *Tourism Development Through Tourism Village Development*

Natural resources are a mainstay in organizing tourism, Indonesia as one of the countries with considerable natural wealth such as the sea with its beaches, lakes, volcanoes, sub-tropical forests, various flora and fauna, caves, rivers and so on which is contained therein is a mainstay in tourism administration. Along with the development of the times, there has been a change in the tourism paradigm where one of these paradigm changes is a shift in tourist motivation which is more directed towards tourists seeking new experiences in local architectural styles, starting with local-style facilities and waiters, local cuisine and local culture.

Indonesia has various ethnic groups and of course is rich in local culture, where local culture can be found in villages throughout Indonesia. One of the tourist destinations in Indonesia that has been known since the colonial era is in North Sumatra, namely the Karo highlands; Karo Regency is one of the areas in the plains. With amazing natural conditions, one of the largest tribes in North Sumatra, namely the Karo tribe, which has a rich culture and inhabits many villages that still have cultural wealth, also inhabits this area. Supported by natural wealth and beauty, it has the potential to be developed into tourist villages.

### *Global Issues*

Tourism can be a series of visiting activities to tourist destinations that are carried out by a person or group of people voluntarily and for a limited time. People who travel are called tourists and can be classified as domestic tourists, foreign tourists. Tourism is a sector where there are several unique characteristics, namely consumers visiting tourist destinations directly when they want to enjoy the tourism products produced, meaning they cannot. The tourism sector is vulnerable to global issues, namely issues of security, gender, human rights, global financial crises, global warming and disaster management. Therefore, if there is a change in one of these issues, it will have an impact on the tourism sector.

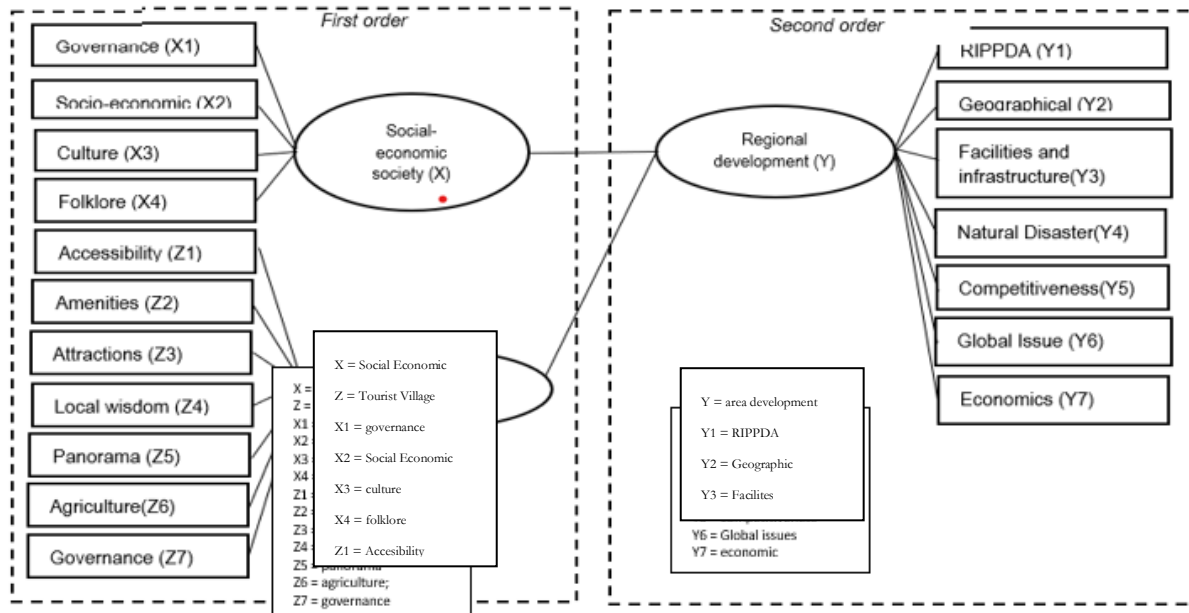


Figure 1. Conceptual framework

Ho1 : There is no socio-economic influence of the community on the development of the Siosar Village area, Karo Regency

Ho2 : Nothere is the influence of the tourist village on the development of the Siosar Village area of Karo Regency

H03 : There is noCommunity Socio-Economic Influence on Tourism Villages

Ho4 : There is no socio-economic influence of the community on the development of the Siosar Village area, Karo Regency with tourism villages as a moderating variable

## Theoretical Framework

### *Regional Development Planning*

Regional planning is a development planning process that is intended to make changes towards a better direction of development for a community, government, and environment in a certain area. By utilizing or utilizing various existing resources and must have an orientation that is comprehensive, complete, and stick to the principle of priority (Riyadi and Bratakusumah, 2003). In regional development efforts, the most important issue that is of concern to economists and regional planning concerns the process of economic growth and equitable development. The difference between the theory of regional economic growth and the theory of national economic growth lies in the nature of openness in the input-output process of goods and services as well as people. In the regional system,

Budi Setiawan, R. Rijanta, M. Baiquni (2017) in a journal entitled Sustainable Tourism Development: the Adaptation and Resilience of the Rural Communities in (the Tourist Villages of) Karimunjava, Central Java recommends several things related to sustainable tourism development, namely:

1. The Recommendation emphasizes the importance of a policy that draws attention to the reciprocal relationship between the biosphere and the development of social welfare.
2. Stresses the need for a policy that creates room for flexible and innovative collaboration oriented towards sustainability,
3. Refers to the direction of a policy that makes operational sustainability in the context of socio-ecological resilience.

### *Tourist*

According to Pendif (2003) Tourism is a new type of industry capable of accelerating economic growth and providing employment, increasing income, living standards and stimulating other productive sectors. Furthermore, as a complex sector, classic industries such as handicrafts, souvenirs, lodging and transportation are economically also seen as industries. According to the WTO (1999: 5) what is meant by tourism is the activity of humans traveling to and staying in destinations outside their usual environment which lasts for a period of not more than one year in a row for the purpose of pleasure, business and others. Meanwhile, according to Koen Meyers (2009) in Suwena & Widyatmaja (2017) Tourism is a visit to interesting places, with the aim of recreation, fulfilling curiosity and spending free time. Tourism is also regulated in Law no. 10/2009 concerning Tourism, which explains tourism as various kinds of tourism activities and is supported by various facilities and services provided by the community, businessmen, government and local governments.

Tourist Destination Areas (DTW) or tourist objects are areas that are the target of tourists to do their tours because DTW has an attraction to visit as well as being the energy of the entire tourism system. The attractiveness of tourist objects can be both natural and cultural (Ismayanti 2019). The world of tourism continues to experience development, one of which is the emergence of the term sustainable tourism development as stated in the Sustainable Tourism Charter (1995) is development that can be supported ecologically as well as economically viable, as well as ethically and socially just to the community. One form of tourism product as a derivative of the concept of sustainable tourism development is the concept of ecotourism development (Haryanto 2014).

#### *Ecotourism and Tourism Village*

Budi Setiawan, R. Rijanta, M. Baiquni (2017) with the title Sustainable Tourism Development: the Adaptation and Resilience of the Rural Communities in the Tourist Villages of Karimunjawa, Central Java:

1. The Recommendation emphasizes the importance of a policy that draws attention to the reciprocal relationship between the biosphere and the development of social welfare.
2. Stresses the need for a policy that creates room for flexible and innovative collaboration oriented towards sustainability,
3. Refers to the direction of a policy that makes operational sustainability in the context of socio-ecological resilience.

Sustainable tourism development in the Karimunjawa tourist village in Central Java Province using strategic management, which is described as a process of evaluation, preparation and implementation, designed to maintain or strengthen competitive advantage. The process of evaluation, preparation and implementation involves the external and internal environment (Sammut-Bonnici, 2015). Destination management together with strategic management uses the role of competitiveness, so that development strategies and policies are well planned and will increase the attractiveness of highly competitive tourist destinations. Thus, the role of tourists is needed to improve the quality of tourist attractions. Tourism actors such as tourism services, visitors. The purpose of establishing a Tourism Village is to increase the position and role of the community as direct actors in tourism development and to be able to work together and partner with stakeholders. Communities are prepared to be good hosts for visiting tourists, as well as having awareness of opportunities and readiness to capture the benefits that can be developed from tourism activities to improve economic welfare. Building and cultivating a positive attitude and support from the community as the host through the embodiment of Sapta Pesona values has a positive impact on the growth and development of tourism, regional development, preservation and utilization of potential tourist attractions in each region.

#### *Main Components of Tourism Village*

According to Nuryanti (1993), there are three main concepts in the Tourism Village component, namely:

1. Accommodation is part of the residence of local residents and units develop on the concept of residential areas.
2. Attractions are the entire daily life of the local population along with the physical setting village locations that allow the integration of tourists as active participants such as dance, language and other specific courses.
3. The natural beauty, uniqueness and scarcity of the Tourism Village itself.

In developing a tourism village as a tourist object, it is necessary to understand from the start that the local community is not a passive object but rather an active subject. A rural environment can be seen as an object as well as a tourist subject. As an object, it means that the village is a destination for tourism activities, while as a subject. The community will enjoy what the village produces directly and the active role of the community determines its continuity Soebagyo (1991) in Raharjana (2005). In the implementation of community-based tourism, especially for the development of tourist villages, several issues that must be considered are participation, decision-making, community capacity building, and access to tourism markets.

### *Socioeconomic Impact*

Socio-economic influence can be interpreted as a change that arises as a result of activities that affect the socio-economic environment, both in terms of employment opportunities, income and welfare. Gillmore (1981) in Rahma (2010) states that social impacts are very difficult to understand because cases in one region will be different from other regions. Social relations are relationships between people or groups in the conditions of society that are based on a system of values and symbolic meanings. In a dynamic form, social relations will take the form of social interactions between individuals and groups within the community. The formation of a system of social relations in a society is always influenced by environmental conditions, including the physical environment and the social environment.

*The potential of the Siosar area is the village of relocating Mount Sinabung refugees to become a tourism village.*

The Siosar Forest as the relocation site for the Sinabung victims is located in the Nagara Village area, Brand District, Karo Regency, which is 12 kilometers south of Kabanjahe City (the capital of Karo Regency). 15%), altitude 1200-1500 masl. Based on its status, the land is a Production Forest (HP) covering an area of 458 ha which has been permitted by the government for loan use based on Kepmenhut No. 5482/ Menhut II/2014 dated 29 October 2014. The potential for the Siosar Village area is as follows:

1. Attractions

For attractions, namely relocation settlements, folklore, natural beauty, forestry, agriculture, community culture, Puncak 2000, Madu Efi, Zia Coffee and Cafe and Villa

2. Accessibility

For this accessibility are the Medan-Siosar highway (95.2km) and the Damri Public Bus from Kabanjahe City

3. Amanity

For safety, namely clean water, lodging, restaurants, houses of worship, parking lots and villas or homestays.

### *Siosar Area Biophysic Condition*

Administratively, the relocation area in Siosar belongs to the area of Nagara Village, Brand District, Karo Regency. Geographically it is located between 2o58'15" N 98o26'48" E to 3o00'01" N 98o27'27" E. It is approximately 12 kilometers from the district capital, Kabanjahe City. This land is former pine forest land, pine trees are allelopathy-producing trees, namely resinous substances produced from plant secondary metabolite systems. Allelopathy in pine plants includes terpenoid compounds namely monoterpenes  $\alpha$ -pinene and  $\beta$ -pinene, these compounds are toxic to insects and plants (Cahyanti et al., 2013). The adverse effect of allelopathy on plants occurs through a number of mechanisms, including inhibiting the division of root cells, inhibiting root respiration, inhibiting protein synthesis, inhibiting enzyme activity.

## **Method**

### *Research Approach*

The research approach that will be used in this research is a quantitative approach, namely testing the hypothesis of the influence of the development of the disaster relocation village of Mount Sinabung into a tourism village on the socio-economic community in Siosar Village, Tiga Panah District, Karo Regency.

### *Research Sites*

The research location was Karo Regency which included phase 1 relocation, namely Sukameriah Village, Simacem Village, Bekerah Village and the second phase of relocation consisted of 7 (seven) villages and 1 (one) hamlet, namely Guru Kinayan Village, Berastepu Village, Gamber Village, Kota Tunggal Village, and Sibintun Hamlet.

#### *Population and Sample*

The population in this study were 2,793 heads of families, namely 370 heads of families consisting of Sukameriah Village, 136 heads of families from Simacem Village, 131 heads of families and Bekerah Village 103 heads of families while the second stage of relocation consisted of 7 (seven) villages and 1 (one) hamlet, namely Guru Kinayan Village, Berastepu Village, Gamber Village, Kota Tunggal Village, and Sibintun Hamlet, with a total of 2,053 households. By using the slovin formula, the total sample is 559 respondents.

#### *Data Collection Technique*

This study is literature studies, which used literatures as references. Interviews as a form of information gathering regarding the village relocation of the Mount Sinabung eruption disaster to become a tourism village in Karo District, a questionnaire to collect information on variables (X) Village Development relocation of Mount Sinabung as a variable (Y) Tourism Village on Variable (Z) Socio-Economy of the people in Siosar Village, Tiga Panah District, Karo Regency.

#### *Data Analysis Technique*

The data analysis technique in this study looked for the influence or relationship between the three variables, namely Development of the Relocation Village of Mount Sinabung (Variable X) to become a Tourism Village (Variable Y) on the Socio-Economy of the community (Variable Z) in Siosar Village, Tiga Panah District, Karo Regency.

#### *Structural Models*

This model describes the relationship between latent variables. Parameters indicating the regression of endogenous latent variables on exogenes are denoted by  $\gamma$  ("gamma"). Whereas for the regression of endogenous variables on other endogenous variables is denoted by  $\beta$  ("beta"). Exogenous latent variables may also be related in two directions (covary) by denoting  $\varphi$  ("psi"), while the notation for error is  $\zeta$

The structural equation model is the relationship between latent variables, which can be written as the following equation (indirect equation)

$$X = \lambda_{21}\eta_2 + \lambda_{22}\eta_2 + \lambda_{23}\eta_2 + \lambda_{24}\eta_2 + \zeta_3$$

$$Y = \gamma_{11}\xi_1 + \gamma_{12}\xi_1 + \gamma_{13}\xi_1 + \gamma_{14}\xi_1 + \gamma_{15}\xi_1 + \gamma_{16}\xi_1 + \gamma_{17}\xi_1 + \zeta_1$$

while the indirect equation is as follows:

$$Z = \lambda_{11}\eta_1 + \lambda_{12}\eta_1 + \lambda_{13}\eta_1 + \lambda_{14}\eta_1 + \lambda_{15}\eta_1 + \lambda_{16}\eta_1 + \lambda_{17}\eta_1 + \zeta_2$$

## **Results and Discussion**

#### *SEM Models*

Testing the validity and reliability of the data in this study was carried out with several suggested criteria. The structural model in this study is shown in Figure 2 below

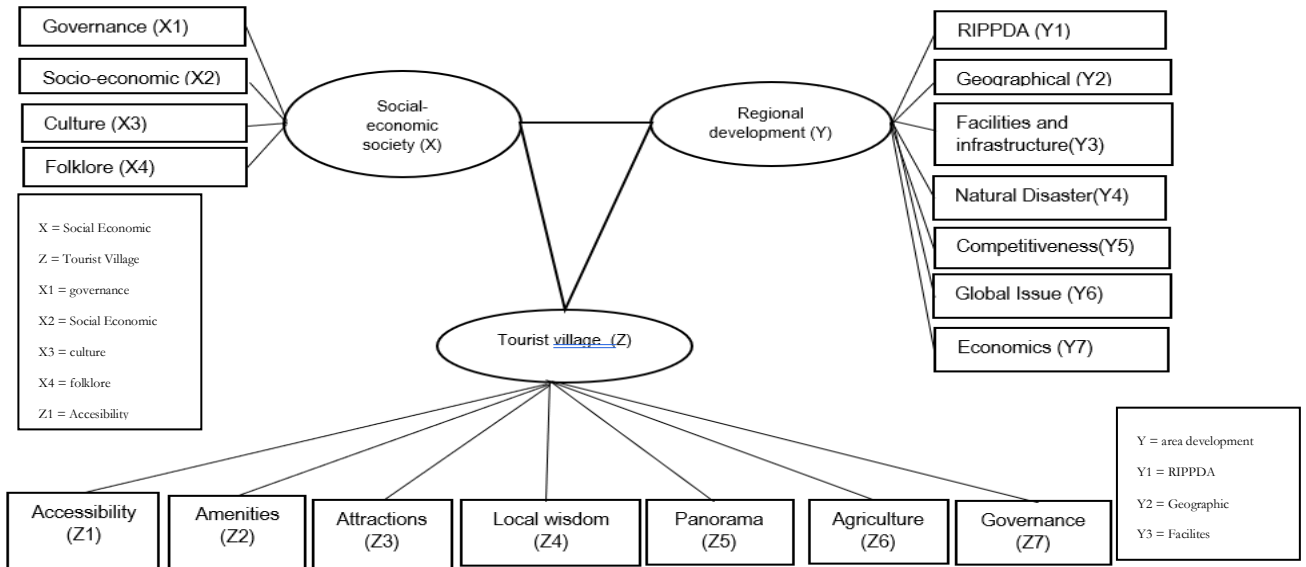


Figure 2. SEM research model.

Figure 2 shows that the socio-economic variable of the community (X) is measured by 4 dimensions, the Regional Development variable (Y) is measured by 7 dimensions, and the Tourism Village variable (Z) is measured by 7 dimensions.

Table 1. Validity test results.

			Estimates
Z	<---	X	.024
Y	<---	Z	,838
Y	<---	X	,001
X11	<---	X	,722
X12	<---	X	,811
X13	<---	X	,826
X14	<---	X	,712
X15	<---	X	,482
X16	<---	X	.049
X17	<---	X	.086
Y11	<---	Y	,621
Y12	<---	Y	,301
Y13	<---	Y	,463
Y14	<---	Y	,565
Y15	<---	Y	,511
Y16	<---	Y	,698
Y17	<---	Y	,514
Z11	<---	Z	,413
Z12	<---	Z	,524
Z13	<---	Z	,537
Z14	<---	Z	,606

based on table 1, there are some invalid items. Next, elimination was carried out on several invalid items and recalculating the modified model. The results of the confirmatory factor analysis are shown in figure 3.



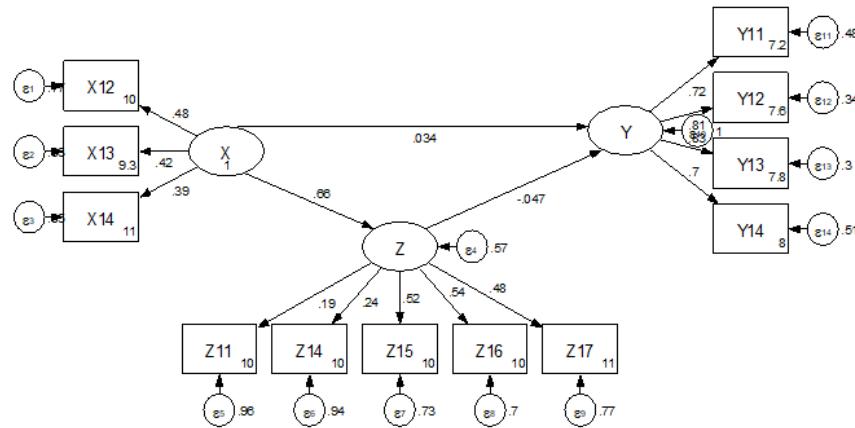


Figure 3. Modification of the construct model/second order.

The figure 3 shows that the area management variable (X) is measured with 4 dimensions, the Tourism Village variable (Y) is measured with 5 dimensions, and the Community variable (Z) is measured with 3 dimensions.

Table 2. Results of the modification of the construct model validity test.

	Estimates
Z <--- X1	,648
Y <--- Z	,503
Y <--- X1	,436
X11 <--- X1	,630
X12 <--- X1	,609
X13 <--- X1	,620
X14 <--- X1	,645
Z12 <--- Z	,628
Z13 <--- Z	,663
Z14 <--- Z	,542
Y11 <--- Y	,628
Y14 <--- Y	,795
Y15 <--- Y	,694
Y16 <--- Y	,548
Y17 <--- Y	,717

it can be concluded that all statement items in this study are classified as valid categories. In testing the expected reliability is above 0.6 so that the data can be considered reliable.

Table 3. Cronbach's alpha value.

Variable	Cronbach's Alpha
Territory Management	0.716
Tourism Village	0.604
Public	0.806

The table above shows the Reliability value above 0.6 which means that the internal consistency of the dependent variable (Tourism Village and Community) and independent (Regional Management) has good reliability.

The feasibility test of the measurement model was carried out by calculating the construct confirmatory factor analysis for each variable in Figure 3 above. Comparison of the goodness of fit construct model for all variables with cut-off values is presented in Table 4.

Table 4. Goodness-of-fit full model.

Test results	Cut-off Value	Model Results	Information
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Chi-Square ( $\chi^2$ )	156,941	$\leq(\chi^2_{table}$	Good
CMIN/DF	1,329	$\leq 2.00$	Good
probability	0.058	$\geq 0.05$	Good
TLI	0.917	$\geq 0.90$	Good
RMSEA	0.061	$\leq 0.08$	Good

From the table 4 can be seen that the results of the goodness of fit model meet the evaluation requirements. The chi-square significance level value of 156.941 indicates that there is a difference between the sample covariance matrix and the estimated population covariance matrix.

Structural model feasibility test (full model). Carried out if the confirmatory factor analysis meets the requirements, namely identification in the feasibility test of the structural model (full model) through the results of the textual structural model feasibility test. Based on the tests conducted it can be identified whether the indicators have met the cut-off value of convergent validity, namely the loading factor value in the standardized loading estimate is  $\geq 0.50$  or more and ideally it should be 0.70, Ghozali (2008).

**Table 5.** Standardized regression weights.

			Estimates
Z	<---	X1	,655
Y	<---	Z	,469
Y	<---	X1	,636
X11	<---	X1	,630
X12	<---	X1	,609
X13	<---	X1	,620
X14	<---	X1	,645
Z12	<---	Z	,628
Z13	<---	Z	,663
Z14	<---	Z	,542
Y11	<---	Y	,628
Y14	<---	Y	,795
Y15	<---	Y	,694
Y16	<---	Y	,548
Y17	<---	Y	,717

Loading factor values for standardized regression weights the table 5 shows that there are no loading factor values below the cut-off. In other words, it has met the convergent validity cut-off value.

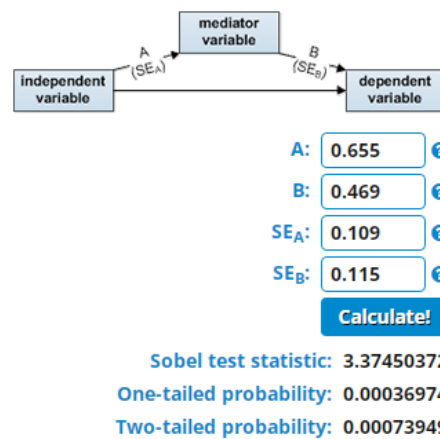
Hypothesis testing is done by observing the value of the critical ratio (CR). The hypothesis is accepted if the CR value is far above the critical value  $\pm$ , conversely, if the CR value is far below the critical value  $\pm 1.96$  then the hypothesis is rejected. The following is the result of testing the hypothesis.

**Table 6.** Regression weights.

		Estimates	SE	CR	P	Label
Z	<---	X	,655	,109	4,125	,000
Y	<---	Z	,469	,115	2,880	,004
Y	<---	X	.038	,126	2,746	,009

Based on the table above, it can be concluded several things as follows.

1. The results of testing the estimation parameter (standardized regression weight) between regional management, tourism villages and the community show that there is a positive effect because it has a value of 0.655; 0.469; and 0.038. With a CR value of 4.125; 2,880; and 2,746.
2. There is a Socio-Economic influence of the community (X) on Regional Development (Y) because it has a P value of 0.009 which is smaller than the significant level of 0.05.
3. There is a Socio-Economic influence of the community (X) on the Tourism Village (Z) because it has a P value of 0.000 which is smaller than the significant level of 0.05.
4. There is an influence of Tourism Village (Z) on Regional Development (Y) because it has a P value of 0.004 which is smaller than the significant level of 0.05.



**Figure 4.** Sobel test.

Based on the Sobel test image above which shows the ability of the mediating variable to mediate the independent and dependent variables. From the calculation results, the value of the two-tailed probability is 0.00073 which is smaller than the significant level of 0.05 so it can be concluded that the mediating variable / tourism village (Z) is able to mediate the independent variable, namely the socio-economic community (X) and the dependent variable, namely regional development (Y).

## Discussion

The development of the relocation village for victims of the Mount Sinabung eruption has proven to have an impact on the Socio-Economy of the Siosar Village community from social, economic, cultural and policy aspects. As an example, we can see this impact on the people of Suka Meriah Village. Suka Meriah Village is one of the villages in the red zone, which is located at a radius of 2 kilometers from the peak of Sinabung. Previously, before the Sinabung eruption occurred, Suka Meriah village was a village known for its very fertile arable land for agricultural commodities, especially vegetables. Apart from that, Suka Meriah Village is also known for its very cool air because the surroundings of this village are surrounded by forest, the public bathrooms have fountains flowing all day long without stopping because this village is very close to a spring. Now the village is covered with volcanic ash so thick that now this village is even like a barren desert filled with hundreds of tons of volcanic ash material vomited by Mount Sinabung. There is not a single residential building in Suka Meriah Village.

When the Sinabung disaster occurred, at least there were several main factors that were faced by farmers, namely the condition of damaged housing, the non-production of business land due to land damage, and the malfunctioning of community business institutions, which further worsened the community's economic situation. Therefore, structured efforts are needed not only for relocation villages but also socio-economic improvement programs for relocation communities such as the tourism village program.

The repeated indicator approach is very popular compared to other approaches such as hybrid and two stages. Herman Wold developed the repeated indicator approach in the 1980s. The procedure for repeated indicators is very simple, namely by using all indicators contracted in the first order as indicators in the second order and so on.

Based on the results of the study, that from an economic aspect, of course the development of the Siosar relocation area into a tourism village provides many economic benefits. Without the development of tourism in Siosar, Siosar village is just an ordinary relocation village whose income is only from the agricultural sector. However, with the promotion of tourism in Siosar, public opinion does not only come from the agricultural sector, but also from the tourism sector. The existence of tourism in Siosar certainly has an impact on the job opportunities of the relocation community. Relocation people who previously lost their jobs due to the Sinabung disaster can now carry out the same jobs as farmers and other job opportunities in the tourism sector. New jobs include those related to the hotel industry, tour guides, and art workers.

With the diversity and many sources of people's livelihoods, local community income due to the presence of tourism certainly also increases. The number of visiting tourists is often directly proportional to the income of the Siosar people, especially those directly related to this sector. When many tourists come to visit Siosar, the local community's opinion also increases. Conversely, if tourists decrease, then people's income also decreases. Therefore, promotional and improvement efforts need to be carried out continuously so that tourists keep coming to Siosar.

Concerning employment, the existence of tourism in Siosar eventually had an impact on migration to the area. Local people are able to maintain their family members who will migrate to other areas to survive in the area because of the many new jobs created. This also happened because the relocation people who initially did not want to move to the area where Siosar was located became willing because they considered the many bigger economic opportunities in Siosar area and considered the many new jobs they could get in Siosa Village.

The development of Siosar village will of course also have an impact on the price of necessities, especially food needs. The community considers the increase in prices in tourist areas normal. This certainly causes both losses and profits for the Siosar community. Profits are usually obtained by people who are directly involved with the tourism industry. For example, innkeepers in Siosar benefit from this price increase. Profits were obtained not only from lodging, but also from the provision of food, which provided great benefits. On the other hand, price increases cause losses to people who are not directly involved with tourism. Because, they have to buy some necessities at high prices without making a profit.

Another influence is the impact of dislocations. Tourism wherever it is located certainly has a dislocation impact and generates relatively small benefits or profits for the relocation community. This is because in the development of the tourism industry, usually foreign communities as investors introduce high standard facilities, thus in the construction of these facilities, land is definitely needed, this is where dislocation occurs where community land is ultimately converted to facilities supporting tourism activities. Thus, the benefits obtained by foreign communities will be greater when compared to those obtained by local communities. In other words, the existence of tourism here provides more profit or benefits for foreign communities as investors than for the local Siosar community. From a social aspect, the development of Siosar village into a tourism village has made the local Siosar community more dependent on and connected to the wider community. The wider community, in this case, are tourists who come from outside the area. The existence of this tourism makes the relocation community increasingly related to tourists who come to their area and indirectly this makes the local community lose autonomy in their social life. Autonomy meant in this case is the loss of rights and authority to regulate their social life. In this case the community indirectly loses their rights and authority in managing their own lives because indirectly when there are already tourism activities in the area.

From another social aspect, the existence of tourism also has an impact on the interpersonal relations of the local community, which varies in each region. Sometimes there is tourism that has an impact in the form of waning local community solidarity. This is due to the influence brought by people from outside the area. Tourists who come from outside the area usually bring influence in the form of modernity. For example, in modern life solidarity is no longer an important thing that must be maintained in life. Modern society is considered more individualistic. For the people of the relocated village of Siosar, this kind of influence seems invisible. The solidarity of the Siosar relocation community has only increased. With the development of tourism in Siosar, people are increasingly maintaining the values and culture that they have because those values and culture are what tourists want to see. Culture is increasingly being preserved because it is one of the selling points of the siosar relocation tourist village. The community is also becoming more solid because they feel they share the same fate because they are both victims of the Sinabung disaster.

From the aspect of social institutions, the existence of tourism indirectly has an impact on social organizations or institutions. Soekanto (2014) argues that social organization itself is a group of people who have the same goals to form a social institution or organization. The existence of tourism in an area generally has an impact on the basics of social institutional organization in the tourist destination. In general, the basic social organization of the local community pays more attention to the economic aspect. Local people in tourist destinations agree to join the majority social organizations because they are oriented towards economic benefits that they can get later. The same thing also happened in Siosar, Local people who join

an organization that manages tourism in the Siosar area join because not only they have the same goal of advancing tourism in Siosar, but also because they consider the economic benefits they can get if they join the organization. In addition, the existence of tourism in Siosar causes the community to establish relationships with other individuals or outside Siosar as well as being oriented towards the economic domain. For example, the Siosar people try to establish good relations with tourists and investors from outside the area by considering the economic benefits that will be obtained by organizations and individuals. The existence of tourism in Siosar causes the community to establish relationships with other individuals or outside Siosar as well as being oriented towards the economic domain. For example, the Siosar people try to establish good relations with tourists and investors from outside the area by considering the economic benefits that will be obtained by organizations and individuals. The existence of tourism in Siosar causes the community to establish relationships with other individuals or outside Siosar as well as being oriented towards the economic domain. For example, the Siosar people try to establish good relations with tourists and investors from outside the area by considering the economic benefits that will be obtained by organizations and individuals.

Furthermore, the existence of tourism in general changes the criteria for stratification and social mobility of people in the area. Soekanto (2014), explains that stratification itself is the differentiation of residents or communities in an area into stratified classes. These social classes are distinguished from high to low while social mobility is a movement carried out within the social structure. In Siosar, individuals who initially worked, as farmers prior to relocation will change jobs to become farmers as well as entrepreneurs in the tourism services sector, so that their income will also increase. The existence of tourism in Siosar generally changes the criteria for stratification and social mobility of the local community to prioritize the economic domain where this economic domain is the main criterion in determining their social stratification. On the other hand, tourism also has a positive impact on the local community's economy so indirectly the existence of companies makes it easier for people to carry out social mobility towards a better social class than before.

Finally, from a policy perspective, tourism development for the Siosar relocation area certainly involves a lot of foreigners. The local community and the state as well as foreign investors have their respective financial interests in Siosar. As stated by Cohen (1984), this process often causes the local community to lose control over the tourism industry. This also happened in Siosar, in managing businesses both in agriculture and tourism, local people still have to follow what the government, has determined, because the land does not fully belong to them. In addition, the policies regarding these two matters must of course be in line with the government's vision and mission for the village of Siosar.

## Conclusion

The Karo Regency Government, through the Department of Culture, Youth and Sports and Tourism, continues to strive to carry out campaigns related to new tourist attractions that will bring in regional income for Karo Regency, and encourages the immediate transformation of the relocation village in the Siosar Area into a Tourism Village.

The existence of tourism has given rise to new leaders. In this case in the tourism sector, new leaders have emerged. This new leader usually competes with the existing traditional leaders before the tourism emerges. Especially for the Siosar area, the area is a new village that was deliberately opened for relocation, so traditional/customary leaders do not exist because the village itself has just been created. The relocation community in Siosar also came from various villages around Mount Sinabung, so the traditional/adat leaders did not only come from one village. However, even though they have their own customary leaders, a new leader due to a new political interest, namely the tourism sector in Siosar, will manage the relocation communities.

There is a Socio-Economic influence of the community (X) on Regional Development (Y) because it has a P value of 0.009 which is smaller than the significant level of 0.05. There is a Socio-Economic influence of the community (X) on the Tourism Village (Z) because it has a P value of 0.000 which is smaller than the significant level of 0.05. There is an influence of Tourism Village (Z) on Regional Development (Y) because it has a P value of 0.004 which is smaller than the significant level of 0.05. Based on the Sobel test above which shows the ability of the mediating variable to mediate the independent and dependent variables.

From the calculation results, the value of the two tailed probability is 0.00073 which is smaller than the significant level of 0.

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