

Influence Endogeneity And Embeddedness Dimensions Of *Integrated Rural Tourism Program* On Community Well-Being Of Lake Toba North Sumatera, Indonesia

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Abstract.

Lake Toba area has been designated as a national strategic area and national tourism object. Therefore, development of its surrounding areas become a priority for government. Since Lake Toba is surrounded by many villages, it is suggest that development of this area was done through integrated rural tourism program. This research was done to find out the influence of endogeneity and embeddedness in integrated rural tourism program on community well-being of Lake Toba. The research was held from July to Desember 2021. The survey was conducted to 240 people from 8 regencies surrounding Lake Toba: Samosir, Toba, Simalungun, North Tapanuli, Humbang Hasundutan, Dairi, Karo and West Pakpak Regencies. The sample consists of the community, entrepreneurs, policy makers, academics, and stakeholders. Data of community well-being, endogenous and embeddedness aspects of integrated rural tourism was analyzing using multiple regression analysis. The results shows that endogenous and embeddedness aspects of integrated rural tourism partially and simultaneously influence community well-being.

Keywords: Endogeneity, Embeddedness, Integrated rural tourism and Community well-being.

I. INTRODUCTION

Tourism, which is considered as an approach to enhance community development while conserving natural resources, has been receiving support from governments and academics to achieve national welfare. Sustainable tourism through integrated rural tourism is increasingly being considered as a tool for improving local livelihoods. Lake Toba, as one of “10 New Bali” tourist destinations, its development can be carried out through the Integrated Rural Tourism model. According to Oliver and Jenkins (2003), this model is suitable because it is clearly associated with the integration of economic, social, cultural, natural and human resources of the region in which the community is located. This integration is certainly inseparable from the optimal roles played by all stakeholders (government, community, tourism industry). Many research showed that there is a need for an integrated modern approach in ensuring sustainable regional development in creating harmonization of socio-economic processes in improving people's quality of life. In Stavropol, the southern region of Russia for example, sustainable tourism development carried out with integrated infrastructure development, mobilizing the socio-economic potential of rural tourism and ethnicity, development of organic food (grain) production, and environmental security can improve the welfare of local communities (Taranova et al., 2019). Integrated rural development in Qinggangshu village, China has transformed the village from an agricultural village into a modern tourist village (Gao et al., 2019). Consolidation in utilizing land assets in an integrated manner is the core of the transformation of rural tourism development in Qinggangshu village, thereby encouraging a realignment of labor and capital inflows will reorganize the village and make it a better place to live.

Furthermore, the development of integrated rural tourism in border region of the England–Wales has also prospered citizens through collaborations to market the potential and quality of rural products on the border, such as food processing, arts and crafts, heritage and recreation. (Ilbery et al., 2007). The concept of integrated rural tourism has certainly added a value in stimulating the growth of the local tourism sector. Where various potential destinations can be optimized to attract tourists. Tourist visits have significantly increased employment opportunities and income for local residents (Durberry, 2004). The availability of employment opportunities for the community can directly improve the socio-economic conditions of the community and improve their standard of living. In a broader aspect, tourist visits will increase community development and help reduce poverty (Oh, 2005). It is inextricably linked to the foundation of integrated rural

tourism, which seeks opportunities for sustainable tourism development through its multidimensionality. In other words, rural tourism products use local activities and resources in a sustainable way, are economically viable, and protect the environment, culture and well-being of local communities (Saxena et al., 2007). Integration rural tourism will be able to improve the pattern of tourist visits in rural areas, and through policy support, the role of local communities in the development of the rural tourism sector can empower local cultures and communities, especially in suburban (rural) areas. In the long run, this will improve the well-being of society (Ilbery & Saxena, 2011).

II. LITERATURE REVIEW

Integrated Rural Tourism Definition

Integrated rural tourism is a concept that connects alternative tourism development through a holistic approach by involving all stakeholders to integrate community, social, cultural, economic, political, local values, space, tourism actors (Cawley & Gillmor, 2008; Day, 1998; Lee et al., 2013; Mitchell & Eagles, 2001; Weaver, 2006). In Saxena et al. (2007) point of view, integrated rural tourism is tourism that supported through social networks, explicitly linking the goals of local actors together in promoting and maintaining economic, social, cultural, natural, and human resources at the location where they are at. Quiet similar, Clark and Chabrel (2007), view integrated rural tourism as a tourism model that builds its activities holistically, thus providing a positive impact on society by increasing social, cultural, environmental and economic standards of society. Further, Ho and Lee (2020), describe integrated rural tourism perspective basically explore the relationship between citizen, tourism industry, tourism resource, even government units in the context of developing rural tourism. Basically, the main purpose of tourism is to provide benefits to all related aspects in stimulating rural development. To achieve this goal, it requires integration both economically, socially, culturally, as well as protecting the physical environment by all stakeholders (Clark & Chabrel, 2007). The purpose of integrated rural tourism is to understand the complex nature of rural tourism (environment, economy and society) and the role of local tourism stakeholders, to promote the integration of the environment, economy, society and culture in tourism activities (Ho & Lee, 2020).

In the same manner, the purpose of the framework of integrated rural tourism according to Cawley & Gillmor (2008) and Jenkins (2016) is to promote environmental, economic, and socio-cultural sustainability in tourism, as well as empower the community/population through bottom-up development. Therefore, it contributes to the sustainability of the rural system in a broader sense. Measurement of integrated rural tourism cannot be separated from various dimensions. Holmes (2014) found that there are at least seven dimensions of integrated rural tourism that have been partially researched previously. The seven dimensions are the network, scale, endogenous, embeddedness, sustainability, complementary, and empowerment. This research focused on studying about two of these dimension, endogenous and embeddedness dimensions. The indicators to determined endogenous dimension are the use of local natural resources, the use of local human resources, the utilization of local socio-cultural resources, and the utilization of local economic resources (Cawley & Gillmor, 2008; Ilbery & Saxena, 2011; Ilbery et al., 2007; Ray, 1999). As for dimension of embeddedness, the indicator are the relationship between tourism resources and tourism activities, local culture, traditions/customs, identity (Clark & Chabrel, 2007; Ilbery & Saxena, 2011).

The endogenous approach to rural socio-economic development focuses on locality and their indigenous resources with the principle of public participation. (Lowe et al., 1995). It claims that whatever development action occurs should be based on local participation in its design and implementation, thus engendering a feeling of ownership and commitment to the territorial development and providing a mechanism to control the nature of development to be in accordance with local wishes (Ray, 1999). Quite different from endogenous, embeddedness suggests not only that resources or activities are directly linked to place but also that relationships are formed within particular sociocultural contexts in specific localities, and the unique sociocultural characteristics and identities that are embedded in place help to shape relationships and networks (Hinrichs, 2000; Murdoch, 2000). Embedded networks and the resources they generate tend to have high levels of significance and are often part of local social, cultural, and recreational life of people (Saxena & Ilbery, 2008).

Community Well-being Definition

Human wellbeing is not something that can be easily observed and measured. It is difficult to speak about communities in different parts of the world using a single definition. There is too much difference in terms of social, economic, environmental and political character between different communities (Rastegar, 2018). Different terms such as quality of life, welfare, well living, prosperity, needs fulfilment, development, human development, poverty, human poverty, living standards, utility, and life satisfaction are often used interchangeably with 'wellbeing' (McGillivray, 2007). Wiseman & Brasher (2008) propose the definition of community wellbeing as a combination of social, economic, environmental, cultural, and political conditions identified by individuals and their communities as essential for them to flourish and fulfil their potential. Researchers of objective wellbeing are more concerned with measuring and analyzing the empirically observable material conditions affecting the lives of individuals. These include life expectancy, income, nutrition, employment, education, or democratic participation (Wiseman & Brasher, 2008). Merriam and Kee (2014) described Community wellbeing as a function of many factors working in concert to promote an optimal quality of life for all members of a community.

Community well-being in this research measured in 3 dimensions, which are quality of life, social capital and health. Delibasic et al. (2008) argued that quality of life is the level of welfare felt by each individual or group of people. Thus, quality of life is useful in conceptualizing well-being by making life relationships objective and subjective (Costanza et al., 2007). Measuring the dimensions of community welfare through social capital, cannot be separated from the concepts that surround it in explaining institutions, relationships, and norms in shaping the quality and quantity of community interaction in carrying out social relations (Yamaguchi, 2013). Lochner et al. (2003) provides a definition of social capital as a set of components related to norms, beliefs, and shared understanding, creating social networks in providing social needs and psychological support to community members (Sloane & Choi, 2016). Meanwhile, the dimension in measuring people's welfare through health, gives responsibility to individual health to ensure the level of health that they contribute to public (Movahed, 2017).

III. METHODS

The study conducted from July 2021 to December 2021. The research data was collected from 8 regencies surrounding Lake Toba: Samosir, Toba, Simalungun, North Tapanuli, Humbang Hasundutan, Dairi, Karo and West Pakpak Regencies. The sample consists of the community, entrepreneurs, policy makers, academics, and stakeholders in the 8 observed regencies, and collected using Cluster Sampling and Quota Sampling. The number of samples observed was 240 people, 30 people from each regencies. Data collected through observation and 5-scale questionnaire. Community welfare measured in three dimensions: quality of life, social capital, and health welfare. The aspects of integrated rural tourism measured were endogeneity and embeddedness. The influence of integrated rural tourism aspects on community well-being analyzed using multiple regression analysis.

IV. ANALYSIS AND DISCUSSION

Result from Multiple Regression Analyses using SPSS in Table 1. shows the value of F_{count} (12.853) $>$ F_{table} (3,03), Sig. value obtained was 0.00. This value of F_{count} was higher than F_{table} and the value of Sig lower than value of alpha 0.05 means that simultaneously, endogeneity and embeddedness aspects of integrated rural tourism program gave influence on well-being of Lake Toba local community.

Table 1. ANOVA^a.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.686	2	2.343	12.854	.000 ^b
1 Residual	43.196	237	.182		
Total	47.881	239			

a. Dependent Variable: Community well-being

b. Predictors: (Constant), endogenous, embeddedness.

In Table 2.,the value of t_{1count} (14.434) > t_{table} (1,65), therefore, in partial endogeneity aspect of integrated rural tourism gave significant influence on community well-being. Same goes for embeddedness aspect, the value of t_{2count} (3.107) > t_{table} (1,65) so it gave significant influence on community well-being. The value of constant obtained was 2.322, coefficient correlation or the R value for endogeneity aspect obtained was 0.185 and for embeddedness aspect was 0.253. Therefore, the regression model for this correlation was $Y = 2.322 + 0.185X_1 + 0.253X_2$.

Table 2. Coefficients^a.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.322	.360		6.444	.000
1 endogenous	.185	.073	.168	2.526	.012
embeddedness	.253	.082	.207	3.107	.002

a. Dependent Variable: Community well-being

The number of influence of both endogeneity and embeddedness aspects of integrated rural tourism program to well-being of Lake Toba local community shown from the value of R square in table of model summary (Table 3). The value of R square value obtained was 0.098. In other words, together endogeneity and embeddedness aspects of sustainable tourism gave 9.8 % influence on well-being of Lake Toba local community.

Tabel 3. Model Summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.313 ^a	.098	.090	.42692

a. Predictors: (Constant), X2, X1

Results of this research clearly prove that endogenous aspects of integrated rural tourism program influence well-being of Lake Toba local community. This fact is supported by the findings of Dewi' study of integrated rural tourism programs in Ajibata, Toba Samosir, North Sumatra (Dewi, 2020). Her study shows that integrated rural tourism programs in Ajibata, Toba Samosir done by increasing the scale of coffee commodity (main commodity) production. The large-scale production then reducing production costs, thereby will increasing profits, create new jobs and increase income per capita in the community (Cang et al., 2018; Dewi, 2020).Integration rural tourism program through embeddedness aspect, also shows significant influence on community well-being in Lake Toba region.

Study by Harahap and Humaizi (2018), it is known that rural tourism integration program in Dairi (one of Regency around Lake Toba) region is implemented by embedding a local wisdom such as preservation of sacred places like Nauli basa,Partonunan stone (Deang Namora). Another study by Butar-Butar et al. (2017) shows that Integration rural tourism program through embeddedness was done by preserve Lake Toba ecosystem through Batak Toba Folklore. The Folklore contain a harmony of land-use space, the norms of time-fishing and fishing tools, the obligations of planting trees and their conservation, stone texture and water preservation. By preserving this local wisdom and folklore, the sacred place and ecosystem of Lake Toba will be protected. In the end, this program directly or indirectly will attract tourist to come, thus increase local income.

V. CONCLUSION

Integration rural tourism program has been applied to Lake Toba region. Through endogenous and embeddedness efforts, integration rural tourism program was giving influence on well-being of Lake Toba local community. In partial, endogenous dimension integration rural tourism program gave 71% influence on embeddedness, while embeddedness gave 88% influence on well-being of Lake Toba community. Therefore, it is concluded that it is important to continue carrying out integration rural tourism of villages around Lake Toba through endogenous and embeddedness dimension to increase Lake Toba local community well-being.

VI. ACKNOWLEDGEMENTS

We thank the publishers so that this paper was created as part of the first author's dissertation study.

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