# ANALYSIS OF THE ECONOMIC IMPACT OF INTEGRATED TOURISM DEVELOPMENT IN THE LAKE TOBA AREA ON THE WELFARE OF THE PEOPLE OF NORTH SUMATRA PROVINCE

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Abstrak. Tourism is one of the economic support systems that drives economic growth in Indonesia. Indonesia as a country with good tourist attractions has enormous potential to create jobs. The greater the employment opportunities, the lower the unemployment. The purpose of this study is to: Analyze whether tourism development factors positively and significantly influence economic activity in the Lake Toba region. Analyzing Do Economic Activity Factors Influence Positively and Significantly the Welfare of People in the Lake Toba Region? Analyzing Do Tourism Development Factors Influence Positively Significantly People's Welfare in the Lake Toba Region? Analyzing Do Tourism Development Factors Have a Positively Significant Influence on People's Welfare Through Economic Activities in the Lake Toba Region? With variables consisting of 3 variable elements, namely: X Independent Variable (Tourism Development), Y Dependent Variable (Community Welfare) and Z Intervening Variable (Economic Impact). While the research method model used is the SEM Approach - Partial Least Square PSL Model for Structural Equation Modeling (SEM) Analysis based on Components or Variants. and Research based on the distribution of Questionnaires or Questionnaires, Interviews, Documentaries, Observations, Focus Group Discussions (FGD) during the 2022 Research Year. This study can contribute to government policies to increase economic development in the Lake Toba Region as a Tourism Priority in Indonesia from five destinations namely: Lake Toba, Borobudur, Likupang, Mandalika and Labuhan Bajo by increasing the productivity of human resources in the tourism industry.

**Keywords**: Economi Development, Businessmen, Toba Lake, Sustainable, Enterpreneur, Tourism,Infrastructure, Transportation, Local Wisdom,Welfare

#### 1. Introduction

The Government of the Republic of Indonesia has made Tourism one of the Supporting Pillars of the Economy. In line with this, the Government of the Republic of Indonesia Established 5 National Super Priority Areas (KSPN), namely: Lake Toba, Borobudur, Mandalika, Labuhan Bajo, Likupang. So Tourism Management with diversity supported by Law No. 32, 33 of 2004 provides a huge opportunity for regions to optimally manage Natural, Social and Cultural Resources. Apart from the above, as a Regional Princesswho pays full attention to Tourism and the Environment, Researchers feel they have a moral responsibility to participate in the Success of Integrated Tourism Development in the Lake Toba National Super Priority Area. In 8 (eight) regencies that are in direct contact with Lake Toba. One of the world's well-known tourist objects, but has received little attention so far is Lake Toba. We are fortunate that during Joko Widodo's leadership as President of the Republic of Indonesia, Lake Toba received special attention in the Tourism Development program which was included in the National Priority Scale. Of course. the attention of the number one person in Indonesia for the improvement of Lake Toba was positively welcomed by the community, especially the residents of North Sumatra where Lake Toba is located. The presence of President Jokowi many times to the lake which has a depth of hundreds of meters has brought new enthusiasm and hope for the people of North Sumatra, especially for residents who live in , this lake is the largest lake in Indonesia and Southeast Asia. Lake Tobais a volcanic lake with a length of 100 kilometers and a width of 30 kilometers

Table 1.

Development of Tourists in 8 (eight) Regencies Lake Toba area

NO	Regency	2012	2013	2014	2015	2016	2017
1	Karo	n/a	n/a	n/a	241803	n/a	552430
2	Simalungu n	6	33529 5	34876 5	285824	306332	n/a
3	Toba	11634 9	93493	10389 6	102766	370898	729445
4	Tapanuli Utara	98094	96361	91647	108117	128110	145765
5	Humbang Hasunduta n	3798	3994	4033	30473	50667	100015
6	Samosir	11953 0	12411 7	14063 7	141215	154905	222288
7	Dairi	84344	83740	10368 2	125503	126866	260013
8	Pakpak Bharat	n/a	n/a	6300	4620	4181	n/a
Total		74716 1	73700 0	79896 0	104032 1	114195 9	200995 6

Data source: from the Central Bureau of Statistics for North Sumatra Province

The number of developments of domestic tourists visiting the Lake Toba area in 2018 reached 11,586,299 trips, an increase of 8.7 percent compared to 2017. The trips of domestic tourists were mostly aimed at visiting family/friends (51.0%) and recreation (39.4%) %). Tourism and Creative Industry is one type of industry 4.0 which is capable of producing fast economic growth in providing employment, increasing income, living standards and stimulating other productivity sectors. Tourism development is directed as a mainstay sector to encourage economic growth, increase income, empower the people's economy, expand employment and business opportunities, and increase the introduction and marketing of products in the context of improving people's welfare. Along with the Development of the Lake Toba National Super Priority Area (KSPN), it must be an Integrated Sustainable Tourism Planned development as a whole so that optimal benefits can be obtained towards a welfare society and the ratification of RI Presidential Regulation Number 49 of 2016 concerning the Lake Toba Tourism Area Authority Management Agency. The tourism economy is an economic dimension created by transactions made between tourists (related to tourism spending) and economic sectors that provide goods and services. Australian Bureau of Statistics, ABS (994) divides the tourism economy into three elements, namely tourists, transactions, and sectors/units. The tourism sector is still used as one of the sectors that are expected to be reliable for economic development.

#### 2. LITERATURE REVIEW

Table 2.

Previous Research Economic Impact Analysis of Integrated Tourism
Development inthe Lake Toba Region, North Sumatra Province

No	Researcher	Title	Year	Variable	Metode	Conclusion	

1	Defri Elias Simatupang	DALIHAN NATOLU, A LOCAL WISDOM AS FRAMING OF THREE PILLARS FOR SUSTAINA BILITY DEVELOPM ENT AT TOBA LAKE AREA	2017	Government Culture Dalihan Natolu	Researc hmethod used is the social network analysis method, trying to locate and explain the importan t position of the dalihan natolu kinship system of the communi ty around the Lake Toba	Results area Research shows that Dalihan Natolu as part of the cultural aspect hasa position important within the framework of the three pillars of sustainable development in the Lake Toba region.
2	Hape, Gladis Gith Prastica	Development of Community Based Tourism as a Community Economic Empowerme nt Strategy (Case Study	2018	The type of research used is descriptive research with a qualitative approach. The research	Collectin g research data using in- depth interview s, documen tation	The results showed that in developing Gemah Beach tourism, various efforts were made by the Regional Government of Tulungagung Regencysuch as holding a work program by

		in the Gemah Beach Tourism Object, Tulungagung		subjects who are considered to fulfill the characteristi cs are the government , stakeholders , and the local local community	and literature study. The data analysis used in this study uses the interactive Miles and Huberma n model where the types of analysis activities include data reduction, data presentat ion, and drawing conclusions.	forming a Pokdarwis (Tourism Awareness Group), facilitating licensing related to the development of tourist areas, providing facilities at tourist attractions, and conducting collaboration between various parties such as Perhutani, Pokdarwis, and the people of Keboireng village. This is a supporter, but there are also obstacles, namely the lack of awareness of visitors in terms of cleanliness, difficult road access, low human resources in the Keboireng community and facilities/infrastructure in tourism.
3	Aditia Agung Prakoso	MULTIPLE IMPACT OF REGIONAL TOURISM DEVELOPM ENT MASTER PLAN (RIPPARDA ) ON TOURISM IN THE SPECIAL REGION OF YOGYAKA RTA	2016	Local Government Tourist		Regional Province Tourism Development Master Plan (RIPPARDA. Special Yogyakarta is structured as an implementation of the mandate of Law Number 10 of 2009 regarding tourism and PP No. 50 of 2011 concerning Development Master Plans National Tourism (RIPPARNAS). But other than that RIPPARDA DIY is expected to be a planning guideline tourism in DIY so that

						it is more focused on the development andutilization of assets tourism can make a significant contribution in realizing the role of the tourism sector as a mainstay of futured evelopment. in the face of the current era of free trade This.
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Data Source: Processed by Researchers 2021-2022 by Murniati Tobing

#### 3. RESEARCH METHODS

#### Place and time of research

This research was conducted in North Sumatra Province and focused on Tourism and the creative industry in the hotel sector using qualitative data that is descriptive in nature and tends to use factual data analysis in the field and uses quantitative research models and develops hypotheses related to previous theories or related previous hypotheses. with existing phenomena.

North Sumatra is a province located on the island of Sumatra, bordering Aceh to the north and West Sumatra and Riau to the south. This province is mainly the homeland of the Batak people, who live in the mountains, and the Malay people, who live in the eastern seaboard. In addition, there are also Nias ethnic groups on the west coast of Sumatra, Mandailing, Javanese and Chinese. The research locations are: Samosir Regency, Humbang Hasundutan Regency, North Tapanuli Regency, Toba Regency, Dairi Regency, Simalungun Regency, PakPak Bharat Regency, Karo Regency.

Time for Pre-Research conducted from June 2021 (Pre-Research) to field research in 8 (eight) Regencies until 2022. The central determination of the research location is North Sumatra Province which is the Research Object, namely: 8 (eight) Scientific Research Districts This focus is on the tourism industry development sector and regional creative industries

Lake Toba National Super Priority 8 (eight) Regencies, namely: Samosir Regency, Toba Regency, North Tapanuli Regency, Humbang Hasundutan Regency, Pak-Pak Bharat Regency, Dairi Regency, Simalungun Regency, Karo Regency which are currently being intensively carried out development and construction A world-scale tourist destination by the Lake Toba Authority Development Agency as a Super Priority World Tourism Destination scale with 2 (two) recognitions from world bodies that have been designated as Geopark Areas from UNESCO (United Nations Educational, Scientific and Cultural Organization) on 13 May 2021 and registered as a Sumatran Tropical Rainforest Heritage at UNESCO.

### Types of Data and Research Data Sources Primary data

Data The data collected consisted of primary data obtained through field research and purposive sampling. According to Nawawi, 1987 that Purposive Sampling is Sampling that is adjusted to certain goals and conditions set based on the objectives and research problems. Moleong (2005.6) that Qualitative Research is research that intends to understand the phenomenon of what is experienced by research subjects, for example: Behavior, Perception, Motivation, Action holistically and in a descriptive way in the form of words and language in a special natural context. This type of research is research with a qualitative approach which is carried out using data collection techniques through direct observation (observation), in- depth interviews (depth interviews), distribution of questionnaires (questionnaires). Presentation of the results of data analysis can be done, both formally (in tabular form) and informally (in narrative form). The tool used with the Statistical Method uses Structural Equation Modeling (SEM) as one of the Moment of Structural Analysis (AMOS). The variables in this study used internal and external variables meaning that the method used wasa survey to obtain primary data and deepened by interviews to obtain

qualitative data, so that this research was a study that had different weights which were presented to respondents in the form of direct field surveys

#### **Secondary Data**

Secondary data in this study were taken from Data from the Central Bureau of Statistics, Ministry of Tourism and Creative Industries, BPODT (Central Agency for Lake Toba Authority), Environment Service, Tourism Office, Regional Revenue Service, Social Service, Forestry Service, BPPRD, PPHRI, PHRI, and various other related agencies both at the Provincial and District levels. Sources of data for this study were obtained from primary and secondary data. Literature study, namely reading books related to tourism development intourism destinations, Local Government, Tax Service, BPPRD (Regional Tax and RetributionManagement Agency) Tourism and Creative Industry Office, Trade, Cooperatives, MSME Office, Industry Office, Trade Office, Bekratf (Creative Economy Agency), Bappenas, Banking, Hotels, Restaurants, PPHRI Association of Indonesian Restaurant Hotel Entrepreneurs, BPODT Lake Toba Authority Executing Agency, KSPN, IBRA, Forest Service, BKPM Investment Coordinating Board, Travel Industry, Hospitality Organizations, Bureau Organizations Travel, Micro, Small and Medium Enterprises, Tourism Service Industry Actors in North Sumatra Province and related parties and other related institutions.

Identification and Operational Definition of Research Variables

Identification of Variables and Operational Definitions. According to Natsir (2013), operational definitions are definitions contained in a variable by giving meaning, or specifying activities, or providing an operation needed to measure a variable. While the research variable is the object of research, or what is the object of a study. In this study, it is divided into two variables, namely the dependent variable (bound) and the independent variable (free). The variables used in this study are as follows:

Research variable. The dependent variable (tied) is the variable that is influenced by the independent variables. In this study, the dependent variable is the dependent variable, whichis the opposite of the independent variable. If the independent variable is the influencing variable, then the dependent variable is the affected variable. According to Sugiono (2090) Related variables are variables that are affected or are the result, because of the independent variables.

The dependent variable (Dependent) is: Community Welfare (Y), Consists of 4 (four) indicators, namely: Income (Y1.1), Education (Y1.2), Health (Y1.3), Expenditures (Y1.4).

The Operationalization of this Research consists of Indicators and Variables, in the Model SEM (Structural Equation Modeling) is shown with an arrow model to the Variable. In this research the independent variable is Tourism Development.

The Intervening Variable namely: Economy (Z) lies between Independent Variables with Dependent Variables Consists of Indicators: Economic Growth (Z1.1), Income (Z1.2), Equity (Z1.3), Poverty Reduction (Z1.4), Unemployment Reduction (Z1.5). On the SEM (Structural Equation Modeling) model is shown by the model arrow to the Variable. In this research that becomes the Intervening Variable is Economy.

#### **Population and Sample**

Population

Population is the total number of research subjects. While the sample is part of the population, the number and characteristics of that population (Sugiono, 2003). Definition of the population in the study is in the form of data and the total number of districts and municipalities in North Sumatra Province from units or individuals whose characteristics are to be studied. And these units are called units of analysis, and can be people, institutions, things, etc. (Djarwanto, 1994: 420).

Table 3.3.

Proportional Calculation Data for Sample Analysis of the Economic Impact of IntegratedTourism Development in the Lake Toba Area on Community Welfare

No	District (District)	Total Popula tion	Sample Calculation	Total Sampel	Number of Samples Rounded
1	Karo ( Merek)	18.712	18712/255632x351	25,6	26
2	Simalungun (Parapat Sipangan Bolon, Haranggaol)	20.193	20193/255632x351	27,7	28
3	Taput (Muara)	14.153	14153/255632x351	19,4	20
4	Pak-Pak Bharat (Salak)	8.590	8590/255632x351	11,7	12
5	Dairi ( Desa Silalahi)	5.242	5242/255632x351	7,1	7
6	Humbang asundutan (aktiraja)	7.284	7284/255632x351	10,0	10
7	Toba (Balige,Lumban Julu,Ajibata)	54.048	54048/255632x351	74,2	74
8	Samosir	126.71 0	126710/255632x351	173,9	174
	TOTAL	255652			351

Data Source: Processed by Researchers 2021-2022 by Murniati Tobing

From the Total Population Based on the notation of the research sample size formula by Slovin above, the total population is 351 people, the margin of error set is 5% or 0.0025.

The calculation is:

 $n = N / (1 + (N \times \alpha^2))$ 

So that:

 $n = 794 / (1 + (794 \times 0.05^2))$ 

 $n = 794 / (1 + (794 \times 0.00025))$ 

n = 794 / (1 + 794 + 1.26)

n = 794 / 2.26

N = 351.3274336283 rounded up to 351 (rounded up)

When rounded up, the minimum sample size of the population at a 5% margin of error is 351 people.

Description: n=Number of Samples

N=Number of Population

E=error/ error rate

#### 4. RESULTS AND DISCUSSION

From the results of the analysis and discussion of Murniati Tobing's research, it can be concluded as follows:

- Whereas the Impact of Tourism on the Economy of Business Actors has a significant influence in the Lake Toba area, the Government can make policies to focus on the tourism sector so that it is superior and can continue to develop and improve this sector to be able to compete with other provinces.
- 2. That tourism is one of the driving forces of the world economy which is proven to be able to contribute to the prosperity of a country. When tourism is well planned, it will benefit the people at a destination. The success of tourism can be seen from the receipt of government revenue from this sector which can encourage other sectors to develop.
- Whereas the easiest tourism success indicator to observe is the increasing number of tourist arrivals, both domestic and foreign, from period to period in the tourism sector which is a potential sector in North Sumatra Province but not a sector that is able to compete with other provinces in Indonesia
- 4. That the government should pay more attention to leading sectors that are able to compete with other regions. That way North Sumatra Province can make a major contribution to Indonesia. The government must be wise in making policies regarding sectors economy that must be developed in order to become one of the prosperous Provinces.
- 5. That the community must take part in developing existing sectors to further strengthen the government's performance in terms of advancing the Province of North Sumatra and increasing economic growth and people's welfare.
- 6. The tourism sector has an important role as a source of foreign exchange earnings, and can encourage national economic growth, especially in reducing the number of unemployed and increasing the productivity of a country
- 7. In the Lake Toba Region, economic growth and tourism have a reciprocal causal relationship (reciprocal causal hypothesis). That is, tourism growth and economic growth mutually benefit one another for community welfare.

#### CONCLUSION

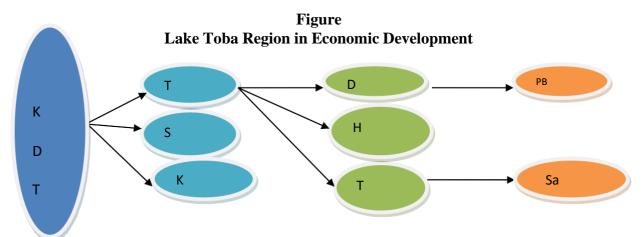
- 1. The results of this study can contribute to the government in 8 (eight) regencies that directly intersect with Lake Toba, especially the North Sumatra Province of Indonesia in reviewing optimal policies or decisions for the tourism sector and determining the type of policy in each region or the right decision considering the effect of retribution arising from the tourism sector so that it is able to produce a better distribution of income for the Welfare of the People in the Lake Toba Region.
- 2. Because economic growth has a significant effect on increasing tourism growth, tourism development policies should become an integral part of policies to increase economic growth, for example through increased development of tourism infrastructure such as hotels, ports, airports and development of tourist destinations. This policy can be carried out in coordination with the local government.
- 3. The results of this study serve as material for consideration for the Government to be more careful in determining tourism sector policies in order to be able to produce a better revenue contribution. To Society
- 4. This study serves as a reference for future researchers in examining the same topic and can be used as a comparison study.
- 5. Economically, improving the quality of experience tourism will be directly proportional to the increase in spending (spending) tourists.
- 6. Tourists can carry out various activities such as learning to make ULOS / MANDAR / KAIN SARUNG TENUN and carry out spiritual and historical tours at Huta Siallagan as a storynomics and storytelling strategy. This is a real example as a trigger for tourists to imagine culture and history in the Lake Toba Region.
- 7. Changing the direction of policies and parameters of tourism development Given the COVID-19 pandemic has limited arrivals tourists and reduce the number of visits drastically, the parameter shift from 'quantity' to 'quality' is very reasonable and recommended. The hope is this transition can take place continuously and permanently, isn't it only during a pandemic

8. Positioning the government as a facilitator in development tourist destinations. The government needs to play more of a role as a facilitator bridging local communities in tourism destinations with the industrial sector, private investors, media, academics and others. Repositioning the role of government is important in order to create bottom-up tourism planning and development process up. That is, a destination or attraction grows exponentially organically from the local community, not top-down design by the above stakeholders, both the government and other parties academics.

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#### **Example of Table and Figure**



Data Source: Processed Results of Researcher Murniati Tobing 2023

Abbreviation Lake Toba Area:

KDT: Kawasan Danau Toba

T: Tapanuli Utara-D(Dairi) -

PB(Pakpak Bharat) T : Tapanuli

Utara – H (Humbang

Hasundutan) T: Tapanuli Utara

- T (Toba ) - Sa ( Samosir)

S: Simalungun K: Karo