Green Tourism Model in Developing Sustainable Tourism in Lake Toba Super Priority

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ABSTRACT:

Sustainable tourism in the super priority of Lake Toba will be optimal if green tourism in the super priority of Lake Toba is developed properly. This study aims to analyze the right green tourism model to develop sustainable tourism in the super priority of Lake Toba. The analysis model used is path analysis and Sobel Test with analysis tools, namely Structural Equation Modelling with the help of Amos version 24.0. The results of the study found that tourist destinations have a positive and insignificant effect on the profitability of Lake Toba super priority tourist attractions. Green Tourism Product has a positive and insignificant effect on the profitability of Lake Toba super priority tourist attractions and Green Tourism Product has a positive and insignificant effect on tourist satisfaction in Lake Toba super priority tourism. In addition, all direct influence hypotheses in this study are accepted.

Keywords: Green Tourism, Profitability, Tourist Satisfaction, Sustainable Tourism, Super Priority Lake Toba..

INTRODUCTION

The success of the super priority development of Lake Toba is the key to welcoming Lake Toba tourism to the world. In order for Lake Toba tourism to be international class, it is necessary to pay attention to green tourism in order to create sustainable tourism in Lake Toba's super priority. With green tourism, Lake Toba will be better preserved in the environment, economy, culture and social of its people.

The decrease in the number of tourist visits in Lake Toba is also a problem that must be thought about together. The issue of environmental destruction has contributed to the decrease in the number of tourists in Lake Toba (Teviana, 2017). The following is displayed tourist visit data:

Table 1. Data on Tourist Visits to North Sumatra, 2024

Year	2017	2018	2019	2020	2021	2022	2023
number of visits	270,792	236,276	258,822	44,400	230	74,498	197,015

Source : BPS North Sumatra Province, 2024

The number of foreign tourist visits in North Sumatra has decreased in 2021 which only reached 230 tourist visits. Likewise in 2022 which only reached 74,498 tourist visits. This decrease is very far when compared to 2019, which was 258,822 tourist visits. This number of visits is still far from the target of 1.3 million tourist visits to Lake Toba in 2023. The decrease in the number of tourist visits to Lake Toba certainly affects the Locally-generated revenue of Samosir Regency and the State's foreign exchange in general.

From the observation of the main problems that occur in the Lake Toba super priority area, there is an issue of environmental destruction, lack of awareness from tourism actors and the public about green tourism, Lake Toba tourism still has a lack of impact in improving the local community's economy, and the weak empowerment of tourism human resources in the Lake Toba super priority (Tobing & Kennedy, 2017). This research aims to find the right green tourism model to develop sustainable tourism in the super priority of Lake Toba.

LITERATURE REVIEW

Tourism development is seen as a way to improve the economy and social welfare of a country (Risman & Fedryansyah, 2016; Yakup, 2019; rusyidi & Fedryansah, 2018). Currently, there is a need for the development of tourism products with a sustainable focus, helping to adapt to the local environment and ensuring their preservation (Evita & Sunartha, 2012). The community is increasingly aware of the limitations of natural resources and the negative impact of tourism that does not care about the environment (Arenas et al., 2017). In addition, tourists are required to have awareness and knowledge about environmental problems and challenges (Zsóka et al., 2013; Taufique, et al., 2014).

Sustainable tourism requires the cooperation of the government and the private sector to anticipate environmental damage before it is too late (Febriandhika & Kurniawan, 2019), for the sake of tourism for future generations (Obot & Setyawan, 2019). Among the three main impacts of tourism, economic impacts play a dominant role in policymaking rather than socio-cultural and environmental fields (Durbarry, 2004). With a focus on the economic benefits that accompany tourism development, the adverse socio-cultural and environmental impacts of tourism are relatively ignored (Widyastuti, 2010).

The challenge of stakeholders in the tourism sector is to build and maintain their competitive advantage (Hastuti, 2023). Sustainable competitive advantage in tourism can only be achieved by developing the concept of green tourism (Meler & Ham, 2012). Green tourism is a form of ecotourism development concept used in sustainable tourism practices that ensure future needs for adequate environmental, economic, social and cultural resources (Azam & Sarker, 2011). Green tourism must be a process of planning, implementing, and controlling development, pricing, promotion, and product distribution (Hasan, 2015). Green tourism has a great influence on sustainable tourism (Adnyan, 2020).

The development of green tourism emphasizes the principle of increasing customer satisfaction, environmental quality, profitability and value for stakeholders. Therefore, the green tourism strategy is not seen as a cost center but as a source of cost efficiency, thereby improving the quality of the environment which leads to premium prices. Customer satisfaction is the goal of marketing must refer to and take place according to the basic spirit of green tourism, namely to create: economic sustainability, ecological sustainability, social sustainability, and cultural sustainability (Hasan, 2015). Environment-based tourist destinations show that tourists are willing to pay more for environmentally friendly products against environmental pollution (Boztepe, 2012).

There are as many as 22 hypotheses proposed by researchers, which is very important to study considering that there is still no research related to green tourism in the super priority tourist attraction of Lake Toba. Especially by using quantitative research methods with path analysis.

Table 2. Research Hypothesis

No.	Hypothesis	Description
1	H1	The Green Tourism program has a positive and significant effect on the green tourism product of tourists in Super Priority Lake Toba
2	H2	Tourist destinations have a positive and significant effect on the green tourism product of tourists in Super Priority Lake Toba
3	H3	Improving environmental quality has a positive and significant effect on the green tourism product of Tourists in Lake Toba Super Priority
4	H4	Green tourism strategy has a positive and significant effect on tourist destinations for tourists in Lake Toba Super Priority
5	H5	The carrying capacity of facilities has a positive and significant effect on tourist destinations for tourists in Super Priority Lake Toba
6	H6	Green tourism products have a positive and significant effect on tourist satisfaction at Lake Toba Super Priority
7	H7	Green tourism products have a positive and significant effect on profitability in Lake Toba Super Priority
8	H8	Green tourism products have a positive and significant effect on value for stakeholders in Super Priority Lake Toba
9	H9	Tourist destinations have a positive and significant effect on tourist satisfaction at Lake Toba Super Priority
10	H10	Product tourism destinations have a positive and significant effect on profitability at Lake Toba Super Priority
11	H11	Tourist destinations have a positive and significant effect on the value for stakeholders in Lake Toba Super Priority
12	H12	Green tourism product mediates the influence between green tourism programs and tourist satisfaction in Lake Toba Super Priority
13	H13	Green tourism product mediates the influence between tourist destinations and tourist satisfaction in Lake Toba Super Priority
14	H14	Green tourism product mediates the influence between green tourism programs and profitability in Lake Toba Super Priority
15	H15	Green tourism product mediates the influence between green tourism programs and value for stakeholders in Super Priority Lake Toba
16	H16	Tourist destinations mediate the influence between green tourism strategies and tourist satisfaction in Lake Toba Super Priority
17	H17	Tourist destinations mediate the influence between green tourism strategies and improving environmental quality in Lake Toba Super Priority
18	H18	Tourist destinations mediate the influence between green tourism strategy and profitability in Lake Toba Super Priority
19	H19	Tourist destinations mediate the influence between the carrying capacity of facilities and tourist satisfaction in Super Priority Lake Toba
20	H20	Tourist destinations mediate the influence between the carrying capacity of facilities and the improvement of environmental quality in Super Priority Lake Toba
21	H21	Tourist destinations mediate the influence between the carrying capacity of facilities and profitability in Super Priority Lake Toba
22	H22	Tourist destinations mediate the influence between the carrying capacity of facilities and green tourism products in Lake Toba Super Priority

METHODS

This research approach uses a quantitative research method with the Path Analysis model. The data that will be used in this study are primary and secondary data. Data collection techniques used with questionnaires. The sampling technique was carried out using the probability sampling technique with the accidental sampling approach.

The population in this study is all tourists in the super priority of Lake Toba which totals 197,015 tourists (BPS North Sumatra Province, 2024). The number of samples is determined based on the analysis tools used. According to SEM, the number of samples can range from 5-10 of the number of indicators. Therefore, the number of samples in this study is 30 x 10 = 300 respondents. So that the total number of respondents is 300 super priority tourists of Lake Toba.

The data collection technique was carried out by providing a questionnaire directly to 300 respondents who are tourists in the super priority of Lake Toba, which was made using an interval scale of 1-5 (likert).

This study uses 3 independent variables, namely: 1) Green tourism strategy (SGT), 2) Green Tourism Program (PGT), and Facility Carrying Capacity (DF). 2 intervening variables, namely: Green tourism Product (GTP) and Tourist Destination (DW). The 4 Bound Variables are: 1) Tourist Satisfaction (KW), 2) Environmental Quality Improvement (PKL), 3) Profitability (PRO), and 4) Value for Stakeholders (VS).

The data analysis technique used in this study is by using SEM (Structural Equation Modeling) with the AMOS (Analysis of Moment Structure) program. SEM is a combination of two statistical concepts, namely the concept of factor analysis included in the measurement model and the concept of regression through a structural model.

Stages in SEM modeling:

1) Developing a Theory-Based Model in SEM

2) Development of Path Diagram or Flow Diagram

The full model with mediation in this study can be described as follows:

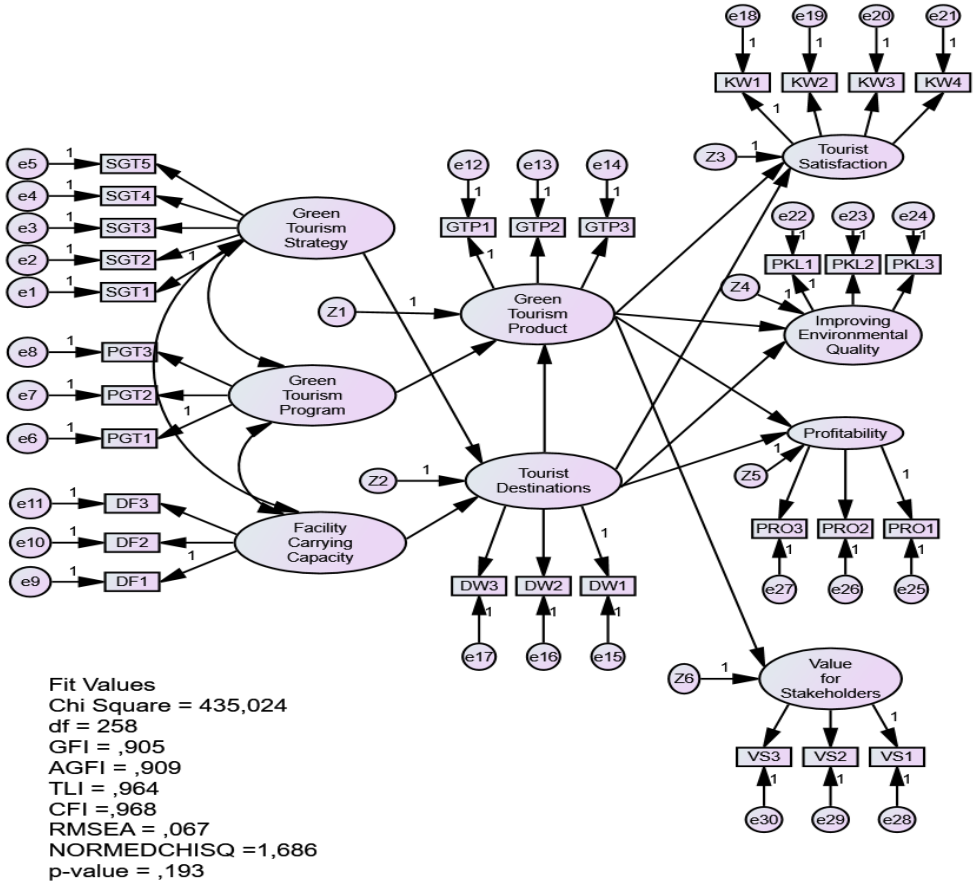

Figure 1. Full Model Research

3) Constructing Structural Equations

The equation developed is seen below:

GTP = *b*1PGT + *b2*DW+ Z1 ..... (1)

DW = b3SGT + *b4*DF+ Z2 ..... (2)

KW = *b5*GTP + b6DW +Z3 ..... (3)

PKL = *b*7DW + *b*8DW + Z4 ..... (4)

PRO = *b9*GTP + b10DW +Z5 ..... (6)

VS = *b*11GTP + Z6 ..... (7)

4) Input Matrix and Model Estimation

5) Analyze the possibility of identification problems

6) Evaluation of Goodness of Fit Criteria

The indices used to test the eligibility of the model are:

Table 3. Model Feasibility Testing Index

Goodness Of Fit Index	Cut-off Value
χ^2 C-square Statistics	df, α = 5%
Probability	≥0,05
CMIN/DF	≤2,00
GFI	≥0,90
AGFI	≥0,90
TLI	≥0,95
CFI	≥0,95
RMSEA	≤0,08

Sumber: Ghozali (2013)

7) Model Interpretation and Modification

The statistical test was carried out by observing the level of significance of the relationship between variables indicated by the C.R (Critical Ratio) value which is identical to the t-test in regression and its probability value (P). A significant relationship is characterized by a C.R value greater than 2.58 and a P value smaller than 0.05 (Ferdinand, 2014).

RESULTS

The following will explain the results of the research obtained by the researcher:

1. Validity Test

Table 4. Validity Test Results

		Variable Indicators	Estimate	Cut Of Value	Conclusion
SGT1	<---	GreenTourismStrategy	,774	0,60	Valid
SGT2	<---	GreenTourismStrategy	,792	0,60	Valid
SGT3	<---	GreenTourismStrategy	,559	0,60	Valid
SGT4	<---	GreenTourismStrategy	,770	0,60	Valid
SGT5	<---	GreenTourismStrategy	,694	0,60	Valid
PGT1	<---	GreenTourismProgram	,751	0,60	Valid
PGT2	<---	GreenTourismProgram	,751	0,60	Valid
PGT3	<---	GreenTourismProgram	,695	0,60	Valid
DF1	<---	FacilityCarryingCapacity	,731	0,60	Valid
DF2	<---	FacilityCarryingCapacity	,608	0,60	Valid
DF3	<---	FacilityCarryingCapacity	,678	0,60	Valid
GTP1	<---	GreenTourismProduct	,723	0,60	Valid
GTP2	<---	GreenTourismProduct	,717	0,60	Valid
GTP3	<---	GreenTourismProduct	,699	0,60	Valid
DW1	<---	TouristDestination	,744	0,60	Valid
DW2	<---	TouristDestination	,691	0,60	Valid
DW3	<---	TouristDestination	,724	0,60	Valid
KW1	<---	TouristSatisfaction	,809	0,60	Valid
KW2	<---	TouristSatisfaction	,785	0,60	Valid
KW3	<---	TouristSatisfaction	,726	0,60	Valid
KW4	<---	TouristSatisfaction	,794	0,60	Valid
PKL1	<---	ImprovingEnvironmentalQuality	,816	0,60	Valid
PKL2	<---	ImprovingEnvironmentalQuality	,737	0,60	Valid
PKL3	<---	ImprovingEnvironmentalQuality	,730	0,60	Valid
PRO1	<---	Profitability	,751	0,60	Valid
PRO2	<---	Profitability	,761	0,60	Valid
PRO3	<---	Profitability	,774	0,60	Valid
VS1	<---	ValueforStakeholders	,762	0,60	Valid
VS2	<---	ValueforStakeholders	,769	0,60	Valid
VS3	<---	ValueforStakeholders	,709	0,60	Valid

Based on Table 4, it can be seen that all indicators are valid, as seen from the CFA (Confirmatory Factor Analysis) value greater than 0.60.

2. Normality Test

Table 5. Normality Test Results

Assessment of normality (Group number 1)

Variable	min	max	skew	c.r.	kurtosis	c.r.
VS3	1,000	5,000	-,591	-1,701	-,038	-,119
VS2	1,000	5,000	-,792	-1,958	,159	,497
VS1	1,000	5,000	-,222	-1,387	-,810	-2,535
PRO3	1,000	5,000	-,330	-2,064	-,614	-1,922
PRO2	1,000	5,000	-,216	-1,353	-,668	-2,090
PRO1	1,000	5,000	-,449	-2,510	-,531	-1,662
PKL3	1,000	5,000	-,619	-1,873	,433	1,355
PKL2	1,000	5,000	-,458	-2,368	-,203	-,634
PKL1	1,000	5,000	-,621	-2,387	,122	,380
KW4	1,000	5,000	-,250	-1,564	-,503	-1,573
KW3	1,000	5,000	-,394	-2,463	-,547	-1,712
KW2	1,000	5,000	-,518	-2,239	-,256	-,800
KW1	1,000	5,000	-,317	-1,982	-,710	-2,221
DW3	1,000	5,000	-,382	-2,392	-,305	-,953
DW2	1,000	5,000	-,264	-1,654	-,391	-1,224
DW1	1,000	5,000	-,412	-2,479	-,246	-,771
GTP3	1,000	5,000	-,447	-2,195	-,278	-,870
GTP2	1,000	5,000	-,533	-2,335	-,013	-,041
GTP1	1,000	5,000	-,204	-1,274	-,628	-1,964
DF3	1,000	5,000	-,228	-1,426	-,571	-1,788
DF2	1,000	5,000	-,513	-2,211	-,249	-,781
DF1	1,000	5,000	-,300	-1,880	-,682	-2,133
PGT3	1,000	5,000	-,427	-2,175	-,145	-,455
PGT2	1,000	5,000	-,420	-2,131	-,352	-1,101
PGT1	1,000	5,000	-,332	-2,078	-,525	-1,642
SGT5	1,000	5,000	-,064	-,403	-,738	-2,309
SGT4	1,000	5,000	,035	,217	-,928	-2,104
SGT3	1,000	5,000	-,100	-,629	-,577	-1,805
SGT2	1,000	5,000	,001	,008	-,608	-1,903
SGT1	1,000	5,000	-,160	-,999	-,612	-1,914
Multivariate					12,090	2,115

Based on Table 5, it is known that the data is normal, as seen from the c.r values univariate and multivariate which are in the ± range of 2.58.

Based on the results of the analysis, it can also be seen that there is no outlier data. It can be seen from the P1 and P2 values which are > 0.05.

3. Multicollinearity Test

Table 6. Multicollinearity Test Results

Sample Covariances (Group number 1)

Sample Moments (Group number 1)

Sample Covariances (Group number 1)

	VS3	VS2	VS1	PRO3	PRO2	PRO1	PKL3	PKL2	PKL1	KW4	KW3	KW2	KW1	DW3	DW2	DW1	GTP3	GTP2	GTP1	DF3	DF2	DF1	PGT3	PGT2	PGT1	SGT5	SGT4	SGT3	SGT2	SGT1
VS3	,822																													
VS2	,438	,766																												
VS1	,214	,223	,944																											
PRO3	,298	,331	,502	,980																										
PRO2	,224	,202	,447	,546	,866																									
PRO1	,227	,240	,443	,580	,542	1,033																								
PKL3	,092	-,002	,174	,221	,223	,249	,824																							
PKL2	,134	,102	,212	,183	,150	,163	,433	,829																						
PKL1	,055	-,003	,166	,256	,150	,264	,533	,545	,966																					
KW4	,013	,037	,056	,094	,088	,030	,046	,049	,152	,964																				
KW3	,063	,001	,041	,080	,080	,041	,169	,177	,211	,546	,967																			
KW2	,091	,068	,134	,147	,196	,130	,140	,159	,200	,607	,517	,920																		
KW1	,033	,006	,026	,043	,079	,069	,133	,071	,155	,606	,583	,581	,939																	
DW3	,084	,031	,165	,156	,087	,111	,184	,200	,215	,061	,140	,166	,109	,910																
DW2	,086	,041	,203	,139	,108	,166	,191	,233	,185	,032	,114	,070	,027	,392	,942															
DW1	,013	,024	,130	,104	,039	,091	,210	,238	,256	,081	,126	,141	,115	,540	,426	1,015														
GTP3	-,034	-,025	,181	,208	,216	,211	,228	,119	,197	,041	,064	,098	,055	,106	,171	,251	,891													
GTP2	,017	,073	,246	,218	,183	,204	,179	,202	,228	,035	,134	,100	,091	,168	,143	,236	,493	,915												
GTP1	-,007	,047	,182	,183	,175	,240	,220	,199	,260	-,079	,003	-,003	-,082	,162	,187	,221	,468	,491	,905											
DF3	-,005	,035	,171	,224	,189	,276	,217	,147	,243	,037	,050	,059	,075	,063	,122	,149	,478	,463	,458	,884										
DF2	-,072	-,057	,159	,168	,165	,207	,308	,215	,300	,045	,120	,137	,075	,099	,120	,196	,499	,556	,555	,565	1,064									
DF1	,052	,005	,233	,304	,201	,229	,341	,383	,235	-,011	,101	,169	,071	,162	,201	,076	,147	,094	,170	,142	,154	,979								
PGT3	,084	,065	,261	,291	,271	,276	,289	,247	,339	,095	,120	,181	,127	,072	,109	,033	,217	,197	,222	,175	,187	,454	,891							
PGT2	,061	,005	,204	,280	,198	,291	,395	,355	,300	-,029	,089	,072	,054	,171	,113	,063	,139	,064	,172	,128	,163	,584	,478	1,033						
PGT1	,023	,015	,219	,252	,234	,260	,269	,203	,234	,030	,053	,085	,012	,106	,176	,062	,108	,111	,165	,101	,170	,527	,509	,565	,930					
SGT5	,038	,040	,207	,168	,121	,136	,307	,194	,246	,030	,187	,155	,101	,141	,154	,173	,064	,122	,172	,097	,239	,308	,268	,321	,246	,934				
SGT4	,065	,029	,241	,158	,172	,158	,247	,348	,217	,047	,167	,189	,104	,113	,171	,101	,046	,087	,127	,138	,166	,540	,263	,350	,299	,513	,982			
SGT3	,120	,018	,135	,066	,073	,131	,256	,268	,325	,001	,067	,076	,058	,123	,138	,140	,100	,166	,161	,155	,124	,281	,390	,213	,251	,367	,374	,902		
SGT2	,017	,029	,160	,104	,099	,122	,283	,283	,202	,003	,170	,100	,064	,191	,191	,142	,040	,030	,109	,087	,128	,320	,226	,541	,330	,556	,610	,413	,999	
SGT1	,128	,082	,246	,168	,180	,187	,261	,377	,360	,047	,132	,061	,007	,183	,192	,164	,026	,092	,172	,080	,103	,359	,383	,436	,523	,521	,623	,436	,641	1,000

Condition number = 45,321
Eigenvalues
6,796 2,748 2,602 2,180 1,637 1,237 1,086 ,845 ,774 ,705 ,644 ,604 ,548 ,519 ,480 ,459 ,446 ,426 ,411 ,370 ,344 ,332 ,323 ,287 ,273 ,258 ,244 ,203 ,169 ,150
Determinant of sample covariance matrix = ,100

Based on Table 6, it is known that there is no multicollinearity between independent variables, as can be seen from the determinant value of sample covariance matrix which is greater than 0.05. So, this data is worthy of testing at the next stage.

4. Model Conformance Test

This test was carried out to see the extent of the feasibility of the proposed model to see the influence between variables, fit values and their significance.

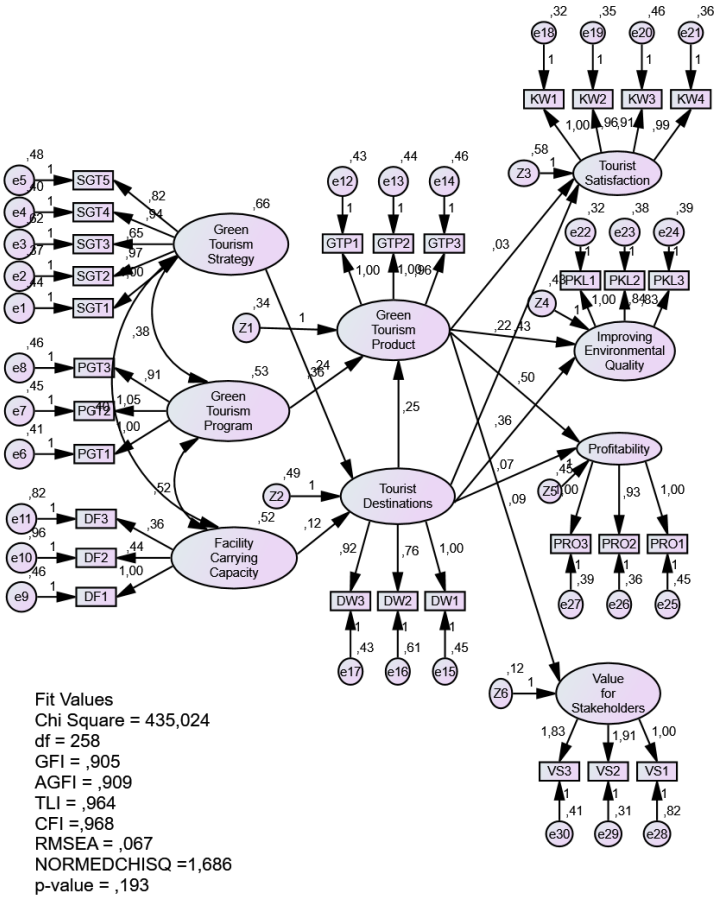

Figure 2. Full Model Research

From figure 2 of the full research model, it can be seen that the fit values are good, as can be seen from the values of GFI, AGFI, TLI, CFI, and p-values above 0.05. So that this model is considered to be able to explain the research model accurately and well.

Discussion

To see how much influence the independent variable has on the bound variable is shown in Table 7 below:

Table 7. Regression Test Results

Influence between Variables			Std. Estimate	Estimate	S.E.	C.R.	Probability
TouristDestinations	<---	FacilityCarryingCapacity	,113	,117	,127	,920	,047
TouristDestinations	<---	GreenTourismStrategy	,265	,244	,113	2,656	,031
GreenTourismProduct	<---	TouristDestinations	,270	,248	,081	3,059	,002
GreenTourismProduct	<---	GreenTourismProgram	,380	,360	,081	4,434	***
TouristSatisfaction	<---	TouristDestinations	,211	,220	,096	2,591	,022
ImprovingEnvironmentalQuality	<---	TouristDestinations	,334	,357	,095	3,760	***
Profitability	<---	TouristDestinations	,069	,071	,090	,785	,133
TouristSatisfaction	<---	GreenTourismProduct	,030	,034	,101	,337	,236
ValueforStakeholders	<---	GreenTourismProduct	,175	,089	,048	2,869	,052
Profitability	<---	GreenTourismProduct	,451	,500	,107	4,666	***
ImprovingEnvironmentalQuality	<---	GreenTourismProduct	,365	,426	,102	4,161	***

Based on the results of the data analysis as shown in Table 7, the structural equation is as follows:

Structural Equations 1 : GTP = *b*1PGT + *b2*DW + Z1

GTP = 0,380 PGT + 0,270DW

Structural Equations 2 : DW = *b3*SGT + *b4*DF+ Z2

DW = 0,265 SGT + 0,113DF

Structural Equations 3 : KW = *b5*GTP + b6DW +Z3

KW = 0,030 GTP + 0,211DW

Structural Equations 4 : PKL = *b*7DW + *b*8DW + Z4

PKL = 0,365 GTP+ 0,334DW

Structural Equations 5 : PRO = *b9*GTP + b10DW +Z5

PRO = 0,451GTP + 0,069DW

Structural Equations 6 : VS = *b*11GTP + Z6

` VS = 0,175GTP

The results of the study found that tourist destinations have a positive and insignificant effect on the profitability of Lake Toba super priority tourist attractions. Green Tourism Product has a positive and insignificant effect on the profitability of Lake Toba super priority tourist attractions and Green Tourism Product has a positive and insignificant effect on tourist satisfaction in Lake Toba super priority tourism. In addition, all direct influence hypotheses in this study are accepted.

Furthermore, in this discussion, we will see the extent of the influence of intervening variables in mediating the independent variable with its bound variable. According to Baron & Kenny (1986) it is required that a variable can be said to be a mediator if the result is: (1) Path –c : significant, (2) Path –a : significant, (3) Path –b : significant, (4) Path c' : not significant. To be stated as a mediator, the relationship X to Y in equation 3 must be insignificant (zero), or called complete mediation. But if equations 1-3 are met, but equation 4 is not, then it is called partial mediation.

The mediation effect analysis was used to answer hypothesis 12, hypothesis 13, hypothesis 14, hypothesis 15, hypothesis 16, hypothesis 17, hypothesis 18, hypothesis 19, hypothesis 20, hypothesis 21 and hypothesis 22 in this study, the following is the description:

Input:			Test statistic:	Std. Error:	*p*-value:
a	0.380	Sobel test:	0.29643614	0.03845685	0.76689703
b	0.030	Aroian test:	0.28994795	0.0393174	0.77185606
s_a	0.081	Goodman test:	0.30338033	0.0375766	0.76160003
s_b	0.101	Reset all	Calculate		

Figure 3. Mediation Effect Test for hypothesis 12

From Figure 3, it is known that green tourism products cannot mediate the influence between green tourism programs and tourist satisfaction in Lake Toba Super Prioritas. Hypothesis 12 rejected.

Input:			Test statistic:	Std. Error:	*p*-value:
a	0.270	Sobel test:	0.29585741	0.02737805	0.76733898
b	0.030	Aroian test:	0.28347222	0.02857423	0.77681487
s_a	0.081	Goodman test:	0.31002209	0.02612717	0.75654416
s_b	0.101	Reset all	Calculate		

Figure 4. Mediation Effect Test for hypothesis 13

From Figure 4, it is known that Green tourism product cannot mediate the influence between tourist destinations and tourist satisfaction in Lake Toba Super Priority. Hypothesis 13 rejected.

Input:			Test statistic:	Std. Error:	*p*-value:
a	0.380	Sobel test:	3.13536454	0.05466031	0.00171641
b	0.451	Aroian test:	3.09667842	0.05534317	0.00195702
s_a	0.081	Goodman test:	3.17553775	0.05396881	0.00149559
s_b	0.107	Reset all	Calculate		

Figure 5. Mediation Effect Test for hypothesis 14

From Figure 5, it is known that green tourism products mediate partially the mediation of the influence between green tourism programs and profitability in Lake Toba Super Priority. Hypothesis 14 accepted.

Input:			Test statistic:	Std. Error:	*p*-value:
a	0.380	Sobel test:	2.87873872	0.02310039	0.00399269
b	0.175	Aroian test:	2.8388108	0.0234253	0.0045282
s_a	0.081	Goodman test:	2.92040022	0.02277085	0.00349582
s_b	0.048	Reset all	Calculate		

Figure 6. Mediation Effect Test for hypothesis 15

From Figure 6, it is known that green tourism products mediate partially the mediation of the influence between green tourism programs and value for stakeholders in Lake Toba Super Priority. Hypothesis 15 accepted.

Input:			Test statistic:	Std. Error:	*p*-value:
a	0.265	Sobel test:	1.60368214	0.03486664	0.10878413
b	0.211	Aroian test:	1.53127925	0.03651522	0.12570039
s_a	0.113	Goodman test:	1.687433	0.03313613	0.09152012
s_b	0.096	Reset all	Calculate		

Figure 7. Mediation Effect Test for hypothesis 16

From Figure 7, it is known that tourist destinations mediate in a full mediation manner the influence between green tourism strategies and tourist satisfaction in Lake Toba Super Priority. Hypothesis 16 accepted.

Input:			Test statistic:	Std. Error:	*p*-value:
a	0.265	Sobel test:	1.95094227	0.04536782	0.05106391
b	0.334	Aroian test:	1.89851737	0.04662059	0.05762796
s_a	0.113	Goodman test:	2.00796462	0.04407946	0.04464705
s_b	0.095	Reset all	Calculate		

Figure 8. Mediation Effect Test for hypothesis 17

From Figure 8, it is known that tourist destinations mediate in a full mediation manner the influence between green tourism strategies and improving environmental quality in Lake Toba Super Priority. Hypothesis 17 accepted.

Input:			Test statistic:	Std. Error:	*p*-value:
a	0.265	Sobel test:	0.72871412	0.02509214	0.46617655
b	0.069	Aroian test:	0.67535133	0.0270748	0.49945258
s_a	0.113	Goodman test:	0.79712235	0.02293876	0.42537998
s_b	0.090	Reset all	Calculate		

Figure 9. Mediation Effect Test for hypothesis 18.

From Figure 9, it is known that tourist destinations do not mediate the influence between green tourism strategies and profitability in Lake Toba Super Priority. Hypothesis 18 rejected.

Input:			Test statistic:	Std. Error:	*p*-value:
a	0.113	Sobel test:	0.82474662	0.02890948	0.40951546
b	0.211	Aroian test:	0.75993141	0.0313752	0.44729559
s_a	0.127	Goodman test:	0.90959209	0.02621285	0.36303767
s_b	0.096	Reset all	Calculate		

Figure 10. Mediation Effect Test for hypothesis 19

From Figure 10, it is known that tourist destinations mediate in a full mediation manner the influence between the carrying capacity of facilities and tourist satisfaction in Lake Toba Super Prioritas. Hypothesis 19 accepted.

Input:			Test statistic:	Std. Error:	*p*-value:
a	0.113	Sobel test:	0.86256964	0.04375531	0.38837413
b	0.334	Aroian test:	0.83153721	0.04538823	0.40567022
s_a	0.127	Goodman test:	0.89735765	0.04205904	0.3695281
s_b	0.095	Reset all	Calculate		

Figure 11. Mediation Effect Test for hypothesis 20

From Figure 10, it is known that tourist destinations mediate in a full mediation manner the influence between the carrying capacity of facilities and the improvement of environmental quality in Lake Toba Super Prioritas. Hypothesis 20 accepted.

Input:			Test statistic:	Std. Error:	*p*-value:
a	0.113	Sobel test:	0.58080074	0.01342457	0.56137476
b	0.069	Aroian test:	0.44222403	0.01763133	0.6583271
s_a	0.127	Goodman test:	1.107388	0.00704089	0.26812621
s_b	0.090	Reset all	Calculate		

Figure 12. Mediation Effect Test for hypothesis 21

From Figure 12, it is known that tourist destinations do not mediate the influence between the carrying capacity of facilities and profitability in Super Priority Lake Toba. Hypothesis 21 rejected.

Input:			Test statistic:	Std. Error:	*p*-value:
a	0.113	Sobel test:	0.85966465	0.03549058	0.38997393
b	0.270	Aroian test:	0.82567977	0.03695137	0.40898577
s_a	0.127	Goodman test:	0.89822395	0.03396703	0.36906617
s_b	0.081	Reset all	Calculate		

Figure 13. Mediation Effect Test for hypothesis 22

From Figure 13, it is known that tourist destinations mediate in a full mediation manner the influence between the carrying capacity of facilities and green tourism products in Lake Toba Super Priority. Hypothesis 22 accepted.

CONCLUSION

The results of the study found that tourist destinations have a positive and insignificant effect on the profitability of Lake Toba super priority tourist attractions. Green Tourism Product has a positive and insignificant effect on the profitability of Lake Toba super priority tourist attractions and Green Tourism Product has a positive and insignificant effect on tourist satisfaction in Lake Toba super priority tourism. In addition, all direct influence hypotheses in this study are accepted. For the mediation test, only hypotheses 12, 13, 18, and hypotheses 21 were rejected. while hypotheses 14, 15, 16, 17, 19, 20, and 22 were accepted.

LIMITATION

This study has several limitations, including the untested influence of satisfaction variables on improving environmental quality, the influence of environmental quality improvement on profitability and the influence of profitability on value for stakeholders. If this can be seen in its influence, it will provide even more comprehensive results. So it is hoped that the next researcher can test these effects.

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