Tourism Development in Associated with Environment at the Mekong River Delta of Vietnam: Part 2 Research Result

Quang Hung LE¹, Linh Dang Nguyen² & Phu Tu Nguyen³

¹Associate Professor, Vice Dean, Faculty of Marketing and International business, Hutech University, Vietnam lq.hung@hutech.edu.vn

²Lecturer, Doctoral student, Faculty of Banking and Finance, Hoa Sen University, Vietnam dang.tranlinh@hoasen.edu.vn

³Associate Professor, Dean of Marketing and International business faculty, Hutech University, Vietnam Np.tu@hutech.edu.vn

Corresponding Author: Quang Hung LE

ABTRACT

With study part 1 is to determine the Tourism development in associated with environment at the Mekong river Delta of Vietnam: Literature review, this study presents part 2, which is building a model, testing and proposing implications for improving the Tourism development in associated with environment at the Mekong river Delta of Vietnam. Research sample information was collected by convenience sample technique. Questionnaires will be distributed to 500 representatives of travel businesses, tourists, local authorities and residents. Data of 371 valid survey forms were analyzed by Cronbach's Alpha, EFA and PATH analysis in order to test hypotheses and build models of factors affecting the Tourism development in associated with environment. The results of the study show that factors such as (1) Tourism product, (2) Tourism human resources, (3) Accessibility, (4) Infrastructure, (5) Tourism resources, (6) Tourism environment and environmental protection, (7) Tourism management policy associated with environmental protection along with the (8) Tourism development (intermediate variable) have a positive influence on the Tourism development in associated with environment.

Further studies apply this research model to measure the impact of factors on the Tourism development in associated with environment as well as propose some managerial implications to help the local government leaders and tourism industry administrators have business policies and strategies as well as have more complete solutions for tourism management and tourism development associated with environmental protection.

Keywords: Tourism development, Environmental protection, Mekong Delta River (Mekong River Delta in Vietnam), Research result

1. INTRODUCTION

The current development of the Tourism industry in the Mekong river Delta of Vietnam is not really associated with environmental protection. It has also caused significant impacts on the ecological environment, has also caused significant impacts on the ecological environment, such as depleting natural resources and putting pressure on the Tourism industry of the Mekong river Delta in particular and Vietnam in general. The local government leaders and tourism industry administrators must have policies and solutions for tourism development associated with the environment protection. Because this is the comprehensive and relevant approach to the Tourism industry in emerging economies, which does not contradict the development of tourism in countries, typically in Vietnam.

To achieve this, the local government leaders and tourism industry administrators must recognize the factors influence on the Tourism development in associated with environment as well as continue to promote the achievements to have more appropriate policies implications and solutions on tourism management associated with environmental protection, tourism human resources, tourism environment and conservation, environmental protection, accessibility, infrastructure, tourism resources of the region...

The objective of the study is to test the research model that affects the Tourism development in associated with environment protection through the following steps:

- Measure the reliability of observed factors and variables by Cronbach's Alpha.

- Exploratory factor analysis (EFA).
- Test the model and the hypotheses of the research model by PATH analysis, identifying the effects of the Tourism development in associated with environment protection through an intermediary variable, which is the Tourism development factor. The higher the Tourism development, the better the Tourism development in associated with environment protection.

2. LITERATURE REVIEW

2.1. Determining Sample Size

In exploratory factor analysis (EFA), collected data at least 5 samples on 1 observed variable and preferably 10 or more (Hair et al., 1998). Arcording to Hair et al. (2009) the sample size should be at least 50, preferably 100, and the observation/measurement ratio should be 5/1. In determining the sample size for EFA, the number of observations (sample size) must be at least 4 or 5 times the number of variables in the factor analysis (Hoang & Chu, 2008). In Multiple regression analysis method, the formula will be $n \ge 8m + 50$, "n" is the minimum sample size and "m" is the number of independent variables present in the model (Tabachnick & Fidell, 1996). Hoelter (1983) said that the minimum sample size should be 200. According to Bollen (1998), 5 samples are needed for a parameter to be estimated.

2.2. Cronbach's Alpha

Cronbach's Alpha coefficient is used to evaluate whether it is appropriate to include certain observed variables in a latent variable. To check this, it is necessary to test the reliability of the scale based on two statistical indicators, Cronbach's Alpha coefficient and the corrected item-total correlation coefficient and Cronbach's Alpha if item deleted. The value of Cronbach's Alpha coefficient is: < 0.6: Factor scale is not suitable; 0.6 - 0.7: Acceptable with new studies; 0.7 - 0.8: Acceptable; 0.8 - 0.95: Good; 0.95: Acceptable but not good, researchers should consider observed variables that may have the phenomenon of coincidence. Test the reliability of the scale through Cronbach's Alpha coefficient to exclude variables with the total variable correlation coefficient less than 0.3. Criteria for choosing a scale when it has Cronbach's Alpha reliability ≥ 0.7 (Hoang & Chu, 2008). The scale with reliability Cronbach's Alpha ≥ 0.6 was also chosen when it was first used (Nunnally & Burnstein, 1994). In theory, Cronbach's Alpha coefficient has a variable value in the range $\{0,1\}$, the higher the Cronbach's Alpha, the better (meaning the more reliable the scale) (quoted in Le, 2022).

2.3. Exploratory Factor Analysis (EFA)

EFA is the generic name of a group of procedures used primarily to shrink and summarize data. EFA is based on the correlation between variables and used to reduce a set of "k" observations into a set of "F" observations (F < k) of more significant factors. This means that a fairly large number of variables are collected and most of these variables are related and their number must be reduced to a usable quantity (Nguyen & Nguyen, 2011). The study used the method of Principal component coefficients with Varimax rotation at the breakpoint when extracting factors with Eigenvalue > 1. Scales with a total variance extracted from 50% or more are accepted (Gerbing & Anderson, 1988). At each concept has the difference of Factor loading and any must reach ≥ 0.3 (Jabnoun & AL-Tamini, 2003) (quoted in Le, 2022).

In EFA, the KMO coefficient (Kaiser - Meyer - Olkin) must have a large value ($0.5 \le \text{KMO} \le 1$). This indicates EFA is appropriate. If the KMO coefficient is < 0.5 then factor analysis is likely to be inappropriate for the data. According to Kaiser (1974), it is suggested that: $\text{KMO} \ge 0.9$ is very good; $0.9 > \text{KMO} \ge 0.8$ is good; $0.8 > \text{KMO} \ge 0.7$ is fine; $0.7 > \text{KMO} \ge 0.6$ is temporary; $0.6 > \text{KMO} \ge 0.5$ is bad; KMO < 0.5 is unacceptable (Hoang & Chu, 2008).

2.4. Multiple Linear Regression Model and PATH Model

- The multivariable linear regression equation showing the relationship between many influencing factors (independent variable) and one affected factor β (dependent variable) has the following form: X: independent variable Y: dependent variable. The multivariable linear regression equation is presented: $Y = \beta 0 + \beta 1X1 + \beta 2X2 + ... + \beta nXn$
- Dependent variable: A variable that is affected/explained by one or more other variables. In the research model, the dependent variable can be one or more variables.

European Economic Letters ISSN 2323-5233 Vol 13, Issue 4 (2023)

http://eelet.org.uk

- Independent variable: A variable that affects/explains a change to one or more other variables. In the research model, the independent variable can be one or more variables. In the PATH model, another variable can be an intermediate variable or a dependent variable.
- The PATH model is a multivariable linear regression model:
- Independent variable is either qualitative or quantitative.
- Intermediate and independent variables are quantitative variables.
- Regression analysis with PATH model is to analyze the impact of the independent variable on the dependent variable through the intermediate variable.
- Intermediate variable is a participating variable that explains the relationship between the independent variable and the dependent variable. It is the bridge between the independent variable and the dependent variable. In the research model, the intermediate variable can be one or more variables (Le, 2017).

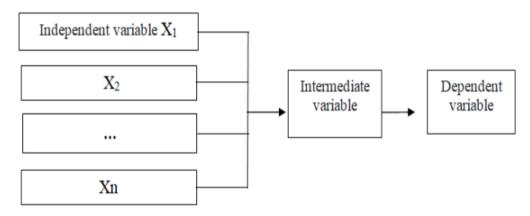


Figure 1: PATH mode

2.5. Research model

In the content of the study part 1, the Proposed conceptual framework is the study model which based on the PATH model in which The higher the Tourism development, the better the Tourism development in associated with environment is. The proposed model includes the following factors: (1) Tourism product, (2) Tourism human resources, (3) Accessibility, (4) Infrastructure, (5) Tourism resources, (6) Tourism environment and environmental protection, (7) Tourism management policy associated with environmental protection, (8) Tourism development (9) Tourism development in associated with environment protection. In this model, there are 08 hypotheses and they have been proven, such as:

Hypothesis 1: Tourism product has a positive effect on the Tourism development.

Hypothesis 2: Human resources for tourism has a positive effect on the Tourism development.

Hypothesis 3: Accessibility has a positive effect on the Tourism development.

Hypothesis 4: Infrastructure has a positive effect on the Tourism development.

Hypothesis 5: Tourism resources has a positive effect on the Tourism development.

Hypothesis 6: Tourism environment and environmental protection has a positive effect on the Tourism development.

Hypothesis 7: Tourism management policy associated with environmental protection has a positive effect on the Tourism development.

Hypothesis 8: Tourism development has a positive effect on the Tourism development in associated with environment protection.

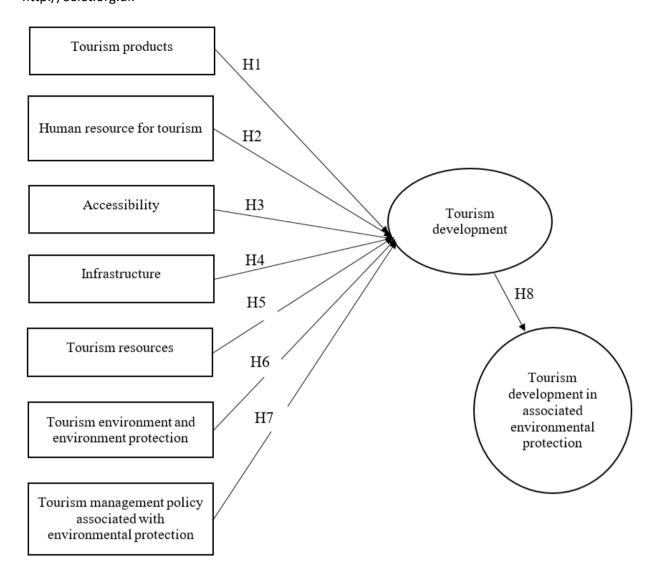


Figure 2: Proposed Conceptual Framework

3. RESEARCH METHODOLOGY

3.1. Operationnalization

Qualitative and quantitative methods are used in the process from qualitative research to quantitative research with the aim of constructing, testing models and hypotheses of the effect of the Tourism development in associated with environment protection through measurement of the Tourism development.

3.2. Qualitative research

Firstly, qualitative research method was conducted through the focus group discussion. Collecting the ideas of group discussions is crucial to do a test interview in order to adjust the scale. Based on researched documents from experts and survey studies on Tourism development in associated with environment at the Mekong River Delta of Vietnam (Mekong River Delta), the basic factors affecting Tourism development in associated with environment at the Mekong River Delta are then finalized. This study adjusts and adds observation variables used to measure concepts in the research model. The result of qualitative research is that the scales have been corrected accordingly and the official survey form is used for quantitative research. 500 representatives of travel businesses, tourists, local authorities and residents were surveyed for primary data.

The questionaire was designed with a 5-point Likert scale to assess Tourism development in associated with environment. The official questionnaire consisted of 36 observation variables corresponding nine scales of the research

model: (1) Tourism product, (2) Tourism human resources, (3) Accessibility, (4) Infrastructure, (5) Tourism resources, (6) Tourism environment and environmental protection, (7) Tourism management policy associated with environmental protection, (8) Tourism development, (9) Tourism development in associated with environment.

The concept of Tourism product is denoted by PRO and measured by five observed variables; the concept of Human resources for tourism is denoted by HUM and measured by four observed variables; the Accessibility is denoted by ACC and measured by four observed variables; the concept of Infrastructure is denoted by FRA and measured by three observed variables; the concept of Tourism resources is denoted by REN and measured by three observed variables; the concept of Tourism environmental protection is denoted by ENV and measured by five observed variables; the concept of Tourism management policy associated with environmental protection is denoted by POL and measured by four observed variables; the concept of Tourism development is denoted by DEV and measured by four observed variables; the concept of Tourism development in associated with environment protection is denoted by DEEN and measured by four observed variables (see Table 1).

Table 1: Mesurements

Variable	Content
PRO1	The Mekong River Delta has built a garden tourism product.
PRO2	The Mekong River Delta has built ecotourism products.
PRO3	The Mekong River Delta has built a cultural tourism product.
PRO4	The Mekong River Delta has built a tourism product for sightseeing and relaxation.
PRO5	The Mekong River Delta has built a green tourism product.
HUM1	Employees are well trained with environmental knowledge and develop tourism associated with environmental protection.
HUM2	Community education activities about the environment are disseminated to people and tourists.
HUM3	The friendliness of staff, community and tourists in tourism activities associated with environmental protection.
HUM4	The Mekong River Delta region regularly disseminates the awareness of environmental protection in tourism to stakeholders.
ACC1	Tourist place that has a connection with a major tourist center: Ho Chi Minh City and other tourist centers in the country
ACC2	Tourists have easy access to other tourist attractions in the region
ACC3	The system of roads and rivers creates convenience, movement and access for tourists
ACC4	The aviation system is being invested in accordance with the tourism development of the region
FRA1	The accommodation services provide information on tourism development associated with environmental protection.
FRA2	The food service providers support information on tourism development associated with

	environmental protection.				
FRA3	The tourist service providerS provide information on tourism development associated with environmental protection				
REN1	Tourist place with high biodiversity.				
REN2	Natural landscape has special value.				
REN3	The local culture is very diverse (traditional dance, folks, weaving).				
ENV1	Local authorities focus on conservation and sustainable use of tourism resources.				
ENV2	Local authorities regularly study and assess the impacts of tourism development associated with environmental protection.				
ENV3	The local government builds an open and clean tourism environment.				
ENV4	Local authorities develop tourism development policies in line with climate change.				
ENV5	Local authorities, tourism service businesses and tourists focus on minimizing excessive use of resources and waste.				
POL1	Local leaders support for tourism associated with environmental protection.				
POL2	Localities in the region regularly organize and manage tourism activities associated with environmental protection.				
POL3	Tourism policies associated with environmental protection are widely communicated in the media.				
POL4	Investment attraction policy focuses on tourism development associated with environmental protection.				
DEV1	The State promulgates policies to support the development of tourism products.				
DEV2	The State promulgates policies to create human resources for tourism development activities.				
DEV3	The State promulgates policies to support tourism product promotion activities, including technology application in product promotion activities.				
DEV4	The State promulgates policies to support market research activities in order to meet the demand for tourism products.				
DEEN1	Tourism development must focus on environmental benefits.				
DEEN2	Tourism development is consistent with the national policy on environmental protection.				
DEEN3	Tourism development associated with climate change and tourism environment.				
DEEN4	Tourism development aims to raise awareness about environmental protection.				

3.3. Quantitative Research

• Sampling Method

Research sample information was collected by convenience sample. The form of the survey is a questionnaire distributed to representatives of travel businesses, tourists, local authorities and residents. The survey period is from July to September 2022. A total of 500 tables were collected and there were 371 valid tables.

• Research Process

The research process began with the elaboration of research objectives and the proposition of theoretical framework. The draff scale was then finalized by a focus group interview (n=15). The formal scale was finally arrived at and the quantitative research method was employed to quantify the factors affecting the Tourism development in associated with environment. Primary data was processed by software SPSS 23.0 to measure the impact of factors affecting the Tourism development in associated with environment protection as follows: Cronbach's Alpha, EFA, and PATH analysis.

4. RESEARCH RESULT

4.1. Scale Reliability

In Table 2, nine Cronbach's alpha coefficients, which range from 0,707 to 0,898. They demonstrate high reliability measurement scales.

Table 2: Cronbach's alpha Factor Scale

Factor	Observed Variables	Cronbach's Alpha
Tourism product	PRO1, PRO2, PRO3, PRO4, PRO5	0,871
Human resources for tourism	HUM1, HUM2, HUM3, HUM4	0,871
Accessibility	ACC1, ACC2, ACC3, ACC4	0,804
Infrastructure	FRA1, FRA2, FRA3	0,848
Tourism resources	REN1, REN2, REN3	0,875
Tourism environment and environmental protection	ENV1, ENV2, ENV3, ENV4, ENV5	0,872
Tourism management policy associated with environmental protection	POL1, POL2, POL3, POL4	0,898
Tourism development	DEV1, DEV2, DEV3	0,877
Tourism development in associated with environment protection	DEEN1, DEEN2, DEEN3, DEEN4	0,707

4.2. Exploratory Factor Analysis (EFA)

29 observed variables of 07 factors – (1) Tourism product, (2) Human resources for tourism, (3) Accessibility, (4) Infrastructure, (5) Tourism resources, (6) Tourism environmental and environmental protection, (7) Tourism management policy associated with environmental protection, are analyzed by the Principal component analysis and Varimax rotation. After 01 time for analyzing, 07 factors are extracted from the 29 observed variables.

Table 3: Result of Exploratory Factor Analysis

Rotated Component Matrix^a

	Component						
	1	2	3	4	5	6	7
ENV4	0,864						
ENV1	0,852						
ENV3	0,831						
ENV2	0,798						
ENV5	0,722					0,291	
PLO3		0,863					
PLO1		0,854					
PLO4		0,843					
PLO2		0,825					
PRO1			0,834				
PRO5			0,834				
PRO3			0,745				
PRO2			0,719				
PRO4		0,250	0,646				
HUM1				0,855			
HUM3				0,842			
HUM4				0,836			
HUM2				0,826			
ACC3					0,788		
ACC4					0,768		
ACC1		0,304			0,746		
ACC2					0,718		

FRA2			0,896	
FRA3			0,873	
FRA1			0,829	
REN3				0,893
REN2				0,883
REN1				0,872

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

From the results of EFA in Table 3, the adjusted formal theoretical research model includes seven factors influencing Tourism development in associated with environment. Specifically, this model has seven component variables, including 07 independent variables: (1) Tourism product, (2) Human resources for tourism, (3) Accessibility, (4) Infrastructure, (5) Tourism resources, (6) Tourism environmental and environmental protection, (7) Tourism management policy associated with environmental protection.

4.3. PATH analysis

4.3.1. Stage 1: Multiple linear regression

Regression Analysis R value is 0,729> 0,5. So, this model is appropriate to use for evaluating the relationship between dependent and independent variables. In addition, the R^2 is 0,531. This means the Multiple linear regression model is constructed in accordance with the 53,1% data. In other words, 53,1% of Tourism development is explained by the Multiple linear regression model. The rest is due to errors and other factors. The Durbin Watson test result = 1,762 and it is in the range [1 < D < 3]. So, there is no correlation of the residuals.

Table 4: Statistical Parameters of Regression Model Model Standardized Coefficients

	Coefficients ^a								
Model		el Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity	Statistics	
		В	Std. Error	Beta			Tolerance	VIF	
	(Constant)	-2,069	0,308		-6.722	0,000			
	EVN	0,206	0,035	0,216	5,920	0,000	0,974	1,027	
	POL	0,269	0,041	0,267	6,631	0,000	0,798	1,253	
1	PRO	0,259	0,050	0,212	5,207	0,000	0,782	1,280	
1	HUM	0,291	0,036	0,300	8,007	0,000	0,923	1,084	
	REN	0,226	0,044	0,188	5,107	0,000	0,953	1,049	
	ACC	0,155	0,042	0,155	3,733	0,000	0,750	1,333	
	FRA	0,133	0,035	0,137	3,760	0,000	0,976	1,025	

a. Dependent Variable: DEV

Note: VIF: Variance Inflation Factor

In Table 4, the t-stat value of independent variables (EVN, POL, PRO, HUM, REN, ACC, FRA) are higher than the value of $> t \alpha / 2$ (1, n). Seven t-stats which range from 3,733 to 6,631 are higher than tstat $> t\alpha/2$ (7, 363) = 1,9665 and seven Sig. values are lower than 0,05. In addition, the VIF coefficients of independent variables are lower than 2,

a. Rotation converged in 6 iterations.

indicating no collinearity occurs. Based on Table 4, from the result of Standardized coefficients, the Multiple linear regression equation of the factors affecting the Tourism development is as follows:

Tourism development = 0.216 * Tourism environment and environmental protection + 0.267 * Tourism management policy associated with environmental protection + 0.212 * Tourism product + 0.300 * Human resources for tourism + 0.188 * Tourism resources + 0.155 * Accessibility + 0.137 * Infrastructure

Thus, the Environment and environmental protection, Tourism management policy associated with environmental protection, Tourism product, Human resources for tourism, Tourism resources, Accessibility, Infrastructure factors all have a positive influence on the Tourism development. It means that the higher the Environment and environmental protection, Tourism management policy associated with environmental protection, Tourism product, Human resources for tourism, Tourism resources, Accessibility, Infrastructure, the higher the Tourism development. Among these seven factors, the most influential factor is Human resources for tourism, because its Standardized coefficient is highest (β = 0,300). The followers are Tourism management policy associated with environmental protection, Tourism environment and environmental protection and Tourism product. Thus, hypotheses H1, H2, H3, H4, H5, H6, H7 for the formal theoretical model of Domestic tourist's perception are accepted.

4.3.2. Stage 2: Simple linear regression

Path analysis model is used to analyze the influence of Environment and environmental protection, Tourism management policy associated with environmental protection, Tourism product, Human resources for tourism, Tourism resources, Accessibility, Infrastructure factors (independent variables) on the Tourism development in associated with environment factor (dependent variable) through Tourism development factor (intermediate variable). Analytical technique is also linear regression in which Tourism development factor is independent variable and Tourism development in associated with environment factor is dependent variable.

Model		Unstandardize	d Coefficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	-0,733	0,128		-5,716	0,000
1	DEV	1,170	0,034	0,873	34,358	0,000

Table 5: Statistical Parameters of PATH Model Model Standardized

Independent variable: Tourism development

Dependent variable: Tourism development in associated with environment protection

In Table 5, R value is 0.873 > 0, 5. So, this model appropriates to use for evaluating the relationship between dependent and independent variables. The tstat value of independent variables (Tourism development) = 34,358 is higher than the value of tstat $> t\alpha/2(1, 369) = 1,9664$ and Sig. values =0,000 is lower than 0,05. So the hypothesis H8 accepted. Based on table 5, from the result of Standardized coefficient, the Simple linear regression equation of the factor Tourism development in associated with environment protection is as follows:

Tourism development in associated with environment protection = 0,873 * Tourism development

Tourism development factor has a strong positive influence on the Tourism development in associated with environment protection. It means that the higher the Tourism development, the higher the Tourism development in associated with environment protection.

 R^2M fit coefficient of the PATH model: $R^2M = 1 - (1 - 0.531) * (1 - 0.762) = 0.8883 = 88.83\%$

R²M fit coefficient of PATH model is high. Base on table 4 and 5, the results of the formal PATH model is as follows:

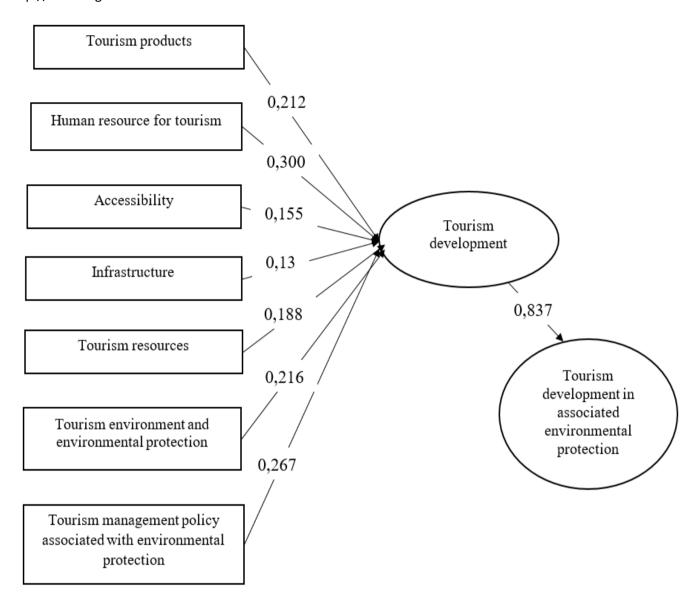


Figure 3: Path model of Tourism development in associated with environment protection

5. DISCUSSION

In the model proposed by the research team, seven factors Tourism product, Human resources for tourism, Accessibility, Infrastructure, **Tourism** resources, **Tourism** environmental and environmental protection, Tourism management policy associated with environmental protection factors have a position influence on Tourism development. The results showed that Human resources for tourism factor has four observation variables (HUM1, HUM2, HUM3, HUM4) and remained unchanged through Cronbach's alpha and EFA (Table 2, 3). In this research, Human resources for tourism factor is still the top concern of tourists. This factor has the strongest influence (standardized $\beta = 0,300$ and Sig. value less than 0,05) on Tourism development, so the hypothesis H2 is accepted. Tourism management policy associated with environmental protection factor is composed of four observation variables (POL1, POL2, POL3, POL4) and remained unchanged through Cronbach's alpha and EFA (Table 2, 3). The result shows that it has the second largest influence on Tourism development (standardized $\beta = 0.267$ and Sig. value less than 0,05), the hypothesis H7 is accepted. Tourism environmental and environmental protection factor is composed of five observation variables (ENV1, ENV2, ENV3, ENV4, ENV5) and remained unchanged through Cronbach's alpha and EFA (Table 2, 3). The result shows that it has the third largest influence on Tourism development (standardized β = 0,216 and Sig. value less than 0,05), the hypothesis H6 is accepted. Tourism product factor is composed of five observation variables (PRO1, PRO2, PRO3, PRO4, PRO5) and remained unchanged through Cronbach's alpha and

EFA (Table 2, 3). The result shows that it has the forth largest influence on Tourism development (standardized β = 0,212 and Sig. value less than 0,05), the hypothesis H1 is accepted. Tourism resources factor is composed of three observation variables (REN1, REN2, REN3) and remained unchanged through Cronbach's Alpha analysis and EFA (Tables 2, 3). This factor has the fifth largest influence on Tourism development (standardized β = 0,179 and Sig. value less than 0,05), the hypothesis H5 is accepted. Accessibility factor is composed of three observation variables (ACC1, ACC2, ACC3, ACC4) and remained unchanged through Cronbach's Alpha analysis and EFA (Tables 2, 3). This factor has the second weakest influence on Tourism development (standardized β = 0,155 and Sig. value less than 0,05), the hypothesis H3 is accepted. Finally, the Infrastructure factor is composed of three observation variables (FRA1, FRA2, FRA3) has the strong weakest influence on Tourism development (standardized β = 0,137 and Sig. value less than 0,05), the hypothesis H4 is accepted.

The Tourism development is an intermediate factor in the PATH model to Tourism development in associated with environment protection. The results show that the Tourism development factor composed of three observed variables (DEV1, DEV2, DEV3) and remained unchanged by Cronbach's Alpha analysis (Table 2). This factor has the influence on Tourism development in associated with environment (standardized $\beta = 0.837$ and Sig. value less than 0,05). The hypothesis H8 is accepted. The Tourism development in associated with environment protection factor is dependent variable in the PATH model. It composed of three observed variables (DEEN1, DEEN2, DEEN3, DEEN4) and remained unchanged through Cronbach's Alpha analysis (Table 2).

After Two-Stage Regression Analysis:

Stage 1: Tourism product, Human resources for tourism, Accessibility, Infrastructure, Tourism resources, Tourism environmental and environmental protection, Tourism management policy associated with environmental protection factors (independent variables) have a proportional influence on Tourism development factor (dependent variable). The most influential factor is Human resources for tourism, followed by Tourism management policy associated with environmental protection, Tourism environmental and environmental protection, Tourism product, Tourism resources, Accessibility and Infrastructure. With R = 0.729 and $R^2 = 0.531$ this is the appropriate model to use to evaluate the relationship between dependent and independent variables (Table 4).

Stage 2: The Tourism development factor (independent variable) has a strong influence on Domestic tourist's purchase decision factor (dependent variable) with R = 0.873 and $R^2 = 0.762$ (Table 5). The model explained 76,2% of the same effect direction on Tourism development with environment protection (Table 5). R^2M fit coefficient of the PATH model is 0.8883 (88,83%). These results are rarely high figures, which show the interest of tourists in environment protection. This proves that using PATH to test the Tourism development in associated with environment protection in an enhancement model is appropriate.

6. IMPLICATIONS AND CONCLUSION

This literature review may be helpful in providing policies, business strategies, and more comprehensive solutions for tourism management and tourism development related to environmental protection, as well as in helping them comprehend the factors influencing tourism development related to environmental protection in the Mekong Delta. Through the results of data analysis using the PATH model, the authors propose a number of policy implications for local governments in the Mekong region and tourism companies in Vietnam. It is hoped that in the development of tourism, the local government cooperates with tourism companies to pay the highest attention to environmental protection. Tourism development in associated with environmental protection is always a matter of concern in the sustainable tourism development strategy of the locality and the country.

6.1. Regarding Human resource for tourism

This factor has the first largest influence on Tourism development in associated with environmental protection through Tourism development factor. Local governments and tourism businesses also coordinate on-site training of the green tourism workforce, help local residents develop their economy in a green, environmentally friendly direction. Focus on developing tourism human resources in accordance with the needs of tourism development in each period and each locality in the Mekong River Delta. Update vocational training programs and skills as well as educating the awareness of ecological environment protection for staff directly and indirectly doing tourism. Encourage enterprises, universities

and research centers to apply the "professional standard" system for tourism human resources in the Mekong River Delta. Innovate and strongly attract foreign investment sources for the development of human resources Environmental tourism.

6.2. Regarding Tourism management policy associated with environmental protection

This is the second largest influence on Tourism development in associated with environmental protection through Tourism development factor. The local government must not only promote its strengths in natural conditions and unique cultural features, but also diversify tourism products in accordance with the strengths of each locality in the region. In addition, it is necessary to focus on developing "green" tourism products in order to minimize the impact on the natural environment of the area; construction of wastewater treatment system before dumping into canals to reduce water pollution.

Local authorities need to promulgate policies to conserve and develop natural ecosystems in the region, and at the same time have specific mechanisms to protect some areas with specific ecosystems. Propagating, raising awareness and mobilizing people in Mekong River Delta together with tourists to participate in protecting the ecological environment. It is important that central and local governments not only amend and supplement policies and mechanisms on tourism, but also create a favorable legal environment for tourism development in the Mekong River Delta.

6.3. Regarding Tourism environmental and environmental protection

This is the third largest influence on Tourism development in associated with environmental protection through Tourism development factor. In fact, when there is the common interest of all levels of government, tourism businesses and local people in building and protecting the tourism environment, will improve and promote local tourism development towards sustainable tourism development. Therefore, the local government as well as the community need to be responsible through propaganda and voluntary activities; raising the awareness of local people and tourists in fulfilling Green tourism requirements: do not litter, do not pollute water sources, protect animals and plants at tourist destinations... In addition, it is necessary to focus on protecting the coastal protection forest ecosystem, nature reserves, national parks, and biodiversity conservation. Encourage tourism businesses to associate training and re-training of onsite staff in association with the actual operation of the tourism industry in the region. At the same time, organize tourism activities to regions heavily affected by climate change, in order to raise awareness of environmental protection.

6.4. Regarding Tourism product

This is the forth largest influence on Tourism development in associated with environmental protection through Tourism development factor. Tourism in the Mekong River Delta needs to develop specific tourism products with high attractiveness, impression, diversity and richness of each locality and constantly improve the quality of tourism products. In the coming time, regional governments need not only to plan construction and organize effective exploitation, but also to ensure proper exploitation of the tourism potential at the provinces in the region. From there, it will create unique and typical tourism products of the region such as festival tourism, floating season tourism, cultural tourism, craft village tourism, sea and island resort tourism, and ecotourism, ... In addition, the Mekong River Delta also has national tourist areas such as Phu Quoc island marine eco-tourism area (Kien Giang), Ca Mau cape biosphere reserve. In the future, Ca Mau mangrove forest will be included in 10 national key tourist areas. Phu Quoc Island is identified as a large island resort of Vietnam with types of tourism characteristic such as relaxation, entertainment, discovery and "green" tourism products. In particular, the most common product in tourism of the Mekong River Delta is tourism products to visit gardens and rivers.

6.5. Regarding Tourims resource

This is the forth largest influence on Tourism development in associated with environmental protection through Tourism development factor. The Mekong Delta River is characterized by a delta bordering the sea, with a warm climate and rich natural resources for tourism development. In particular, this area has a rich ecosystem with many different characteristics such as seas, islands, estuaries, wetlands, island deltas, etc., so there are many advantages to developing eco-tourism. Also due to the warm and favorable climate conditions, tourism in the Mekong River Delta is

not strongly affected by the "seasonal" nature of the weather. Natural tourism resources of the region are relatively evenly distributed and easily accessible, so localities in the region have many advantages when exploiting tourism development potential. Humanistic tourism resources of the region are diverse, widely distributed and each area has its own characteristics. The region's potential for humanistic tourism is also diverse, including temples, pagodas, festivals, folklore forms, historical relics,... Local authorities should only invest in the development of some specific types of tourism products associated with the most prominent natural resources, and should not be spread out, easy to create duplication and boredom for tourists when traveling to the Mekong River Delta.

6.6. Regarding Accessibility

This factor has the second weakest influence on Tourism development in associated with environmental protection through Tourism development factor. The State needs to invest in the development of road, waterway and air transport systems in the region, connecting tourist attractions in the region to form an inter-regional tour system. In the immediate future, it is necessary to focus on upgrading and developing road, waterway and air transport routes from Hanoi, Ho Chi Minh City to the Mekong River Delta to facilitate linkages with regions throughout the country. Continue to upgrade and open many round-trip international flights from Can Tho, Phu Quoc to major domestic and international tourist centers to attract tourists. The state needs to step up investment to complete the construction of Rach Mieu 2 bridge as well as to study the feasibility of Ho Chi Minh City - Can Tho railway project. Since then soon formed an intra-regional transport network connecting with Ho Chi Minh City, the Eastern region and the Central Highlands.

6.7. Regarding Infrastructure

This factor has the strong weakest influence on Tourism development in associated with environmental protection through Tourism development factor. Local governments need to make adequate investment in infrastructure for the region's tourism industry, and have policies and mechanisms to promptly support businesses to invest in infrastructure in localities. Local governments need to invest adequately in infrastructure for the region's tourism industry, have mechanisms and policies to timely support businesses investing in local infrastructure such as enhancing tourism socialization, attracting all economic sectors to join, exploit and protect environmental tourism. Therefore, investment in infrastructure such as roads, accommodation, public services, commercial areas, means of transport,... is essential, making an important contribution to the tourism development of Mekong River Delta.

REFERENCE

- 1. Hair, J.F. Jr., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). *Multivariate Data Analysis* (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- 2. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis*. Upper Saddle River, NJ: Prentice Hall.
- 3. Hoang, T., Chu, N. M. N. (2008), Research data analysis with SPSS. Hong Duc Publishing House (Volume 2).
- 4. Hoelter, J.W. (1983). *The analysis of covariance structures: Goodness-of-fit indices*. Sociological Methods and Research, 11.
- 5. Le, Q. H. (2017). *Data analysis in business*. Economics Publishing House.
- Le, Q. H. (2022). The Effect of Marketing mix 4Cs on the Domestic Tourist's Purchase Decision Case Study in Vietnam_Part 2: Research result. *International Journal of Health Sciences (Special Issue)*. Vol 6 (S5), 9384-9399.
- 7. Nunnally, J. C, & Bernstein, I. H (1994). Psychometric theory (3rd ed.). New York: McGraw-Hill
- 8. Output.spv of data analysis results from SPSS 23.
- 9. Tabachnick, B.G., Fidell, L.S. (1996). Using Multivariate Statistics. Harper Collins, New York