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RESIDENTS' PERCEPTION TOWARDS THE ENVIRONMENTAL IMPACTS OF RURAL TOURISM DEVELOPMENT — THE CASE STUDY OF DA LAT CITY, VIETNAM

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Abstract

Tourism development in any destination can bring about positive and negative impacts on the natural environment and social and economic aspects. Da Lat, an emerging tourist destination in Vietnam, is confronted with the positive and negative environmental impacts of tourism, especially in rural areas. Several studies have explored the effect of tourism. However, only few studies have focused on the environmental impacts of tourism development in the rural area of a developing country. On this basis, this research aims to: (i) investigate residents' positive and negative perceptions of the environmental impacts of tourism development in the rural areas of Da Lat city, (ii) examine the influences of age, gender, length of residence, economic dependency on their perception, attitude and supportiveness; and (iii) investigate the influences of the independent variables (residents' socio-demographic features, perception and attitude) on residents' supportiveness. This work involved a case study of four rural communes, namely, Xuan Truong, Xuan Tho, Ta Nung and Tram Hanh at Da Lat City, and a stratified sampling technique was used. This study utilised a quantitative research method by using face-to-face questionnaires with a total of 305 usable responses. The findings revealed that the residents' perception on the environmental impacts of tourism are influenced by age, length of residence and economic dependency. Majority of the residents' demonstrated a positive perception on the environmental impacts of tourism and support the tourism development even though the actual environmental effect is visible at Da Lat city. Attitude is the most significant variable that affect residents' supportiveness. This empirical study may provide the current situation on the supportiveness of residents in Da Lat destination that may benefit the decision-maker in conserving environmental sustainability as a tourism destination.

Keywords: Residents' perception, residents' attitude, residents' supportiveness, environmental impacts, rural tourism

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INTRODUCTION

Tourism has become a vital need in cultural and social life due to the development of modern transportation and globalisation, and it is one of the important economic sectors of several countries, including Vietnam. Vietnam is honored to be the only Southeast Asian country ranked third in the top 10 global destinations with the fastest growing number of visitors in 2018 (Rosen, 2018). Vietnam has been named Asia Leading Destination at the 2018 World Trade Award for the first time (Vietnam Briefing, 2019). Da Lat, a small town situated approximately 290 km away from Ho Chi Minh City and Lam Dong province, has long been one of the most famous tourist attractions in Vietnam. This city continuously attracts visitors throughout the years and significantly contributes to the national tourism industry. Despite these positive contributions, tourism development without a proper plan is a significant concern. Da Lat rural tourism is attractive to visitors and boosts people's awareness of responsible tourism because of its fresh air, good weather conditions for agriculture and intact landscapes. However, the rural regions of Da Lat city, which are rapidly developing to create wealth for the city tourism (Vietnam National Administration of Tourism, 2015), is facing environmental problems, such as illegal forest demolition, erosion, flood, greenhouse effect or water pollution. Local residents' perspectives have been proven to be related to their support and willingness for tourism development (Afthanorhan et al., 2017; Kim et al., 2014; Nyaupane & Thapa, 2006) because they are those who are indirectly or directly influence by tourism. Jackson (2008) highlighted the significance of understanding the opinions and attitudes of local residents as a strategy for developing a sound tourism plan that can mitigate negative impacts and maximise its benefits. This matter is relevant for not only developed countries and urban areas but also developing nations and rural regions. However, here are still limited academic work has been dedicated to developing ones, and majority of them are interested in developed countries where tourism has greatly progressed (Almeida-García et al., 2016; Liu & Li, 2018; Nepal, 2008; Pham, 2014; Pham & Kayat, 2011). This work aims to examine residents' perception towards the environmental impacts of rural tourism in Da Lat city, Vietnam and identify the factors that affect their perception, attitude and supportiveness for further tourism development by using a quantitative research method.

LITERATURE REVIEW

Environmental Impacts of Tourism Development

Environmental dimensions consist of pollution conditions, water, waste and recycling and land use (Nevado-Peña et al., 2015). The relationship between the tourism industry and the environment is complicated. Tourism development is considered a two-sided sword. Numerous scholars have studied the positive and

negative perceived environmental impacts of tourism development. Majority of studies have applied social exchange theory and focused on residents' perception because they are those who are directly or indirectly influenced by the impacts of tourism (Abdollahzadeh & Sharifzadeh, 2014; Abera & Assefa, 2020; Amuquandoh, 2010; Hammad et al., 2017). Researchers have explored certain aspects of environmental impacts associated with the natural landscape, living environment and resource management. Nyaupane and Thapa (2006) examined the perceptions of ecological impacts in a protected area in Nepal. The authors focused on waste management, deforestation, water quality and sanitation, wildlife population and natural conservation. Amuquandoh (2010) considered environmental awareness, environmental protection, historical and cultural site preservation, noise level, water pollution, soil quality, forest and landscape loss and agricultural land loss as indicators. The academic article carried out by Almeida-García et al. (2016) in Spain addressed concerns related to environmental awareness and conservation, waste management, landscape preservation and noise pollution. Hammad, Ahmad and Papastathopoulos (2017) studied residents' perception of tourism impacts in the United Arab Emirates. They identified wastewater, soil quality, noise pollution, environmental pollution, landscape loss, living environment and littering as amongst the components of residents' perceptions. Abdollahzadeh and Sharifzadeh (2014) discussed waste management, water quality and sanitation, residents' living environment and environmental conservation in their study. Tichaawa and Mhlanga (2015) conducted a study in Zimbabwe, wherein they identified attributes, such as noise pollution, air pollution, soil pollution, environmental protection, people and vehicle movement, power and water supply, protected area management and cleaning of public spaces. Abera and Assefa (2020) explored noise, water, waste, pollution and natural resource conservation in their study. Several researchers have explained the perceived tourism impacts and residents' attitudes by using some models/theories, such as the tourist area life cycle model of Butler, Irridex model of Doxey or social exchange theory. Social exchange theory is widely used by numerous scholars (Abera & Assefa, 2020; Andereck, Valentine, Knopf, & Vogt, 2005; Sirakaya et al., 2002; Y. Wang & Pfister, 2008). This theory is relevant in this study as it is utilised to investigate the perceptions and attitudes of residents towards the positive and negative environmental impacts of rural tourism development in Da Lat, Vietnam and their support for further tourism development. Butler and Doxey's models focus on the relationship between tourism development stages and residents' perception. However, such models did not address the heterogeneity of communities in which the interests and elements that affect their attitudes varied.

Conceptual Framework

The conceptual framework of this study, which is adapted from Pham and Kayat (2011), is depicted in Figure 1. In this framework, only four variables are chosen for socio-demographic characteristics. According to a previous literature review, the socio-demographic features of residents influence their perceptions, attitudes and supportiveness towards tourism development. Age, gender, length of residence and economic dependency are the four variables widely used in the study of residents' perceptions (Amuquandoh, 2010; Pham & Kayat, 2011). Scholars have studied the positive and negative perceptions of residents on the environmental impacts of tourism. Based on a previous literature review and the actual condition of a case study, the attributes for residents' perception of the environmental impacts are natural landscape preservation, living environment, environment protection awareness, sanitation, water quality and waste management.

This study aims to answer three research questions as follows:

1. What are the residents' perceptions of the environmental impacts of tourism development in the rural areas of Da Lat city?
2. What is the relationship between socio-demographic attributes (age, gender, length of residence and economic dependency) and residents' perception, attitudes and supportiveness towards tourism development?
3. What is the relationship between the independent variables (socio-demographic, perception and attitude) and the dependent variable (supportiveness)?

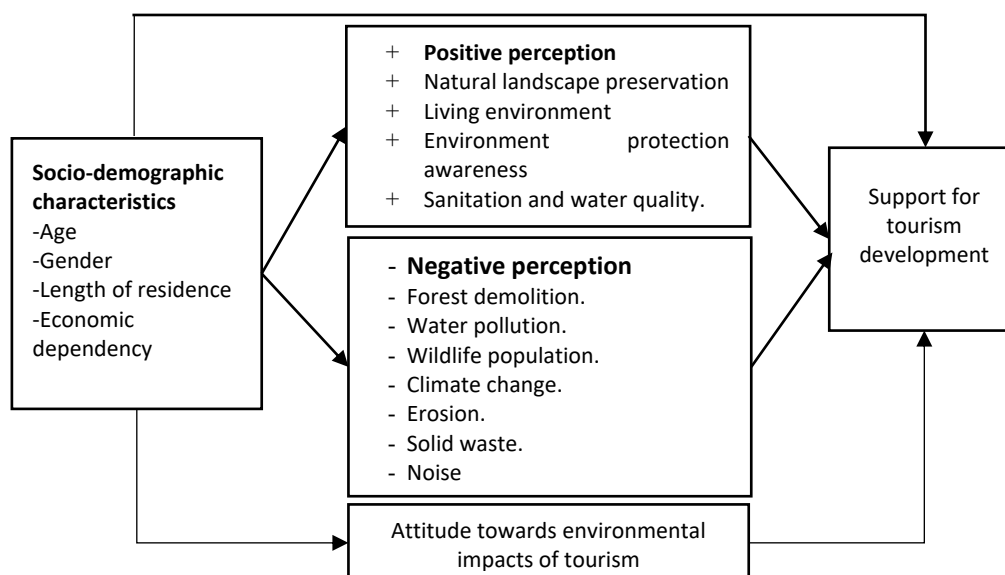


Figure 1: Research framework (adapted from Pham&Kayat (2011), Boonsiritomachai and Phonthanukitithaworn (2019) and Javier (2016))

METHODOLOGY

The study site included the four rural communes: Tà Nung, Xuân Trường, Xuân Thọ and Tràm Hành. The estimated target population in these four rural communes was 20,000 residents. The sample size in this study was 377 respondents (based on Raosoft software). The researcher applied a stratified sampling technique due to the differences in population size and development level of each commune. The number of samples at each commune was equally set. Self-administrated and face-to-face questionnaires were used as the research instruments to collect the data. The data were collected over a period of 4 weeks. The questionnaire comprised 37 questions, divided into four parts. Section A comprises eight questions aimed at delineating socio-demographic features. Section B comprises 17 questions about the positive and negative perceptions of residents about the environmental *impacts* of tourism developments by using a five-point Likert scale. Section C includes five questions about the resident's attitude towards the environmental effect of tourism developments. Section D includes seven questions about the supportiveness towards further developments of tourism.

FINDINGS

Socio-demographic Profiles

The socio-demographic characteristics of respondents are shown in Table 1. Amongst the 305 respondents, 61.6% are male and 38.4% are female. Majority of the participants are in the middle age group, from 36 years old to 55 years old (30.8%). The smallest proportion consists of senior citizens (12%), who are aged 60 years old. Approximately 40% of the respondents lived in the area for 16–20 years. Meanwhile, 7.5% of the respondents lived for 6–10 years in the area. A total of 178 respondents were not dependent on tourism industry either directly or indirectly.

Table 1: Respondents' Socio-demographic Profile

Variables	N	Frequency	Percent (%)
Age (in years)	305		
18-25		57	18.7
26-35		82	26.9
36-55		94	30.8
56-60		60	19.7
Above 60		12	3.9
Gender	305		
Male		188	61.6
Female		117	38.4
Length of residence (in years)	305		
≤ 5		81	26.6
6-10		23	7.5
11-15		45	14.8
16-20		96	31.5
>20		60	19.7
Economic dependency in tourism	305		
Yes		127	41.6
No		178	58.4

Residents' Perception on The Environmental Impacts

Majority of the respondents agreed that tourism development has generated revenue to finance natural site restoration (m=3.97), sanitation improvement (m=3.94) and resident awareness enhancement (m=3.86). The other positive impacts include wildlife habitat protection (m=3.82), solid waste management (m=3.79) and the natural beauty of the landscape improvement (m=3.69). Although these residents acknowledged that tourism has caused the loss of natural forest land and a decline in wildlife population (m=3.78), they hold a

contrary viewpoint regarding the statement that solid waste has increased due to rapid tourism development (m=3.18). The local participants expressed their disagreement with various aspects, including noise pollution (m=2.74), soil erosion (m=2.73), water pollution (m=2.78), clean water shortage (m=2.55), air pollution (m=2.58), climate change due to extensive greenhouse projects for agro-tourism (m=2.18) and local resources over-exploitation (m=2.73) (see table 2).

Table2: Residents' perception of environmental impacts

Variables	Mean (m)	Standard deviation
Positive environmental impacts		
Tourism development in rural area at Da Lat city has improved the natural beauty of the landscape.	3.69	1.102
Tourism development in rural area at Da Lat city has contributed to flora and fauna protection.	3.54	1.166
Tourism development in rural area at Da Lat city has improved sanitation state.	3.94	1.318
Tourism development in rural area at Da Lat city has improved solid waste management of the area.	3.79	1.075
Tourism development in rural area at Da Lat city has contributed to wildlife habitat protection	3.82	1.075
Tourism development in rural area at Da Lat city has enhanced residents' awareness of environmental problems.	3.86	1.057
Tourism development in rural area at Da Lat city has created revenue to finance natural site restoration.	3.97	1.112
Negative environmental impacts		
The loss of natural forest land in rural area at Da Lat city has been caused by tourism infrastructure.	3.78	1.214
Tourism development has led to wildlife population decrease	3.78	1.110
Soil erosion in rural area at Da Lat city has been caused by tourism development	2.73	1.077
Solid waste increase in rural area at Da Lat city has been caused by tourism development	3.18	1.067
Water pollution in rural area at Da Lat city has been induced by tourism development.	2.78	1.211
The possibility of clean water shortages has happened due to the overwhelming number of tourists.	2.55	1.183
Air pollution in rural area at Da Lat city has been induced by tourism development.	2.58	1.045
Climate change has been caused by extensive greenhouse projects for agro-tourism development.	2.18	1.168
Noise pollution in rural area at Da Lat city has been caused by overcrowded tourism.	2.74	1.283
Tourism development has led to excessive use of local resources.	2.73	1.161

Relationship Between Age, Length of Residence, Residents' Perception, Attitude and Supportiveness

A one-way ANOVA test is employed to evaluate the influence of age and length of residence on perception, attitude and supportiveness. The results are illustrated on Table 3. Age and length of residence influence perceived environmental impacts. The significant (Sig.) values are all less than 0.05. This value indicates a significant difference in these variables and positive/negative environmental effect perception.

In terms of positive perception, young people view tourism more favorably (Sig.=0.000) than the older generation. In particular, the youngest respondents, who are in the 18–25 age group, present the highest mean value (m=4.09). Regarding the length of residence (Sig.=0.047), respondents who have been living for 16–20 years view environmental effect more positively than the other groups. With regard to negative perception, the older respondents perceived the more harmful environmental impacts (Sig.=0.012). Respondents who are above 60 years old demonstrated agreement on the environmental impacts of tourism development (m=3.85). By contrast, the youngest age group expressed the least negative opinion towards the statements (m=2.38). In terms of the length of residence (Sig.=0.003), the participants with the period of stay ranging from 11 years to 25 years and 16 years to 20 years expressed the highest negative perception amongst all groups (m=3.58 and m=3.44 respectively). Regarding residents' attitude and supportiveness, all the Sig. values are less than 0.05; therefore, statistical differences in attitude and supportiveness exist based on their age and length of residence. The youngest age group (18–25 years old) demonstrated the most favourable evaluation for attitudes (m=4.76) and willingness to support tourism development (m=4.77). Senior citizens aged above 60 years old expressed the least favourable perspectives (m=1.40 for attitudes and m=1.57 for supportiveness). Regarding the length of residence, residents' attitude exhibited a decline, from the mean value of 4.46 for those living in the area for 5 years or less to 3.03 for survey participants who have resided at the study site for more than 20 years. Moreover, the willingness of these individuals to support tourism development reached highest when their length of stay is 5 years or less (m=4.42).

Table 3: ANOVA test results for the impacts of age and length of residence on perceived environmental impacts

Variables		Mean	Standard deviation	Sig.
Positive environmental impacts				
Age (in years)	18-25	4.09	0.898	0.000
	26-35	3.26	0.61	
	36-55	3.06	0.727	
	56-60	3.07	0.742	
	Above 60	3.15	0.148	
Length of residence (in years)	≤ 5	3.35	0.786	0.047
	6-10	3.30	0.848	
	11-15	2.88	0.909	
	16-20	3.37	0.517	
	>20	3.27	1.02	
Negative environmental impacts				
Age (in years)	18-25	2.38	0.749	0.012
	26-35	3.41	0.649	
	36-55	3.54	0.822	
	56-60	3.32	0.671	
	Above 60	3.85	0.051	
Length of residence (in years)	≤ 5	3.29	0.869	0.003
	6-10	3.17	0.762	
	11-15	3.58	0.512	
	16-20	3.44	0.756	
	>20	2.93	0.921	
Attitude				
Age (in years)	18-25	4.76	0.149	0.000
	26-35	4.42	0.272	
	36-55	3.88	0.441	
	56-60	1.84	0.411	
	Above 60	1.40	0.000	
Length of residence (in years)	≤ 5	4.46	0.203	0.032
	6-10	4.26	0.953	
	11-15	4.08	0.100	

Variables	Mean	Standard deviation	Sig.	
16-20	3.77	0.598		
>20	3.03	1.089		
Supportiveness				
Age (in years)	18-25	4.77	0.145	0.000
	26-35	4.41	0.091	
	36-55	3.89	0.266	
	56-60	2.00	0.273	
	Above 60	1.57	0.000	
Length of residence (in years)	≤ 5	4.42	0.367	0.016
	6-10	4.19	0.136	
	11-15	4.14	0.422	
	16-20	3.85	0.763	
	>20	3.11	1.061	

A multiple regression analysis method in SPSS software is used to explore the impacts of the independent variables (positive perception, negative perception and residents' attitude) on the dependent variable (supportiveness). The result is presented in Table 4. The adjusted R square value is 0.694, indicating that the independent variables account for 69.4% of the variance in the dependent variable (supportiveness). The Sig. value is 0.001 (<0.05), indicating that the linear regression model is appropriate. Based on the result, attitude is the most crucial factor in this model because of its highest β value (0.814) (p-value=0.000). A significantly positive relationship is found between attitude and supportiveness. The negative perception is the subsequent factor that affects their willingness to assist in tourism development (p-value=0.486, β =-0.41). The correlation between these two variables is negative because the β value is negative. With β =0.153, positive perception becomes the element that has the least influence in this model (p-value=0.001). This association is recognised as positive.

Table 4: Multiple regression analysis for residents' supportiveness

Variable	P-value	VIF	β	Adjusted R ²	Sig.
- Positive perception	0.009	3.382	0.153		
- Negative perception	0.486	3.383	-0.41	0.694	0.001

Variable	P-value	VIF	β	Adjusted R ²	Sig.
- Attitude	0.000	1.001	0.814		

DISCUSSION

Based on the findings, majority of the respondents perceived that rural tourism development generates revenue to finance natural site restoration, enhance residents' awareness of environmental problems, improves sanitation state and contributes to wildlife habitat protection. In terms of negative statements, despite the slight disagreement to few statements, the respondents also acknowledged that tourism development has caused the degradation of natural forest land in the rural areas and the wildlife habitat. These perceptions are consistent with Vietnamese public articles highlighting environmental problems in Da Lat city, particularly illegal deforestation and forest land encroachment for tourism projects (Saigoneer, 2018). The public raised issues of water pollution, clean water shortage, erosion, solid waste, air pollution and climate change due to the tourism development in Da Lat (Ministry of natural resource and environment, 2019; Saigoneer, 2018; Tran, 2020; Vietnamplus, 2020). However, respondents did not completely agree that the environmental impacts were derived from tourism development. The environment must be sustainably managed by investigating pollution sources and educating residents about the potential tourism-related environmental problems to promptly detect and prevent the risk of contamination.

Age, length of residents and economic dependency are three socio-demographic variables that are found to have impacts on residents' perception and attitude, whereas gender is explored to have no relationship. Other studies at different sites also show consistent results, such as the research in the Lake Bosomtwe Basin, Ghana by Amuquandoh (2010), in Bisoftu town by Abera and Assefa (2020) and in Kashmir by Charag et al. (2020). In terms of the attitude, this finding diverges from a study carried out in Vietnam by Nguyen et al. (2018), which identified no significant difference between residents' attitude and their years of stay. However, this study supports the result that senior residents have a less optimistic outlook on tourism development than juniors. The result for the economic aspect is supported by earlier studies (Abdollahzadeh & Sharifzadeh, 2014; McGehee & Andereck, 2004; Pham & Kayat, 2011). Meanwhile, all socio-demographic variables, including age, gender, length of residence and economic dependency, are found to have influences on residents' attitude and supportiveness. The female participants exhibit a higher degree of supportiveness degree than their male counterparts, which contrasts with the findings of Nguyen et al. (2018) and Pham and Kayat (2011). Economic dependency is another determinant that shows a positive correlation with supportiveness. The residents' willingness to support tourism development is highest when their length of stay

is 5 years or less, and it slightly decreases among respondents who have live at the area for more than 20 years. This finding is not supported by the research of Man Cheng et al. (2021). Residents' attitude emerges as the most significant determinant for their supportiveness towards tourism development, followed by positive and negative perceptions. The more favorable perception they have on tourism environmental impacts, the more support they show, and vice versa.

CONCLUSION

This research has confirmed the social exchange theory, contributing to the theoretical ground, which is helpful in explaining residents' perception and support for tourism development. According to this theory, residents may express a positive attitude towards an exchange if they recognize more benefit in that interaction. The study focuses on positive and negative impacts of the environment only, the aspect that has still inadequately researched, whereas the majority of studies extend their scope to nearly all elements, including economic, social, cultural, and political. Therefore, the environmental impacts from tourism development can be examined comprehensively. Practical implications for Da Lat tourism stakeholders to take imperative strategies to reduce impact of tourism development in Da Lat. First, despite the pollution problems concerned by the public recently, residents still show a more positive environmental perception of tourism development. It is necessary to intensify environmental management to avoid operations that may produce more pollution. Stakeholders should take their role to encourage residents to adopt an environmentally friendly lifestyle. Second, besides positive perception, this research finds that the loss of natural forest land and wildlife population decrease due to tourism projects are the most residents' negative concerns. To enhance residents' supportiveness and sustainable tourism, it is recommended to control development at sensitive areas and strictly handle violations; reserve natural forest to maintain wildlife flora and fauna population; advise residents to rationally use chemicals in agricultural production to mitigate pollution due to agricultural tourism; develop regulations for tourism activities in sensitive areas in accordance with their carrying capacity, and construct projects that are in harmony with the natural landscape. Lastly, residents tend to underestimate the adverse environmental impacts of tourism development, so the areas may have the possibility to suffer. The government should have campaigns to educate them to comprehend potential tourism-related environmental problems carefully and establish preventative measures to avert the challenges.

REFERENCES

- Abdollahzadeh, G., & Sharifzadeh, A. (2014). Rural residents' perceptions toward tourism development: A study from Iran. *International Journal of Tourism Research*, 16(2), 126-136.

- Abera, G., & Assefa, E. (2020). Bishoftu town residents perception about economic, environmental and socio-cultural impacts of urban tourism. *Journal of Hospitality Management and Tourism*, 11(2), 21-39.
- Afthanorhan, A., Awang, Z., & Fazella, S. (2017). Perception of tourism impact and support tourism development in Terengganu, Malaysia. *Social Sciences*, 6(3), 106.
- Almeida-García, F., Peláez-Fernández, M. Á., Balbuena-Vazquez, A., & Cortés-Macias, R. (2016). Residents' perceptions of tourism development in Benalmádena (Spain). *Tourism Management*, 54, 259-274.
- Amuquandoh, F. (2010). Residents' perceptions of the environmental impacts of tourism in the Lake Bosomtwe Basin, Ghana. *Journal of Sustainable Tourism*, 18(2), 223-238. <https://doi.org/10.1080/09669580903298531>
- Boonsiritomachai, W., & Phonthanukitithaworn, C. (2019). Residents' support for sports events tourism development in Beach City: The role of community's participation and tourism impacts. *Sage Open*, 9(2), 2158244019843417.
- Charag, A. H., Fazili, A. I., & Bashir, I. (2020). Residents' perception towards tourism impacts in Kashmir. *International Journal of Tourism Cities*.
- Hammad, N., Ahmad, S. Z., & Papastathopoulos, A. (2017). Residents' perceptions of the impact of tourism in Abu Dhabi, United Arab Emirates. *International Journal of Culture, Tourism and Hospitality Research*.
- Jackson, L. (2008). Residents' perceptions of the impacts of special event tourism. *Journal of Place Management and Development*, 1(3), 240-255. <https://doi.org/10.1108/17538330810911244>
- Javier, H. H. (2016). An ethnographic evaluation of local residents' perceptions of tourism in the pretourism phase: the case of Burdeos, Philippines.
- Kim, S., Park, E., & Phandanouvong, T. (2014). *Barriers to local residents' participation in community-based tourism: Lessons from Houay Kaeng Village in Laos*
- Liu, X. R., & Li, J. J. (2018). Host perceptions of tourism impact and stage of destination development in a developing country. *Sustainability*, 10(7), 2300.
- Man Cheng, E. N., So, S. I., & Nang Fong, L. H. (2021). Place Perception and Support for Sustainable Tourism Development: The Mediating Role of Place Attachment and Moderating Role of Length of Residency. *Tourism Planning & Development*, 1-17.
- McGehee, N. G., & Andereck, K. L. (2004). Factors predicting rural residents' support of tourism. *Journal of travel research*, 43(2), 131-140.
- Ministry of natural resource and environment. (2019). *Khắc phục ô nhiễm môi trường tại Bãi rác Cam Ly, thành phố Đà Lạt, tỉnh Lâm Đồng*. <https://monre.gov.vn/Pages/khac-phuc-o-nhiem-moi-truong-tai-bai-rac-cam-ly,-thanh-pho-da-lat,-tinh-lam-dong.aspx>
- Nepal, S. K. (2008). Residents' attitudes to tourism in central British Columbia, Canada. *Tourism Geographies*, 10(1), 42-65.
- Nevado-Peña, D., López-Ruiz, V.-R., & Alfaro-Navarro, J.-L. (2015). The effects of environmental and social dimensions of sustainability in response to the economic crisis of European cities. *Sustainability*, 7(7), 8255-8269.
- Nguyen, N. T. H., Suwanno, S., Thongma, W., & Visuthismajarn, P. (2018). The attitudes of residents towards agro-tourism impacts and its effects on participation in agro-

- tourism development: The case study of Vietnam. *African Journal of Hospitality, Tourism and Leisure*, 7(4).
- Nyaupane, G. P., & Thapa, B. (2006). Perceptions of environmental impacts of tourism: A case study at ACAP, Nepal. *The International Journal of Sustainable Development and World Ecology*, 13(1), 51-61.
- Pham, L. (2014). Local Residents' Perceptions of Tourism Impacts and Their Support for Tourism Development: The Case of Ha Long Bay, Quang Ninh, Vietnam. *St. Paul's Annals of Tourism Research*(16), 77-84.
- Pham, L., & Kayat, K. (2011). Residents' perceptions of tourism impact and their support for tourism development: the case study of Cuc Phuong National Park, Ninh Binh province, Vietnam. *European Journal of Tourism Research*, 4(2), 123-146.
- Rosen, E. (2018). *New Rankings Of The World's Fastest-Growing Tourism Destinations*. <https://www.forbes.com/sites/ericrosen/2018/09/06/new-rankings-of-the-worlds-fastest-growing-tourism-destinations/#12f1ee6f57ea>
- Saigoneer. (2018). *Da Lat is going through its own climate change. And greenhouses are to blame*. <https://saigoneer.com/saigon-environment/13723-da-lat-is-going-through-its-own-climate-change-and-greenhouses-are-to-blame>
- Tran, D. (2020). *Đừng gieo rắc tai ương*. <https://nld.com.vn/thoi-su/dung-gieo-rac-tai-uong-20201102224416426.htm>
- Vietnam Briefing. (2019). *Vietnam's Tourism Industry Continues its Growth in 2018*. <https://www.vietnam-briefing.com/news/vietnams-tourism-industry-continues-growth-2018.html/>
- Vietnam National Administration of Tourism. (2015). *Đà Lạt trên con đường thành trung tâm du lịch sinh thái nông nghiệp*. <http://www.vietnamtourism.gov.vn/index.php/items/17245>
- Vietnamplus. (2020). *Xử lý tình trạng ô nhiễm môi trường 'phá vỡ' cảnh quan rừng ở Đà Lạt*. <https://www.vietnamplus.vn/xu-ly-tinh-trang-o-nhiem-moi-truong-pha-vo-canh-quan-rung-o-da-lat/673167.vnp>

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