

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas



Rizza Ramos-Gonzales¹, Dr. Pedrito Jose V. Bermudo²

^{1,2} University of Perpetual Help System Laguna, Binan Laguna, Philippines

ABSTRACT: This descriptive correlational study aimed at determining the viability, prospects and challenges of ecotourism in Lobo, Batangas. It engaged 120 members of the people's organizations involved in ecotourism. Majority of the respondents aged 56 to 59, male, a high school graduate, had been involved in ecotourism business for either 1 to 4 years or 5 to 8 years, and had attended 1 to 2 trainings. The level of viability of ecotourism in Lobo, Batangas was 'very high' with a weighted mean of 3.43. The respondents strongly agreed with a weighted mean of 3.38 to the prospects of growth and development of ecotourism in Lobo, Batangas. Likewise, they agreed with a weighted mean of 3.03 to the myriad of challenges encountered in their involvement in ecotourism. There was a significant difference in their understanding of the viability of ecotourism along marketing aspect, when grouped according to the number of years of involvement in ecotourism and number of trainings attended in ecotourism. The respondents with 5 or more trainings had higher appreciation of the level of viability of ecotourism in the locality than those with 1 to 2 trainings and those with 3 to 4 trainings. Members of the people's organizations recognize the business prospects and abundant opportunities for growth and development for the community and its residents in the ecotourism sites despite the myriad of problems that beset them. Thus, the proposed action plan should be considered by stakeholders in the ecotourism business in Lobo, Batangas.

KEYWORDS: viability, prospects, challenges, ecotourism

INTRODUCTION

The International Union for Conservation of nature defines "ecotourism as the "environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features—both past and present) that promotes conservation, has low visitor impact, and provides for beneficially active socio-economic involvement of local populations" (IUCN, 2018). This means that those who implement and participate in ecotourism activities should follow the following principles: minimize impact, build environmental and cultural awareness and respect, provide positive experiences for both visitors and hosts, provide direct financial benefits for conservation, provide financial benefits and empowerment for local people, and raise sensitivity to host countries' political, environmental, and social climate (TIES, 2019).

A sustainable plan of ecotourism requires a deeper understanding of a locale's viability, prospect and met challenges. This was verified by Yu (2020) who examined Philippines' destinations, its viability and faced challenges before exploring how sustainable ecotourism strategies benefit the Philippines. He then connoted ecotourism as a viable solution to both environmental and economic issues that have plagued the country; but highlighted the need to implement strategies for conservation and further development. Meanwhile, Armando (2017) found out that marineprotected areas in Iloilo have a high level of viability of ecotourism due to being established, developed, and regularly maintained. Hence, its management is required to focus on improving its Information, Education Communication (IEC) activities, monitoring, and evaluation.

In contrast, Brillo (2021) revealed th at Philippines despite being blessed with abundant natural-cultural attractions with excellent prospects for ecotourism development, continue to be left behind in ecotourism development. This is rooted from the fact that its natural resources remain untapped, underdeveloped, arbitrarily governed, and ecologically threatened. This proved the findings of study of Anastacio and Brillo (2020) which claimed that Philippines' ecotourism is exacerbated by absence of sustainability plans and scarcity of scholarly works.

Although, several research emphasized the need for action plans on ecotourism sustainability, current studies are only concerned on the negative impacts of activities on sites and to the local communities of the sites and only limited works have

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

been done to develop sustainable ecotourism indicators (Ebisa et al., 2018). The United Nations World Tourism Organization (UNWTO) then worked with a study on the Sustainable Tourism for Development that will enhance a common understanding and commitment on Sustainable Tourism and will demonstrate how it will serve as a vehicle to foster economic and social growth through achievement of development imperatives and action steps on the negative social, cultural, and environmental impacts. Set criteria can also be used for education and awareness-raising, policy making for businesses and government and non-government agencies, and a measurement and evaluation tool.

Thus, this study endeavored to investigate the level of viability, prospects and challenges met of ecotourism sites in Lobo, Batangas, Accordingly, results of this study could be referred to in framing a sustainable plan on ecotourism. Likewise, it could distinguish research areas and points to ponder for further investigation.

METHODS

The researcher notified the municipal mayor, the Sangguniang Bayan and municipal tourism officer of Lobo, Batangas about her study. Then she secured the permission of the officers and members of the people's organizations that were registered with the Sangguniang Bayan and the Department of Labor. After a brief explanation of her study, she personally administered the questionnaire and retrieved the same. A 100% retrieval of the accomplished questionnaires was realized. Thereafter, the data generated were coded and encoded in Excel format and sent to the statistician for statistical treatment and initial analysis.

The statistical tools used in the treatment of data were frequency count, percentage, weighted mean and ANOVA.

RESULTS AND DISCUSSION

1. The Respondents' Profile

Table 1. Profile of the Respondents

Profile		Frequency	Percentage
Age	Below 30	36	30.00
	40-49	22	18.30
	50-59	39	32.50
	59 and above	23	19.20
Gender	Male	63	52.50
	Female	57	47.50
Educational attainment	Elementary undergraduate	9	7.50
	Elementary graduate	23	19.20
	HS undergraduate	20	17.00
	HS graduate	40	33.00
	College undergraduate	10	8.30
Number of years of involvement in ecotourism	1-4	60	50.00
	5-8	60	50.00
Number of trainings attended in ecotourism	1-2	45	37.50
	3-4	44	36.70
	5 and above	31	25.80
Number of respondents = 120			

Shown in Table 1 is the profile of the 120 respondents in the study. *Age*: 39 or 32.50 percent were 56 to 59 years old; 36 or 30.00 percent were below 30 years of age; 23 or 19.20 percent were 59 years old and above; and 22 or 18.30 percent were between 40 and 49 years old. *Gender*: 63 or 52.50 percent were male and 57 or 47.50 percent were female. *Educational attainment*: 40 or 33.00 percent finished their high school education; 23 or 19.20 percent were elementary graduates; 20 or 17.00 percent were high school undergraduates; 18 or 15.00 percent were college graduates; 10 or 8.30 percent college undergraduates; and 9 or

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

7.70 percent did not finish elementary education. *Number of years of involvement in ecotourism:* 60 of 50.00 percent of the respondents had been involved in ecotourism for 1 to 4 years, while the other 60 respondents or 50 percent for 5 to 8 years. *Number of trainings attended in ecotourism:* 45 or 37.50 percent had attended 1 to 2 trainings in ecotourism; 44 or 36.70 percent had 3 to 4 trainings; and 31 or 25.80 percent had 5 or more trainings in ecotourism.

A typical respondent in this study is aged 56 to 59, male, a high school graduate, has been involved in the business of ecotourism for either 1 to 4 years or 5 to 8 years, and has attended 1 to 2 trainings in ecotourism as of this study.

2. Viability of Ecotourism in Lobo, Batangas

Table 2. Level of Viability of Ecotourism in Lobo, Batangas as perceived by the Respondents

Indicators	Weighted Mean	Verbal Interpretation	Rank
Market			
1. The ecotourism sites attract a high number of tourists.	3.75	Very High	1
2. Stakeholders promote the conservation of natural resources.	3.63	Very High	2
3. The community ensures the preservation of the endemic culture in the locality.	3.44	Very High	4
4. A number of ecotourism establishments have increased.	3.47	Very High	3
Average	3.57	Very High	1
Economic			
1. A clear improvement in life and livelihood of the community is felt.	3.38	Very High	3
2. Ecotourism has brought benefits to the community.	3.53	Very High	1
3. Governmental support to ecotourism in the locality is visible.	3.47	Very High	2
4. Quality ecotourism products have emerged in the local market.	3.20	High	4
Average	3.39	Very High	2
Financial			
1. Investors in ecotourism-related activities have realized returns in their investment.	3.10	High	2
2. Local bookings for nature tours were high prior to the pandemic.	3.53	Very High	1
Average	3.31	Very High	3
Overall Weighted Mean	3.43	Very High	

As presented in Table 2, the level of viability of ecotourism in Lobo, Batangas is 'very high' with an overall weighted mean of 3.43 along marketing, economic and financial aspects. This means the ecotourism business in Lobo, Batangas has the potentials to survive, grow and continue to be successful with all the stakeholders in it responsibly contributing its share to ensure its sustainability.

Market Viability

As indicated, the market viability is 'very high' with an average weighted mean of 3.57. The respondents rated all its indicators very high with weighted means ranging of 3.44 to 3.75 as the ecotourism sites attract a high number of tourists (Rank 1), stakeholders promote the conservation of natural resources (Rank 2), a number of ecotourism establishments have increased (Rank 3), and the community ensures the preservation of the endemic culture in the locality (Rank 4).

This finding finds support in the study of Hassan (2019) at the World Heritage Site (WHS) of Morten village, Melaka, Malaysia from the beginning of September 2016 to the end of January 2017. It was noted that the respondents realized the impacts that community-based-tourism (CBT) had produced in respect of the destination. Concerning the economic impacts, with the

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

exception of the tourists, all of the respondents confirmed the positive role played by CBT in producing economic benefits for the village and local area. However, it was suggested that in order for CBT to be sustainable, the concerns of every stakeholder need to be considered, especially with regard to the cultural and authenticity impacts. The stakeholders should be encouraged to not only enjoy participating in sharing the economic benefits of tourism but also to have the opportunity to preserve the culture and heritage. Magio, Arguelles and Guillen (2017) found that ecotourism can generate significant economic benefits to the local communities and encourage their participation in conservation initiatives avoiding environmentally harmful practices. It was also found that direct economic incentives are not the only factors that influence attitudes and practices towards conservation. It is recommended to consider ecotourism as only one of the strategies within a broader plan that seeks to integrate conservation and socioeconomic development.

Murungi, Mbugua and Gitonga (2020) determined the factors influencing sustainability of community-based ecotourism development projects in Kenya, specifically Northern Rangeland Trust Conservancy in Meru County. The study findings revealed that community participation influences the sustainability of community-based ecotourism projects in Meru County very greatly; that networking with tourism expertise and facilitating links to market influence sustainability of community-based ecotourism projects in Meru County to a great extent; and that transparent management of financial resources affect sustainability of communitybased ecotourism projects in Meru County to a very great extent. It was concluded that community participation had the greatest influence on sustainability of community-based ecotourism development projects in Meru County, followed by financial viability, then stakeholders' collaborations. According to DLA Piper (2018), the Global Challenge of Delivering Community Benefits from Ecotourism, Case Studies from Ecuador 1 found that many of the community-based tourism enterprise (CBTE) projects started by donors and run by NGOs in Ecuador did not have a proper demand-driven approach to development and were not integrated into the existing, local tourism supply chain. This rendered many small communities without the capability to enlist a market and make their projects viable. However, the study showed that with proper efforts to plan community-based tourism (CBT) projects like micro or small businesses and with efforts to link them to the local tourism industry, it was highly likely that more would succeed. CBTEs are of interest to the sustainable development community, because they are small, medium and micro-enterprises that can generate a variety of positive social and economic development impacts in highly rural, biodiverse areas.

Economic Viability

In terms of the economic viability, it is 'very high' with an average weighted mean of 3.39. Specifically, the respondents rated 'very high' indicator #2 – Ecotourism has brought benefits to the community with a weighted mean of 3.53 (Rank 1), indicator #3 – Governmental support to ecotourism in the locality is visible with a weighted mean of 3.47 (Rank 2), and indicator #1 – A clear improvement in life and livelihood of the community is felt with a weighted mean of 3.38 (Rank 3). However, indicator #4 – Quality ecotourism products have emerged in the local market was rated 'high' with a weighted mean of 3.20 (Rank 4).

This finding confirms the study of Anup (2017), who stated that ecotourism had more beneficial impacts compared to adverse impacts on the environment, society and culture. It emphasizes the protection of natural resources, biological diversity and sustainability of resource. It increases mobility of people, social stability and harmony; strengthen traditional culture, hospitality and folkway; and decreases political conflicts. Economic benefits from ecotourism include direct employment in hotels, lodges, tourist restaurants, and tourist chauffeuring. It is an integral part of the master development strategy of a developing nation. In the early stage of ecotourism development, it is difficult to have adequate private agencies and local people involved in delivering lodging, foods, tour management and tourism activities during peak visitation season. Hence, there is need of training on nature guiding, cooking, sustainable use of tourism resources, proper handling of tourism demands, expertise in park management and finance management. Magio and Valdez (2019) found in their study on ecotourism as a strategy for conservation and sustainable development in Biosphere Reserves that ecotourism has potential for generating significant economic benefits to the local communities and for encouraging their participation in conservation initiatives. However, they also observed that direct economic incentives are not sufficient to change residents' attitudes and practices in favor of conservation. Karmini (2020), in a study on ecotourism management based on local wisdom in Tenganan Village, Karangasem Bali, found that the local wisdom owned by indigenous people in Tenganan Village was in the written customary law, namely awig-awig which is used to preserve local tourism forests by not damaging the potential of flora and fauna at forest, and utilizing forest products in an adaptive manner. The implementation of awig-awig in the tourism forests management had positive implications for the diversity of spatial planning and the Tenganan forest preservation. Second, ecotourism management accompanied by efforts to preserve local village forests was able to support the sustainable tourism, namely development that ensured economic sustainability, ecological sustainability, and the socio-cultural viability of the local community.

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

Financial Viability

Finally, financial viability is 'very high' with an average weighted mean of 3.31. The respondents rated indicator #2 - Local bookings for nature tours were high prior to the pandemic 'very high' with a weighted mean of 3.53 (Rank 1) and indicator #1 - Investors in ecotourism-related activities have realized returns in their investment 'high' with a weighted mean of 3.10 (Rank 2).

The study's finding on the investors' high ROI is related to the study of Salera et al. (2019) on the economic viability of the community-based homestay service as a livelihood project of the Dumagats who are native residents of Daraitan. The main service of the project is to provide accommodation and campsite for tourists who usually go for trekking at Mt. Daraitan. The results showed that the financial assessment of the homestay service yielded an average of 27.25% return on sales; 85.4% gross profit ratio, and 79.37% return on capital. A portion of the profit will be appropriated for charitable purposes.

Financial viability is crucial for public nature-based attractions, especially in the context where many are seeking to transform their business model and goals in order to survive because of the heavy hit by COVID-19 and pressure from Chinese central government policies to lower entrance fees in state-owned attractions. A case study of Shanghai Sheshan National Forest Park (SNFP) tested the framework "resource–function–transformation–cost" and revealed that (a) transformation happened because of the recombination of resources, followed by the change of functions, leading to capital expenditure being more prominent during the early stages and management costs more so in the latter stage. It was concluded that the elasticity of the cost structure, which measures the responsiveness of total cost to changes in output is low; (b) the structure of functions tended to be stable over the years; and (c) the cost structure of the management, production and business, and tourism and leisure functions did not change much, while that of ecological protection functions changed significantly from capital expenditure to management costs (Liu, Li, Sigley, and Quan, 2021).

Moving on, Müllera, Hucka and Markovab (2020) stated that the oftenmissing financial sustainability in community-based tourism (CBT) in Cambodia frequently happens due to a lack of management skills and a lack of knowledge of pricing in the communities. Their paper contributed to the discussion by examining the willingness to pay of different target groups (i.e., locals, expatriates, and international tourists), and presents two arguments in support of a stronger emphasis of the local and, especially, the expatriate market, expatriates display significantly higher willingness to pay than international tourists, and, secondly, expatriate support allows CBT sites to build an understanding of potential customers' needs, thereby supporting a more organic and sustainable growth.

3. Prospects of Ecotourism in Lobo, Batangas

Table 3. Prospects of Ecotourism in Lobo, Batangas as assessed by the Respondents

Indicators	Weighted Mean	Verbal Interpretation	Rank
The ecotourism in Lobo, Batangas			
1. opens opportunities for local business in the community (i.e., local products, delicacies, souvenirs).	3.26	Strongly Agree	9.5
2. provides alternative source of livelihood for the community people.	3.31	Strongly Agree	7
3. nurtures the entrepreneurial culture among community residents (pasalubong store, establishment of cooperatives).	3.33	Strongly Agree	6
4. promotes women employment or livelihood	3.28	Strongly Agree	8
5. develops/improves transport sector	3.26	Strongly Agree	9.5
6. promotes eco-friendly initiatives such as use of biodegradable products.	3.40	Strongly Agree	5
7. encourages public-private partnership for sustainable nature tourism	3.42	Strongly Agree	4
8. creates employment opportunities	3.48	Strongly Agree	2
9. promotes conservation of wildlife	3.56	Strongly Agree	1

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

tributes to the economic development of the locality.	3.47	Strongly Agree	3
Average	3.38	Strongly Agree	

As indicated in Table 3, the respondents 'strongly agree' with an average weighted mean of 3.38 to the development prospects of ecotourism in Lobo, Batangas. This means that the members of the people's organizations in the locality, who are involved in ecotourism, realized the abundant opportunities for growth and development for the community and its residents in the ecotourism sites.

Emphatically, they 'strongly agree' with weighted means ranging from 3.26 to 3.56 that promotes conservation of wildlife (Rank 1), creates employment opportunities (Rank 2), contributes to the economic development of the locality (Rank 3), engenders public-private partnership for sustainable nature tourism (Rank 4), and promotes eco-friendly initiatives such as use of biodegradable products (Rank 5). Notably, conservation of wildlife was paramount in their minds for sustainable tourism or ecotourism.

Further, the respondents 'strongly agree' that ecotourism in Lobo, Batangas nurtures the entrepreneurial culture among community residents (pasalubong store, establishment of cooperatives) (Rank 6), provides alternative source of livelihood for the community people (Rank 7), supplements women employment or livelihood (Rank 8), and opens opportunities for local business in the community (i.e., local products, delicacies, souvenirs) and develops/improves transport sector (Rank 9.5).

This finding is buttressed by the following studies: The Philippines is rich in natural-cultural attractions with excellent prospects for ecotourism development. Brillo's study (2021) explored the prospects of establishing ecotourism at the municipal level by investigating the experiences of two sites: Pandin Lake of San Pablo City and Tayak Hill of Rizal Municipality, both in Laguna province of the Philippines. In Pandin Lake, the ecotourism development is a locally driven and nongovernmental organization-inspired initiative, and in Tayak Hill, it is a top-down driven endeavor where the initiatives are primarily personal actions of the local executives. According to Brillo, in Pandin Lake, the initiating conditions in the development of Pandin Lake were: the awareness brought about by the save Sampaloc Lake movement; the constraint to aquaculture expansion; the scenic natural beauty of the small lake; and the lack of development-oriented actions by its administrative agencies. Whereas, in Tayak Hill the triggering situations consisted of: the urgent need for instituting a promotional identity for the town and a catalyst for the local socioeconomic development; the advent of a new local government administration that is open to novel development strategies; and the discovery of Tayak Hill as a historical landmark.

Various destinations in Batangas have showed prospects on ecotourism. As an eco-friendly destination, it evidently has admirable seascape, inland water, and majestic Taal Volcano. Moreover, it is rich in culture, heritage, and historical evidence. It also has pleasantly built environment, friendly local people, various local transport type, and personal safety and security. Apritado and Borbon (2021) recommended that the management should focus on developing new facilities, improving existing tourist activities, and investing on providing new trends in tourists activities.

Serebryakova, Dorohova, and Isaenko (2021) discussed the potential for the development of eco-tourism in Russia, which has many natural objects of interest to tourists. But a number of factors hinder the development of this type of tourism such as insignificant information support and promotion of Russia as a place suitable for tourist recreation, including nature-oriented, in foreign markets; unfavorable visa regime for tourists, which makes it much more difficult for foreign citizens to visit Russia; undeveloped tourist infrastructure; low level of service, mismatch of prices for offered tourist goods and services to their quality; low level of development of transport infrastructure, high degree of deterioration of the transport base and lack of comfortable tourist vehicles.

In spite of picturesque landscapes, natural beauties and authentic traditional lifestyles to be seen in East Kazakhstan, tourism is far from being developed. The study of Chlachula et al. (2020) presents a roster of geo-tourism and ecotourism loci for the broader Altai area within a framework of sustainable development. Prospects for travel to these places are enhanced by the presence of numerous prehistoric archaeological sites and historical monuments, which document the rich, multi-ethnic background of Kazakhstan and the ancient Silk Road that traverses it. These geological, environmental and cultural resources, and the regional geo-heritage and environmental conservation concepts have been figured into strategies for economic growth of rural Kazakhstan.

Ramaano (2021) evaluated the prospects of using ecotourism industry to advance community livelihoods in Musina Municipality, Limpopo, South Africa. The findings confirmed substantial ecotourism potential of the Musina Municipality and that this potential is manifest irrespective of geographic and demographic factors. However, it was revealed that there was a low current ecotourism impact in the Musina Municipality with consequential minimal benefits accruing to the enhancement of the

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

standard of living in the local community. This situation was attributed to the lack of a well-articulated tourism strategy linked to the sustainable economic development of the communities involved.

Das (2021) observed that ecotourism has a significant role in community development in the host areas through alternative but sustainable livelihood. In Darjeeling and Kalimpong districts of West Bengal, ecotourism is still a community-based activity which involves local people and their culture. Most of the ecotourism sites in this part of West Bengal are within forest and hilly tract. Here growth of ecotourism has been phenomenal during the last decades with the influx of tourists that boosted the local economy. Sillery Gaon, a small village, in 'Silk Route Circuit' of West Bengal, is a new addition to it and a perfect example of this scenario. It is situated in Kashyone, gram panchayat of Kalimpong District. This pictorial village is surrounded with the dense forest of Pankhasari range and blessed with the panoramic view of Tista River and Kanchenjunga. In the last ten years, the villagers have developed ecotourism facilities and activities which transformed their traditional agrarian economy to tourism-based livelihood.

4. Challenges met by Respondents in the Involvement in Ecotourism

Table 4. Challenges Met by the Respondents in their Involvement in Ecotourism in Lobo, Batangas

Indicators	Weighted Mean	Verbal Interpretation	Rank
of eco-friendly infrastructure and facilities	3.03	Agree	5
of capacity building of organizational members towards sustainable development	3.09	Agree	2
tors' lack of knowledge on environmental protection and conservation	3.01	Agree	6.5
4. Poor promotional marketing/strategies	3.04	Agree	4
aintenance fund for infrastructure and facilities is insufficient	3.14	Agree	1
6. Lack of ecotourism plan and strategy	2.96	Agree	10
efficient training on business management	2.98	Agree	9
ds for other business opportunities are not available	3.08	Agree	3
erly trained personnel/staff are scarce.	3.01	Agree	6.5
urist guides' lack of information on sites and history.	2.99	Agree	8
Average	3.03	Agree	

As seen in Table 4, the respondents confirmed by 'agreeing' with an average weighted mean of 3.03 to the challenges encountered in their involvement in ecotourism in Lobo, Batangas. This implies that that the members of the people's organizations were beset by a myriad of problems involving physical, human and financial infrastructures, etc. that could hinder growth and development in ecotourism if left unsolved or disregarded. Specifically, they 'agreed' with weighted means ranging from 2.96 to 3.14 to the following challenges: maintenance fund for infrastructure and facilities is insufficient (Rank 1); lack of capacity building of organizational members towards sustainable development (Rank 2); funds for other business opportunities are not available (Rank 3); poor promotional marketing/strategies (Rank 4); lack of eco-friendly infrastructure and facilities (Rank 5); visitors' lack of knowledge on environmental protection and conservation and properly trained personnel/staff are scarce (Rank 6.5); tourist guides' of lack information on sites and history (Rank 8); insufficient training on business management (Rank 9); and lack of ecotourism plan and strategy (Rank 10).

The findings on the challenges encountered by the respondents in their involvement in ecotourism in Lobo, Batangas were more or less similar to the challenges expounded in the succeeding studies: Mnini and Ramoroka (2020) investigated the challenges of ecotourism towards poverty alleviation. Ecotourism is believed to be associated with various challenges which are environmental deterioration, inability to contribute to local economy as, well as cultural exploitation and deterioration. Regardless

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

of the challenges ecotourism has, the paper concluded that ecotourism positively contributes towards poverty alleviation in South Africa.

The study of Kunjuraman (2021) on local community participation challenges in community-based ecotourism development in Sabah, Malaysian Borneo discovered that local communities' challenges in ecotourism development are manifold, thematically categorized into internal and external challenges. The study advised that ecotourism development in Sabah, Malaysia will be in danger, if it fails to emphasize the local community participation and their aspirations, thus weakening the sustainability. The study proposes that stakeholder approach be taken as a remedy to overcome the challenges faced by the local communities in ecotourism in the study site.

Petros and Firew (2020) determined the opportunities and challenges for ecotourism development in the Dilla University Botanical and Ecotourism Garden. The results revealed that low level community benefit, inadequate community participation, absence of ecotourism plan and unsustainable use of resources were the major challenges of ecotourism development in the garden. It also identified absence of sufficient accommodation and lack of local guides as first and second facility problems in the garden. To address the different problems and implement an integrated ecotourism development approach, involving communities and enhancing their role has been recommended as the key component of ecotourism development in the area.

Wondirad's study (2020) systematically determined the challenges and opportunities of ecotourism development in Wondo Genet and its vicinity, Southern Ethiopia. The research findings unfolded several constraints, i.e., budget and human resource, etc., that deter successful ecotourism development along with opportunities that can be used in future development in Wondo Genet and its vicinity, as the area is known for its natural and cultural resources. The findings offer substantive insights to policymakers, private investors and local communities about the existing challenges and opportunities of ecotourism development in the context of emerging destinations.

Ezequias (2020) presented the challenges of ecotourism in Angola in the face of the new trend of sustainable development, taking into account endogenous and exogenous conditions. The qualitative study allowed the identification of natural, mineral and cultural potential favorable to the sector, but also challenges such as the lack of economic and social infrastructure, training, high prices and credits, the overcoming of which will foster ecotourism in the country.

A case study was conducted by Mondino and Beery (2019) to understand the many challenges ecotourism faces despite its role in sustainable development in the Monviso Transboundary Biosphere Reserve, Italy. Study results showed that ecotourism had some positive effects, such as the creation of a network for collaboration between various stakeholders. However, negative perceptions still play an inhibiting role such as the lack of proper environmental education.

5. Difference in the Respondents' Perception of Viability of Ecotourism

Table 5. Difference in the Level of Viability of Ecotourism in Lobo, Batangas as Perceived by the Respondents when grouped according to Profile Variables

Profile		Marketing	Economic	Financial	Overall
Age	Below 30	(F-test) F = 1.588 p= 0.196	F = 0.702 p= 0.553	F = 0.035 p= 0.991	F = 0.415 p= 0.743
	40-49				
	50-59				
	59 and above				
Gender	Male	(t-test) t = 0.537 p = 0.593	t = 0.397 p = 0.692	t = 0.992 p = 0.323	t = 0.838 p = 0.404
	Female				
Educational attainment	Elementary undergraduate	(Kruskal-Wallis test) x ² = 5.188 p = 0.393	x ² = 5.897 p = 0.316	x ² = 3.043 p = 0.693	x ² = 5.446 p = 0.364
	Elementary graduate				
	HS undergraduate				
	HS graduate				
	College undergraduate				
	College graduate				
	1-4	(t-test)		t = -1.805	t = -0.140

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

Number of years of involvement in ecotourism	5-8	$x_{1-4} = 3.65$ $x_{5-8} = 3.50$ $t = 2.184$ $p = 0.031^*$	$t = 0.214$ $p = 0.831$	$p = 0.074$	$p = 0.889$
Number of trainings attended in ecotourism	1-2	(F-test)	$F = 0.740$ $p = 0.479$	$F = 0.289$ $p = 0.750$	$F = 1.391$ $p = 0.253$
	3-4	$x_{1-2} = 3.63$ $x_{3-4} = 3.46$			
	5 and above	$x_{5\text{-above}} = 3.65$ $F = 3.331$ $p = 0.039^*$			
*Significant @ 0.05					

As reflected in Table 5, there was no significant difference in the respondents' perception of the level of viability of ecotourism along marketing economic and financial aspects in Lobo, Batangas, when grouped according to age ($F = 0.415$; $p = 0.743 > 0.05$); gender ($t = 0.838$; $p = 0.404 > 0.05$); and educational attainment ($\chi^2 = 5.446$; $p = 0.364 > 0.05$). This means that the level of viability of ecotourism based on their own understanding of the phenomenon was not dependent on whether he or she was younger or older, whether he or she was a male or female, and whether he or she was an elementary, high school or college graduate.

However, a significant difference was noted in the respondents' perception of the level of viability of ecotourism along marketing aspect in Lobo, Batangas, when grouped according to the number of years of involvement in ecotourism ($t = 2.184$; $p = 0.031 < 0.05$) and number of trainings attended in ecotourism ($F = 3.331$; $p = 0.039 < 0.05$). This implies that the respondents with 1 to 4 years of involvement in ecotourism ($x_{1-4} = 3.65$) had higher appreciation of the level of viability of ecotourism in Lobo, Batangas than those with 5 to 8 years of involvement ($x_{5-8} = 3.50$). This could further mean that those who were relatively new in ecotourism business were either earning profitably or simply recognized the opportunities to earn and succeed. Further, the respondents with 5 or more trainings attended in ecotourism ($x_{5\text{-above}} = 3.65$) had higher appreciation of the level of viability of ecotourism in the locality than those with 1 to 2 trainings ($x_{1-2} = 3.63$) and those with 3 to 4 trainings ($x_{3-4} = 3.46$). This could mean that the more trainings they attended, the more opportunities given them to widen their business horizons while interacting with various resource persons and benchmarking with their fellow trainees or attendees.

Generally, the respondents' perception of the viability of ecotourism in Lobo, Batangas was similar. Such finding is corroborated by Hassan's (2019) critical analysis of stakeholders' perceptions of community-based tourism (CBT) impacts in World Heritage Sites (WHS) which analyzed, among others, the stakeholders' perceptions concerning the economic, environmental and socio-cultural impacts of CBT. It was revealed that the respondents were found to clearly realize the impacts that CBT had produced in respect of the destination. Concerning the economic impacts, with the exception of the tourists, all of the respondents confirmed the positive role played by CBT in producing economic benefits for the village and local area.

However, in Collado's study (2019), when grouped according to province, there was a significant difference in the respondents' perceived impacts of river-based tourism destinations in Panay Island in terms of economic viability, socio-cultural equity, and environmental conservation. The author's study aimed to determine the impacts of river-based tourism destinations sustainability of Panay Island in terms of economic viability, socio-cultural equity, and environmental conservation. Results revealed from across four provinces, river-based tourism destinations in Panay Island have high economic, socio-cultural, and environmental significance among its stakeholders. When rank in terms of the sustainability indicators, data showed that the most favored response in the economic viability was to "create income opportunity". Likewise, Mejere et al. (2022) found a significant difference on their respondents' perceived viability of tourism in Baltic Sea Countries when grouped according to their age. Further, young people tend to be indifferent to tourism policies and benefits, are neutral in addressing environmental sustainability issues, and are skeptical on the development of sustainable tourism. Socio-economic type which comprises 71.5% of young people is more focused on the long-term socio-economic wellbeing of the destinations which for them can be achieved through efficient management, tourism planning, and active participated on the implement tourism policies. This was corroborated by Gkoumas (2019) who connoted tourism as a multi-actor field as people have their own interests, espouse certain views, and have varying degrees of the influence of policies. For instance, hoteliers, restaurateurs, and bar owners claimed Mediterranean Standard for Sustainable Tourism (MESST) as a viable tool for enterprises to put sustainability into action; while

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

tourism professionals negate them as absence of follow-up activities, limited use of networking and its inability to obtain national recognition led to poor applicability of standard.

6. Difference in the Prospects of Ecotourism as Assessed by the Respondents

As shown in Table 6, no significant difference was noted in the prospects of ecotourism in Lobo, Batangas as assessed by the respondents when grouped according to age ($F = 0.404$; $p = 0.750 > 0.05$), gender ($t = 0.224$; $p = 0.823 > 0.05$), educational attainment ($\chi^2 = 10.213$; $p = 0.069 > 0.05$), number of years involvement in ecotourism ($t = 1.316$; $p = 0.191 > 0.05$), and number of trainings attended in ecotourism ($F = 2.227$; $p = 0.112 > 0.05$).

Table 6. Difference in the Prospects of Ecotourism in Lobo, Batangas as assessed by the Respondents when grouped according to Profile Variables

Profile	Test statistic	p-value	Interpretation
Age	$F = 0.404$	0.750	Not Significant
Gender	$t = 0.224$	0.823	Not Significant
Educational attainment	$\chi^2 = 10.213$	0.069	Not Significant
Number of years of involvement in ecotourism	$t = 1.316$	0.191	Not Significant
Number of trainings attended in ecotourism	$F = 2.227$	0.112	Not Significant
Significance level @ 0.05			

This means that regardless of their profile variables, they all similarly strongly agreed to the prospects and opportunities of ecotourism in their place that are waiting for them to study and explore with the support of national and local government units, non-government organizations and together with local initiatives.

This finding, which shows the respondents' unanimity in their assessment of the prospects and opportunities of ecotourism in Lobo, Batangas, deviates from the findings of Chen et al. (2020), which analyzed the heterogeneity of different groups, including the differences between local people and tourists, different occupational groups and groups with different educational levels, thus clarifying the problems existing in the development of marine park ecotourism, and providing reference for the further development and management of the marine park.

The results show that Dongshan Island has a good carrying capacity and a certain level of tourism development foundation, which can provide opportunities for mass tourists to participate in ecotourism. However, weak environmental awareness of Dongshan Island residents will become an important obstacle to the island's ecotourism development. Barnes and Sutcliffe (2018) noted the perceived diverse prospects of ecotourism in Hawaii. For some, only environmentally minded people will be attracted to cage free shark diving ecotourism program and their participation will not lead to meaningful conservation gains. On the other hand, tour participants who have knowledge on the ecological role of sharks negate this premise. Sarpong, Blankson and Britwum (2018) brought to the fore issues on residents' views on the benefits and costs of ecotourism projects at Bobiri Forest and Butterfly Sanctuary in Ghana. Their study revealed that socio-demographic characteristics, native status, place of residence and length of stay influence residents' perceptions of tourism. Statistically a significant difference was found between place of residence and economic, socio-cultural and environmental impacts of tourism. It was concluded that for the goal of ecotourism development to be achieved, there is the need for residents' views on the project to be considered and thereby involving residents in ecotourism development.

Le et al. (2021) studied the key factors that affect tourists' awareness and perception of entomological ecotourism based on their demographic profiles. Results showed little difference in perception and awareness between Malaysian and NonMalaysian respondents. Respondents also show three main factors, such as 'Knowledge', 'Experience' and 'Appearance' that may cause different perceptions of insects other than their cultural background. Though there are no significant differences between the respondents' perceptions of insects, there are still some items among the respondents' perceptions need to be considered. These items include the respondents' perspective on diversity, behaviors, life cycle, and insects' appearance. Additionally, Nigatu and Tegegne (2021) concluded significant difference on respondents perceived prospect of ecotourism on the conserved forest of Ethiopia. They have considered the areas as factors on perceiving potential for outdoor recreation. Consequently, education also influence the diverse perspective as 92.9% of high school completers who have limited knowledge on ecotourism and outdoor recreation perceived no prospect of tourism in the place; while, 86.7% of college graduates and 92.9%

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

proved the contradictory. The local communities either have positive and negative perception towards outdoor recreation and ecotourism.

7. Difference in the Challenges met by the Respondents in their involvement in ecotourism in Lobo, Batangas

Table 7. Difference in the Challenges Met by the Respondents in their Involvement in ecotourism in Lobo, Batangas when grouped according to Profile Variables

Profile	Test statistic	p-value	Interpretation
Age	F = 0.398	0.755	Not Significant
Gender	t= -0.286	0.775	Not Significant
Educational attainment	$\chi^2 = 2.941$	0.709	Not Significant
Number of years of involvement in ecotourism	t = 0.966	0.336	Not Significant
Number of trainings attended in ecotourism	F = 0.216	0.806	Not Significant
Significance level @ 0.05			

As seen in Table 7, there was no significant difference in the challenges encountered by the respondents in their involvement in ecotourism in their own town when grouped according to age ($F = 0.398$; $p = 0.755 > 0.05$), gender ($t = 0.286$; $p = 0.775 > 0.05$), educational attainment ($\chi^2 = 2.941$; $p = 0.709 > 0.05$), number of years involvement in ecotourism ($t = 0.966$; $p = 0.336 > 0.05$), and number of trainings attended in ecotourism ($F = 0.216$; $p = 0.806 > 0.05$). This means that regardless of their profile variables, they all uniformly agreed to the various challenges they encountered in their involvement in ecotourism in their locality. Such challenges, problems or difficulties, however, were perceived to be surmountable with the support of national and local government units and non-government organizations, and the steady stream of domestic and international tourists and visitors in the new normal bringing revenues to the local government unit and to the community and local enterprises.

This finding on the common challenges encountered by the respondents in their involvement in the ecotourism in Lobo, Batangas, differs from the study conducted by Joushi and Poudel (2020), which revealed a significant difference on the perceived challenges met by ecotourism. In fact, their respondents who are found to be mostly high school graduates, age around 35 – 45 years, and with a few involvement agriculture activities, perceived that lack of transportation and ineffective communication strategies limit the promotion of ecotourism in the area. Those who stayed longer in the area observed the declining number of tourists year by year due to the unstable condition of the country and lack of promotion. Meanwhile, younger respondents saw the increase of domestic tourists because of trekking, trainings, and tours. Likewise, Lee' study (2022) quantified and revealed the diverse perception between the majority and minority of places where there is severe conflict. In fact, Korean public officials and tour guides seek for the establishment of a river-centered tourism plan, while residents and environmental groups prayed for the implementation of a conservation plan thru farming in the outskirts of the river. Moreover, Lellotery, Hitipeuw and Sahureka (2020) determined the strategy of developing ecotourism based on community participation and stakeholder involvement. FGD was conducted to get the same perception between the community and stakeholders. The findings revealed that community perception shows that 83.3% of respondents agreed to develop ecotourism activities and *community participation* related to tourism activity planning, implementation of activities and development of tourism facilities supported by *tourism stakeholders* such as local governments and NGOs. In addition, Xiaboa and Xiaoying (2020) found in their study challenges that are common in most countries. In Liaoning Province, China, there were two kinds of obstacles to the sustainable development of ecotourism in nature reserves. The first group of obstacles all represent common problems in China including: (1) environmental education is ignored; (2) community participation occurs on an ad hoc basis; (3) tourism management is not rigorous; (4) nature reserve administration is in a state of confrontation with local governments and residents. The second group of obstacles consists of specific problems faced by ecotourism in the three nature reserves, each of which has its own natural, social, cultural and economic environment that generate unique difficulties for ecotourism

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

8. Action Plan

PROPOSED ACTION PLAN FOR SUSTAINABLE ECOTOURISM IN LOBO, BATANGAS

Area Thrust	Objectives	Strategies	Time Frame	Persons Involved	Sources of Funds	Budget (Php)	Success Indicator
Infrastructure and Facilities Development/ Maintenance Fund	<p>To improve the infrastructure (roads/ tourist routes) and facilities to attract more visitors and promote eco-friendly tourism sites</p> <p>To provide fund for the maintenance of infrastructure/ facilities</p>	<p>Request fund from Local Government Office (LGU), NonGovernment Units (NGOs), Environmental Organization</p> <p>Allocate fund from the organization's income</p>	As the need arises	Government Officials / Organizational Member and Officers /	<p>Approved Fund from LGU, NGO, and environmental organization</p> <p>Allocated fund of the organization</p>	1 Million	Improved and well maintained infrastructure and facilities
Capacity Building / Personnel Training	<p>To strengthen the capacity building of the organizational members to promote sustainable development</p> <p>To train personnel</p>	<p>Workshop Seminar and Training Need Assessment</p> <p>Collaboration with National & Local Tourism Office</p>	Year round	<p>Organizational Members DENR/ DA/ Tourism Office/LGU, NGO</p> <p>Tourism Office/NGO LGU</p>	<p>Allocated Fund from Tourism Office Training provided by Bantayan Kalikasan Foundation</p>	200,000	<p>Strengthened capacity building of the organizational members</p> <p>Well trained personnel</p>

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

Visitor's Knowledge on Environmental Protection and Conservation	To provide the visitors knowledge on environmental protection and conservation	Orientation on waste management and protection of wildlife	Upon arrival	Tourism Office / Organizational Members / Visitors	N/A	N/A	Well oriented visitors
Ecotourism Planning / Marketing Strategy	To adopt a marketing strategy that will help attract more tourists and promote tourism sites and products To develop ecotourism plan to increase the income of the organization	Create social media sites, and channel Produce campaign materials/ advertisement Collaboration with LGU and Tourism Office	Periodically Every five years	Visitors / Organizational Officers & Members / Tourism Office / LGU / Commercial Establishment Tourism Office/NGO/LGU	Allocated Fund from organization and LGU	250,000	Ecotourism Plan / Well promoted sites
Training on Business Management Skills	To develop skills needed in managing ecotourism business	Training on business management, such as Financial management training, e.g. Budget allocation, Market planning	Year round	Sponsoring Agency/ Tourism Office NGO/LGU	Allocated Funds from LGU and Tourism Office	100,000	Well trained Ecotourism Business Managers
Environmental Information Campaign	To provide the tour guides with the knowledge on history of the	Training on environmental information campaign	Year round	Sponsoring Agency/ Tourism Office/NGO/LGU	Allocated fund of the organization and NGO	100,000	Knowledgeable tour guides

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

	locale/site and environmental protection						
Local Business Opportunities	To create more local businesses/enterprises that will offer further employment opportunities	Partnership with NGO and private organization Seek investment from potential investors/capitalists	As the need arises	Tourism Office/NGO/LGU	Investment/Capital from individual/private sector	N/A	More local businesses
Entrepreneurial Culture	To develop entrepreneurial culture among community residents	To establish cooperative and <i>pasalubong</i> store	N/A	Tourism Office/PO's	Equity capital from the members of the organization	N/A	Well developed entrepreneurial culture
Private and public partnership	To establish private and public partnership with agencies that will provide services for sustainable operations	Partnership with public and private agencies	As the need arises	Tourism Office/Private Agencies	Allocated fund and/or services by the private agencies	N/A	Established private and public partnership

CONCLUSIONS

Based on the findings of the study, the following conclusions were drawn: (1) A typical respondent in this study is aged 56 to 59, male, a high school graduate, has been involved in the business of ecotourism for either 1 to 4 years or 5 to 8 years, and has attended 1 to 2 trainings in ecotourism as of this study. (2) The ecotourism business in Lobo, Batangas has the potentials to survive, grow and continue to be successful with all the stakeholders in it responsibly contributing its share to ensure its sustainability. (3) The members of the people's organizations in the locality who are involved in ecotourism recognize the business prospects and abundant opportunities for growth and development for the community and its residents in the ecotourism sites. (4) The members of the people's organizations are beset by a myriad of problems involving physical, human and financial infrastructures, etc. that could hinder growth and development in ecotourism if left unsolved or disregarded. (5) The respondents' perception of the level of viability of ecotourism based on their own understanding of the phenomenon is not dependent on whether he or she was younger or older, whether he or she was a male or female, and whether he or she was an elementary, high school or college graduate. The respondents with 1 to 4 years of involvement in ecotourism ($x_{1-4} = 3.65$) have higher appreciation of the level of viability of ecotourism in Lobo, Batangas than those with 5 to 8 years of involvement ($x_{5-8} = 3.50$). The more trainings the respondents attend, the more opportunities given them to widen their business horizons while interacting with various resource persons and benchmarking with their fellow trainees or attendees. (6) Regardless of their profile variables, they all similarly strongly agree to the prospects and opportunities of ecotourism in their place that are waiting for them to study and explore with

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

the support of national and local government units, non-government organizations and together with local initiatives. (7) Regardless of their profile variables, they all uniformly agree to the various challenges they encountered in their involvement in ecotourism in their locality.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are forwarded: (1) The local government unit together with the people's organizations should encourage the stakeholders in the locality' ecotourism to attend more trainings not only on ecotourism conservation and sustainability but likewise on the entrepreneurial aspects of it by sponsoring such activities. (2) More employment and income from ecotourism can encourage more conservation, but the loss of benefits may signal degradation. Thus, the local government unit, the tourism office and local entrepreneurs in Lobo should sustain its viability by revisiting its development tourism plan and ensuring that the key result areas along marketing, economic and financial aspects are on target. (3) The members of the peoples' organizations ranked promotion of wildlife conservation and creation of employment opportunities 1st and 2nd among the prospects of ecotourism in Lobo. Thus, the goal is to ensure that ecotourism benefits are sufficient to provide incentives for local residents to conserve natural habitat, species and other natural resources. (4) The local government could address the number one identified challenge in the respondents' involvement in ecotourism which was the insufficiency of maintenance fund for infrastructure and facilities through prioritization in its budget allocation or by tapping external sources. (5) Another problem identified was the lack of capacity building of organizational members towards sustainable development. The local tourism office can spearhead this human resource development project in coordination with concerned government agencies like the Department of Environment and National Resources and Department of Agriculture and non-government organizations like the Global Sustainable Tourism Council (GSTC) and the Society for Sustainable Tourism & Development Inc. (SSTDl). (6) The proposed action plan may be reviewed and adopted by the local government and people's organizations for implementation.

REFERENCES

- 1) Adeniyi, E. E., & Nwokorie, E. C. (2020). Tourists' Perception of Ecotourism Development in Lagos Nigeria: The Case of Lekki Conservation Centre. *Turizam*, 25 (1).
- 2) Afritado, J. M. & Borbon, N. M. D. (2021). Expectations and experiences of tourists on attractions in Batangas Province. *International Journal of Research Studies in Education*, 10 (1), 13 – 22.
- 3) Afroz, N. & Mahmud, S. (2017). Analyzing the Problem and Prospects of Ecotourism: A Review in Bangladesh. *IOSR Journal of Business and Management*, 19 (5), 59 – 65.
- 4) Anastacio, N. J. C. & Brillo, B. B. C. (2020). Potentials for Ecotourism Development at the Tikub Lake: The Obscure Small Lake of Tiaong, Quezon, Philippines. *Asian Journal of Water, Environment and Pollution*, 17 (4), pp. 53-58, 53 – 58. DOI: 10.3233/AJW200051.
- 5) Anup, K.C. (2017) Ecotourism in Nepal. *The Gaze: Journal of Tourism and Hospitality*, Vol. 8 No.1. 10.3126/gaze.v8i0.17827
- 6) Armando, H. (2017). *An Assessment of the Viability of Marine Protected Areas in the Province of Iloilo as Ecotourism Destinations*. [Doctoral Dissertation, Iloilo State College of Fisheries].
https://repository.cpu.edu.ph/bitstream/handle/20.500.12852/1802/CHM_DM_HisuanAMJr_2017_Ab.pdf?sequence=1&isAllowed=y.
- 7) Barnes, M. L., & Sutcliffe, S. R. (2018). The role of shark ecotourism in conservation behaviour: Evidence from Hawaii. *Marine Policy*, 97, 27 – 33.
- 8) Belay, E. M. & Eyassu, A. W. (2018). Challenges of Natural Resources Conservation Management in Mekit Ecotourism Sites, Ethiopia. *Research Journal of Social Science and Management*, 8 (7), 61 – 71.
- 9) Blumer, A., Candrea, A. C., Constantin, C. P., Gabriela – Alpu, R., Ispas, A., PapucDamascan, V., & Suci, T. (2021). Profiling Visitors to Romanian Ecotourism Destinations. *Sustainability*, 13 (5), 2958. <https://doi.org/10.3390/su13052958>.
- 10) Borbon, N. M. D. & Ricafort, M. V. (2020). Status of marketing strategies towards tourist attraction and local products: In the case of Lobo, Batangas, Philippines. *International Journal of Research Studies in Education*, 9 (7), 91 – 96.
- 11) Brillo, B. B. C. (2021). Initiation and establishment of ecotourism development: Pandin Lake of San Pablo City and Tayak Hill of Rizal, Laguna, Philippines. *Geo Journal*, 86, 2573 – 2586.
- 12) Chachava, N. T. & Khoshtaria, T. K. (2017). Prospects of ecotourism development in recreation areas of South Georgia. *Annals of Agrarian Science*, 15 (3), 312 – 317.
- 13) Chen, F., Huang, H., & Lai, M. (2020). Can marine park become an ecotourism destination? Evidence from stakeholders' perceptions of the suitability. *Ocean and Coastal Management*, 196 (1).

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

- 14) Chlachula, J. et al. (2021). Territorial assessment of the east Kazakhstan geo/ecotourism: Sustainable travel prospects in the southern Altai area. *Geosciences (Switzerland)*. DOI: 10.3390/geosciences11040156
- 15) Choi, Y. E., Kim, M., Lee, J., & Song, K. (2017). Transformation Planning for Resilient Wildlife Habitats in Ecotourism Systems. *Sustainability* (9), 4, 487.
- 16) Choi, Y. E., Chon, J., Doh, M., & Park, S. (2017). Transformation Planning of Ecotourism Systems to Invigorate Responsible Tourism. *Sustainability*, 9 (12), 2248.
- 17) Collado, M. F. C. (2019). A Sustainability Framework of River-based Tourism in Panay Island. *APIJHT*, 8, 1 – 18.
- 18) Das, P. Kr. (2021). Ecotourism and Sustainable Community Development: A Case Study of Sillery Gaon, West Bengal. *International Journal of Social Sciences*. DOI: 10.46852/2249-6637.01.2021.3
- 19) De Leon, R. C. & Kim, M. S. (2017). Stakeholder perceptions and governance challenges in urban protected area management: The case of the Las Piñas – Parañaque Critical Habitat and Ecotourism Area, Philippines. *Land Use Policy*, 63, 470 – 480.
- 20) DLA Piper (2018). DLA Piper global data protection laws of the world - World Map. DATA PROTECTION LAWS OF THE WORLD.
- 21) Ebisa, J. A., Escoto, M. G., Ocampo, L., & Ombe, J. (2018). Sustainable ecotourism indicators with fuzzy Delphi method – A Philippine perspective. *Ecological Indicators*, 93, 874 – 888. <https://doi.org/10.1016/j.ecolind.2018.05.060>.
- 22) Erdogan, N. (2017). Critical Views of Mainstream Approaches on Ecotourism. *Journal of Tourism and Gastronomy Studies*, 5 (1), 20 – 31.
- 23) Ezequias, J.E. (2020). Ecotourism challenges in Angola: Sustainable development trends. *Journal of Tourism and Development*. DOI: 10.34624/rtd.v0i34.22366
- 24) Fennell, D.A. (2020). *Ecotourism*. 5th Ed. London: Routledge. DOI: <https://doi.org/10.4324/9780429346293> article=2524&context=scripps_theses.
- 25) Ghilardi-Lopes, N. P., Pedrini, A. D. G., & Rhormens, M. S. (2017). Implementation feasibility of a marine ecotourism product on the reef environments of the marine protected areas of Tinhare and Boipeba Islands (Cairu, Bahia, Brazil). *Ocean and Coastal Management*, 139. 1 – 11.
- 26) Gkoumas, A. (2019). Evaluating a standard for sustainable tourism through the lenses of local industry. *Heliyon*, 5 (11).
- 27) Global Ecotourism Network (2016). <https://www.gstcouncil.org/ecotourism/>
- 28) Gutyj, B. V., Hrymark, O. Y., Kalaitan, T. V., Kindrat, O. V., Kushnir, L. P., Stybel, V. V., Vovk, M. V., Yaroshevych, N. B. (2017). Ecotourism and sustainable development. Prospects for Ukraine. *Ukrainian Journal of Ecology*.
- 29) Hassan, Z. A. (2019). Critical Analysis of Stakeholders' Perceptions of Community Based Tourism Impacts in a World Heritage Site (WHS). PQDT - Global
- 30) Hwang, K. & Lee, J. (2018). Antecedents and Consequences of Ecotourism Behavior: Independent and Interdependent Self-Construals, Ecological Belief, Willingness to Pay for Ecotourism Services and Satisfaction with Life. *Sustainability*, 10 (3), 789.
- 31) Ibrahim, I., Rendy, R., & Zukhri, N. (2019). Ecotourism Among Dilemma Voluntarism and Ecological Commitment (A Review of the Challenges of Community-Based Environmental Tourism Development in Bangka Island). *Research Gate*.
- 32) Jaafar, M., Malik, S., Mohamad, D., & Salman, A. (2021). Ecotourism development in Penang Hill: a multi-stakeholder perspective towards achieving environmental sustainability. *Environmental Science and Pollution Research*, 28, 42945 – 42958.
- 33) Joushi, R. & Poudel, B. (2020). Ecotourism in Annapurna Conservation Area: Potential, Opportunities and Challenges. *Grassroots Journal of Natural Resources*, 3 (4), 51 – 73.
- 34) Karmini, N.W (2020). Ecotourism management based on local wisdom in tenganan village, Karangasem Bali. *International Research Association for Talent Development and Excellence*. <http://repo.unhi.ac.id/jspui/handle/123456789/952>
- 35) Kunjuran, V. (2021). Local community participation challenges in communitybased ecotourism development in Sabah, Malaysian Borneo. *Community Development Journal*. DOI: 10.1093/cdj/bsaa065
- 36) Le, G. et al. (2021). Factors of tourists' perspective and awareness of insects based on demographics distribution in the tropical ecosystem. Serangga. <https://ejournal.ukm.my/serangga/article/view/4877...>
- 37) Lee, J. (2022). Managing conflict by mapping stakeholders' views on ecotourism development using statement and place Q methodology. *Journal of Outdoor Recreation and Tourism*, 37.
- 38) Liegey, V., & Nelson, A. (2020). *Exploring degrowth: A critical guide*. Pluto Press. eBook ISBN: 9781786807601

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

- 39) Liliquist, M. (2020). What Is a Prospect? <https://www.thebalancesmb.com/marketing-sales-prospect-1794386#:~:text=A%20prospect%20is%20a%20potential,step%20in%20the%20selling%20process>. Retrieved on 02.02.22
- 40) Liu, J.Y., Li, Q.J., Sigley, G. & Quan. H. (2021). How will the cost change after transformation in public nature-based attractions? A framework and case study. *Sustainability (Switzerland)*. DOI: 10.3390/su13116468
- 41) Madzunye, T., Nheta, D. S., & Tshipala, N. (2017). Profile of Ecotourists within the Capricorn District Municipality, South Africa. *African Journal of Hospitality, Tourism and Leisure*, 6 (4), 1 – 20.
- 42) Magio, K.O., Arguelles, E. G., & Guillen, E.M.C. (2017). Ecotourism and conservation in the Ruiz Cortinez Ejido, Los Tuxtlas. *TEORIA Y PRAXIS*. ISSN: 1870-1582
- 43) Magio, K.O. & Valdez, M.V. (2019). El ecoturismo en las reservas de la biósfera: Prácticas y actitudes hacia la conservación. *PASOS. Revista de Turismo y Patrimonio Cultural* DOI: 10.25145/j.pasos.2019.17.00
- 44) Mallick, S. K., Rudra, S., & Samanta, R. (2020). Sustainable ecotourism development using SWOT and QSPM approach: A study on Rameswaram, Tamil Nadu *International Journal of Geoheritage and Parks*, 8 (3), 185 – 193.
- 45) McCombes, S. (2020). Descriptive Research Design | Definition, Methods and Examples. Scribbr. <https://www.scribbr.com/methodology/descriptiveresearch/>. Accessed 21March 2022.
- 46) Mejere, O., Juknevičienė, V., Rausiutienė, J., Rupulevičienė, R., & Saparnienė, D. (2022). Expression of Behavior and Attitudes toward Sustainable Tourism in the Youth Population: A Search for Statistical Types. *Sustainability*, 14, 473. <https://doi.org/10.3390/su14010473>.
- 47) Michael, W. (2017). *Environmentally Friendly Industries: An Examination of Ecotourism as the Solution to the Environmental Degradation Caused by the International Tourism Industry*. [Honor's Thesis, Johnson & Whales University]. <https://core.ac.uk/download/pdf/303926342.pdf>.
- 48) Miller, C. C. (2017). *Challenges and Potentials of Ecotourism as a form of Conservation and Sustainable Development on Zapatera Island, Nicaragua*. [Master's Thesis, Swedish University of Agricultural Sciences]. https://stud.epsilon.slu.se/10096/1/miller_c_c_170406.pdf.
- 49) Mnini, P. & Ramoroka, T. (2020). Challenges of Ecotourism and Poverty Alleviation in South Africa. *International Journal of Economics and Finance Studies*, 12 (2), 321 – 334.
- 50) Mondino, E. & Beery, T. (2019). Ecotourism as a learning tool for sustainable development. The case of Monviso Transboundary Biosphere Reserve, Italy. *Journal of Ecotourism*. DOI: 10.1080/14724049.2018.1462371
- 51) Muboko, N., Mudzengi, B. K., Mutanga, C. N., & Gandiwa, E. (2020). Towards sustainable community conservation in tropical savanna ecosystems: a management framework for ecotourism ventures in a changing environment. *Environment, Development and Sustainability*, 23, 3028 – 3047.
- 52) Müllera, S., Hucka, L., & Markovab, J. (2020). Sustainable community-based tourism in Cambodia and tourists' willingness to pay? *Austrian Journal of South-East Asian Studies* (2020) DOI: 10.14764/10.ASEAS-0030
- 53) Murray, J. (2020). What is business viability. <https://www.thebalancesmb.com/what-is-business-viability-3884327>. Retrieved on 02.02.22
- 54) Murungi, T.M. Mbugua, J., & Gitonga, A.K. (2020). Determinants of Sustainability of Community Based Ecotourism Development Projects in Kenya: A Case of Northern Rangeland Trust Conservancy, Meru County. *International Academic Journal of Information Sciences and Project Management*
- 55) Nigatu, T. F. & Tegegne, A. A. (2021). Potential Resources, Local Communities' Attitudes and Perceptions for Outdoor Recreation and Ecotourism Development in Urban Fringe Harego and Bededo Conserved Forest, South Wollo Zone, Ethiopia. *GeoJournal of Tourism and Geosites*, 39 (4), 1421 – 1429.
- 56) Petros, M.I. & Firew. A. (2020). Challenges and opportunities for ecotourism development: A case study in dilla university botanical and ecotourism garden, South Ethiopia. *Global Journal of Ecology*. DOI: 10.17352/gje.000035
- 57) Pettinger, Tejva (2020). Degrowth - Definition, examples and criticisms https://www.economicshelp.org_ Retrieved on 04.02.22
- 58) Ramaano, A. I. (2021), Potential of ecotourism as a mechanism to buoy community livelihoods: the case of Musina Municipality, Limpopo, South Africa, *Journal of Business and Socio-economic Development*, 1 (1), 47 – 70. <https://doi.org/10.1108/JBSED-02-2021-0020>.
- 59) Salera, J.P. et al. (2019). Community-Based Homestay Service: A Proposed Livelihood Project for the Dumagats. Abstract Proceedings International Scholars Conference. DOI: 10.35974/isc.v7i1.1571

Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas

- 60) Sarpong, G. O., Blankson, B. & Britwum, C.T. (2018). Residents' views on benefits and costs of ecotourism projects: A study of bobiri forest and butterfly sanctuary in Ghana International Journal of Hospitality and Tourism Systems. International Journal of Hospitality & Tourism Systems, vol. 11 No.1
- 61) Serebryakova, N., Dorohova, N., & Isaenko. M. (2021). Current State and Prospects of Ecotourism Development in Russia. Actual directions of scientific researches of the XXI century: theory and practice. DOI: 10.34220/23088877-2021-8-4-77-86
- 62) Sharpley, R. (2022) Tourism and Development Theory: Which Way Now?, Tourism Planning & Development, 19:1, 1-12, DOI: 10.1080/21568316.2021.2021475
- 63) Spacey, J. (2018). 30 Examples of Business Problems.
<https://simplicable.com/new/business-problems>. Retrieved on 02.02.22
- 64) TIES (2019). What is Ecotourism? <https://ecotourism.org/what-is-ecotourism/>. Accessed 21 January 2022
- 65) Vitali, S. (2020). Sustainable tourism: the theory.
<https://www.sustainabletourismworld.com/sustainable-tourism-the-theory/> (accessed 21 March 2022)
- 66) Wondirad, A. (2020). Ecotourism development challenges and opportunities in Wondo Genet and its environs, southern Ethiopia. Journal of Place Management and Development. DOI: 10.1108/JPMD-12-2018-0109
- 67) Yu, S. B. (2020). *Paraisong Nawala: Exploring Sustainable Ecotourism in the Philippines*. [Bachelor's Thesis, Scripps College]. <https://scholarship.claremont.edu/cgi/viewcontent.cgi?>