

RESEARCH ARTICLE

BUNGA ECO-TURISMO: BASIS FOR ECOTOURISM SUSTAINABILITY CAMPAIGN FOR THE DEVELOPMENT OPPORTUNITY OF BUNGA TWIN FALLS IN NAGCARLAN, LAGUNA

Ma. Ivy R. Molino, Arthur B. Almario

Pamantasan ng Lungsod ng San Pablo, Laguna Philippines

*Corresponding Author email: molinomr@gmail.com

This is an open access article distributed under the Creative Commons Attribution License CC BY 4.0, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

ARTICLE DETAILS

Article History:

Received 23 September 2023

Revised 26 October 2023

Accepted 03 November 2023

Available online 07 November 2023

ABSTRACT

Ecotourism is the responsible travel to places of natural beauty that conserve the environment, sustain the well-being of the local community and incorporate educational opportunities and interpretation. The idea of ecotourism ensures that it embodies the three pillars of sustainable tourism known as triple bottom line, that includes socio-cultural, economic and environmental. The purpose of the study aims to discuss the development opportunity of Bunga Twin Falls located in Nagcarlan, Laguna with the aid of sustainability campaigns. The study made use of the quantitative research method in acquiring the perceptions of the tourists with regards to the ecotourism development. It uses descriptive research design to describe the current situation of the site. Data were collected by using survey questionnaires conducted online as well as personal distribution of printed questionnaires. The study reveals that all respondents agree with the development. Based on the result of the survey, the perceptions of the tourist respondents may vary depending on their demographic profile. The formulation of sustainability campaigns must be aligned with the result of this study and in consideration with the preferences of the tourist and contribute to the well-being of its locals and the municipality. The scope of the study focuses on the formulation of sustainability campaign for Bunga Twin Falls with the purpose of analyzing the development opportunities for the ecotourism site.

KEYWORDS

Ecotourism, Sustainability Campaign, Socio-Cultural, Economic, Environmental

1. INTRODUCTION

People nowadays are busy trying to keep up with a fast-moving world, which at times can cause exhaustion. They often seek a serene place where they can breathe in clean air, connect with nature, and enjoy peace while experiencing the beauty of nature. In the study of Bridget Quinn, it was stated that in the concept of attention restoration, people are engaged in activities where they are detached from life's stresses and start being involved in a pleasant attraction like nature (Bridget Quinn, 2019). Thus, ecotourism has become popular with people who love to explore the earth.

Ecotourism is a type of responsible tourism with the objectives of traveling to natural parks and sites, reducing harm from traditional tourism, supporting local businesses financially, and raising environmental awareness (*Eco Tourism in the Philippines - Best Eco-Friendly Tours and Resorts*, n.d.). The International Ecotourism Society (TIES) defines ecotourism as responsible travel to natural areas that conserve the environment, sustain the well-being of the local people and involve interpretation and education. The idea of ecotourism combines the eagerness to travel with a determined effort to support and conserve such attractions (Burland, 2020).

Ecotourism is travel that has a beneficial effect on both the ecology and the economy of a particular area. It aims to create experiences that benefit everyone equally, not only tourists and stakeholders. As stated in the article on Global Biodiversity Protection (*Eco-Tourism, the Responsible Travel*, n.d.), ecotourism is also known as ecological tourism, which is

responsible travel that aims to have a minimal impact on fragile, intact and typically protected areas. Literally, ecological refers to the interactions between living things, including humans and their physical environment, while tourism pertains to traveling outside one's usual environment for personal, business or professional reasons.

A tourism site is not genuinely ecotourism if it does not actively support the indigenous people with tangible financial benefits (*What Is Ecotourism? - Concept Explanation & Goals - Turtle Island*, 2020). In another study made by Susan Christiansen, it was stated that ecotourism sites are commonly a major source of revenue and that the employment rate in certain sites depends on it, as it also supports vulnerable populations' household finances while preserving the ecotourism site (Susan Christiansen, 2019). Hence, the reason why ecotourism can also be associated with economics.

The study performed, stated that the concept of ecotourism emphasizes the preservation of the environment, economic advantages and social life (Rudiastuti, et al., 2018). The goal of ecotourism is to develop a sustainable kind of tourism that helps the neighborhood both economically and socially. Based on the study conducted, ecotourism may be utilized to fight poverty and preserve the natural environment (Samantha, 2019). The need to safeguard the environment and the requirement to use as an income generator must both be considered. eradication and environmental preservation.

Sustainable ecotourism emphasizes environmental protection and education while preserving the economic and social well-being of local

Quick Response Code

Access this article online



Website:

www.seps.com.my

DOI:

[10.26480/seps.01.2024.01.12](https://doi.org/10.26480/seps.01.2024.01.12)

populations. Ecotourism must take into account the triple bottom line, or the economic, socio-cultural, and environmental aspects of sustainability, in order to remain sustainable for future generations (Kelly and Hurt, 2021). Environmental sustainability is especially essential in the Philippines because our country is one of the richest in biodiversity in the world and home to many species in danger of extinction. The last pillar is sustainably environmental where it involves conservation of nature, protection of biodiversity, stability of ecosystems, environmental education and connection of people to the environment. This pillar refers to the wise use of natural resources as well as the preservation of ecosystems such as forests, seas, and animals.

1.1 Background of the Study

Our country has been blessed by nature with natural attractions that have the potential and can be developed as ecotourism sites which can help in contributing to the tourism industry and economy. The perfect destination for ecotourism travelers can be found in Nagcarlan, classified as a second-class municipality in the province of Laguna. The municipality is cradled at the foot of Mt. Banahaw and Mt. San Cristobal. It is composed of 52 barangays with a population of 64,866 people, according to the 2020 Census (Nagcarlan, Laguna Profile – PhilAtlas, n.d.). This municipality has been blessed by nature with ecotourism spots that can be considered hidden gems but can be beneficial to the local community and a source of the municipality's advancement. The study will cover the Bunga Twin Falls located in Barangay Bunga. The place was named after the Bunga (betel nut) palms that once grew in the area. Bunga Twin Falls is a 15-meter-high twin waterfall with two identical waterfalls descending side by side, which adds to its allure (Ozaki, 2018).

The Bunga Twin Falls hasn't undergone a development plan, although a number of tourists have already visited the place. However, it is a good thing that the ecotourism site was somewhat promoted when the location was used in one of a well-known pale pilsen brand way back in 1996 and in a television series that aired in 2005. There are also video logs, otherwise known as vlogs, that promote the ecotourism site on various social media platforms.

In an interview with the barangay captain of Brgy. Bunga, she disclosed that barangay is imposing an environmental fee and with available parking spaces and cottages. The ecotourism destination has no receiving area for the tourists. There are no food stalls and souvenir shops yet. The handrail is made of bamboo and portion of the stairs is intentionally left uncemented in order to have the feel of trekking in a rocky formation. There are fourteen cottages made of bamboo and additional cottages being built. Some tourists bring their own tents, while others settle on the big rock formations on the falls. The comfort rooms are not yet concrete and no water pipeline built permanently for the comfort rooms; they only use a water pump that is powered by gasoline and directly connected to the falls itself.

In the study, tackled the potential for ecotourism of development of Tikub Lake. Like Tikub Lake, Bunga Twin Falls awaits development although it already has a market and needs to incorporate sustainability campaigns in order to help in the development opportunities of the ecotourism site (Anastacio and Brillo, 2020). The Bunga Twin Falls located in the municipality of Nagcarlan in Laguna, awaits development which can contribute to the economic development of the municipality, the augmentation of the income of the community, as well as the upliftment of the standard of living of the residents in the community with the aid of sustainability campaigns.

The study on the development of Bunga Twin Falls as an ecotourism destination aims to explain the improvements that need to be made to the ecotourism site together with the implementation of sustainability that will surely benefit and contribute to the economic development and upliftment of the status of living of the residents in the local. The study wants to emphasize the positive outcome that ecotourism development will have on the welfare of its locals in relation to the creation of job opportunities as well as possible business ventures. The researcher recognizes the efforts of the local government unit in their quest to facilitate progress. However, with this study, the researcher hopes to get the tourist perceptions of their preferences when traveling to an ecotourism site. The said perceptions can contribute to the development of an ecotourism site that will perfectly suit the tourists' preferences and can help bridge the gap between ecotourism and economic development in the municipality.

2. LITERATURE REVIEW

2.1 Subheading

Ecotourism is a form of sustainable travel that gives tourists the chance to enjoy nature and learn about conservation initiatives. In the study by Anastacio and Brillo, it stated that there were both differences and similarities between local men and women in terms of their understanding of, attitudes toward, and perceptions of the lake's natural resources (Anastacio and Brillo, 2020). Such gender-based comparisons of these parallels and variances support the need to increase the gender perspective in the lake's existing management and development strategy.

In the research conducted by it revealed that both men and women had favorable attitudes of ecotourism, believing that it can benefit the environment and the community at large (Cruz et al., 2023). However, women were more inclined to express concerns about the environmental effect of ecotourism and to support ecotourism programs that promote environmental protection. Men, on the other hand, valued adventure and enjoyment in their ecotourism encounters.

Moreover, Cini and Passafaro discussed that in comparison to older people, younger people are more likely to engage with ecotourism activities such as hiking and wildlife watching (Cini and Passafaro, 2017). Younger people are more adventurous and looking for new experiences, while older people enjoy relaxing ecotourism activities such as nature walks and bird viewing.

Furthermore, older people may have a greater appreciation and understanding of nature because they lived during a time when the environment was less endangered than it is today. In the research conducted by the view of ecotourism differs by age group (Stanciu et al., 2017). The younger generations favor sustainable travel approaches because they are more ecologically concerned. The older individuals are more inclined to value cultural experiences and contact with local populations.

In a study by it was discovered that age is a significant factor that influences consumers' assessments and perceptions, according to studies on consumer behavior (Li, 2017). The majority of research that takes into account how age affects marketing and consumer behavior in the travel and tourism sector hypothesizes and confirms the impact of age on consumer behavior using theories of innovation and information processing.

Furthermore, the visitor attitudes, destination perception, and behavioral models are significantly impacted by age disparity. The study's findings are consistent with the information handling theory: younger tourists are more inclined to look up new facts about the location, travel strategy, method, environment, entertainment, or time. Contrarily, senior visitors are more inclined to rely on the already available second-hand

Tourists who visited ecotourism sites in the rural parts of the Philippines had a more beneficial opinion of ecotourism than those who visited urban ecotourism sites, according to a study done (Quintana, 2020). The study discovered that visitors who visited rural ecotourism areas had a deeper respect for the natural environment and local people's cultural heritage.

In the research conducted by Jackson, travelers who visited ecotourism sites in less developed regions had a more favorable opinion of ecotourism than those who visited highly developed areas. As people become more conscious of the effects of tourism on the environment, ecotourism has grown in popularity in recent years (Jackson, 2022).

As stated in the study by Ramos-Gonzales and Bermudo, employed tourists are more likely to participate in ecotourism activities (Ramos-Gonzales and Bermudo, 2022). They pay higher costs for ecotourism services and goods, implying that there is a greater demand for ecotourism experiences among working tourists. While unemployed tourists were more price sensitive and had a reduced willingness to pay for ecological products and services.

The research conducted by tourists who work in the private sector have a more favorable opinion of ecotourism than those who are self-employed or unemployed (de Araujo et al., 2022). Based on the study, individuals working in the private sector have a higher salary, allowing them to spend more on ecotourism activities and experiences. Tourists who are employed have better salaries and more means to spend on recreational activities. They are also more educated and mindful of the value of sustainable tourism practices.

Martinez and Limsico performed a study to evaluate the perception of

ecotourism among tourists in the Philippines and revealed that tourists who have higher monthly income have more beneficial feedback of ecotourism (Martinez and Limsico, 2017). On the other hand, tourists with lesser monthly income were more concerned with the price and accessibility of ecotourism activities and are less inclined to engage in activities that need additional costs.

The opinions of the local populations, who are the main beneficiaries of ecotourism development, are crucial. Ecotourism may assist local communities economically by creating jobs, revenue, and business possibilities (Upadhaya et al., 2022). It is essential to secure the sustainability and acceptance of ecotourism development by integrating local populations in the decision-making process and dispersing the advantages.

Previous studies were conducted in relation to the benefits of ecotourism sites in the Philippines. According to Samantha Yu, in her study entitled "Paraisong Nawala: Exploring Sustainable Ecotourism in the Philippines, if properly implemented, ecotourism might enable the Philippines to alleviate poverty and protect its natural resources (Yu, 2019). She emphasized that the Philippines has the opportunity to be an ecotourism hotspot (Coffey, 2022).

In the study made by Regina Zuniga about "Developing Community-Based Ecotourism in Minalungao National Park, it looked at the socioeconomic situation, as well as perceptions and chances for maximizing the rewards of ecotourism for the local community (Zuniga, 2020). In the study made by Lawal Marafa and Chung-Shing Chan, it stated that sustainable tourism is a condition that results from the development of sustainable tourism, wherein the development of tourism places a strong emphasis on long-term economic benefits, exhibits a strong sensitivity to the needs and goals of communities, adopts a scale that respects the character of a destination, recognizes the integral value of the environment, and aims for a balance between ecological and economic outcomes (Lawal and Chung-Shing, 2019).

Moreover, effective marketing strategies that attract tourists while keeping natural balance are essential for the achievement of sustainable ecotourism. Digital marketing is one of the best methods to advertise sustainable ecotourism. Social media sites may help draw in tourists and inform them about the nature and culture of their destination. Developing links with local organizations is another promotional strategy. These partnerships may provide ecotourism companies access to the skills, resources, and knowledge of the community (Philippine News Agency, 2019).

2.2 Theoretical Framework

2.2.1 Input-Process-Output Model

The Input-Process-Output Model, also known as the IPO model is an overview of several articles that discuss the various steps needed. It takes into account the opinions, observations, and conclusions of other academics on the topic of their study. The term describes a representation of every component of a process. Every piece of information and material needed together with all of the process' precise specifics and a list of all the goods and byproducts it produced.

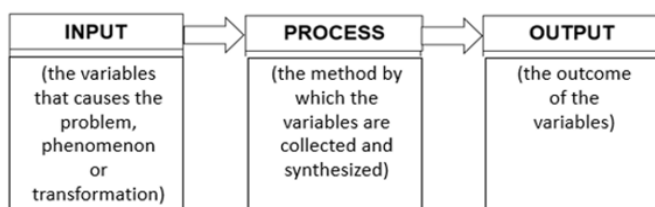


Figure 1: Input Process Output (IPO) Model

Figure 1 features the composition of the Input-Process-Output (IPO) model on which this study is anchored. It identifies the data needed to be processed, the method that is necessary in order to come up with a desirable outcome. The respondents' demographics and the elements relating to the dependent and independent variables of the research make up the input. The method or process comprises the use of surveys, making observations, interviews, acquiring data, and handling data statistically. The entire process is covered, starting with the information or data collection necessary to perform the study and concluding with results and suggestions.

The action taken after evaluating the study's findings is referred to as the output. Considerations are given to the action plan, the intervention

program, the planned program, activities, modules, and other relevant items. Additionally, it includes the respondents' increased learning outcomes or performance, an improved teaching-learning process, and other relevant outcomes (Canonizado, 2018). The IPO model may be a useful tool for researchers since it gives an organized method for analyzing and comprehending complicated systems, researchers may determine gaps and create improvements that can enhance the overall performance of a strategy.

2.2.2 Flyer Theory

The study also utilized the flyer theory with primary goal of designing and distributing flyers to draw attention to the marketed item, generate interest in it, and encourage people to engage in action, such as browsing a website, joining an event, or initiating a purchase. As defined, A flyer is a printed piece of paper that contains information on a certain event, business, product, or service. Its purpose is to raise awareness and bring attention to the marketed item. In an article by David Justice, the concept of Flyer Theory involves going through the streets, passing out brochures to passers-by (David Justice, 2018). It is not limited to flyers that may have been published in the streets but ensuring that the flyers are getting in the hands of the individuals.

3. METHODOLOGY

The study utilized the quantitative research method in getting information, specifically the perceptions of the tourists with regards to the development of an ecotourism site. It aims to attain a greater knowledge and comprehension of the social world since it studies the events that have an impact on individuals. It is adopted because it can generate objective data that can be explained in a simpler way with the use of statistics and figures.

The descriptive research design was used in order to describe the situation of ecotourism in Barangay Bunga, Nagcarlan, Laguna by using the gathered, analyzed and presented data collected. It can also pave the way to better understand a particular problem by observing and collecting information about it. It also offers insightful information that may guide future study.

The respondents of the study are composed of people who are residing in Region IV-A CALABARZON (Cavite, Laguna, Batangas, Rizal and Quezon). The chosen respondents are regardless of whether they have already visited Bunga Twin Falls or not. The objective of the researcher is to get the perceptions of the tourists on the features of an ecotourism site that they want to experience which can be incorporated in the ecotourism development opportunities for Bunga Twin Falls.

The study made use of simple random sampling since it is intended to offer an objective representation of a group. As every member of the population has an equal chance of being chosen, it is seen as a fair method of selecting a sample from a larger population without regard to any characteristics. Simple random sampling is hence renowned for its unpredictability and lower risk of sample bias.

The data for this study was gathered using a questionnaire that was accomplished by creating a set of questions through Google Forms and sending them online, as well as by providing printed materials that were personally distributed. The researcher chose a questionnaire as it was the most cost-effective, practical, and simple approach to collecting data.

The questionnaire is a researcher-made instrument that was validated and checked by the panel. It underwent revisions and was tested first before it was finalized and sent to the respondents of the study. The pilot testing for the tourist survey questionnaire was administered to 30 respondents as samples. The gathered data underwent reliability testing using Cronbach alpha 0.8354 that demonstrated the validity of the instrument.

After determining the validity and reliability of the data collection methods, creating study-specific research questions, and making any required adjustments to the selected respondent. The researcher requested approval from the Office of the Barangay Chairman in Barangay Bunga, Nagcarlan, Laguna to manage and administer the survey questionnaires for the tourists of Bunga Twin Falls. There are two methods of collecting data that includes Google forms that were sent online to respondents/tourists. The other method is the conduct of the survey done through face-to-face survey wherein the interviewer was physically present to ask the survey questions as well as to help the respondent in answering the questionnaire.

A comprehensive interview was done to some barangay officials of the community, particularly the barangay chairwoman and councilor, in order

to clearly get their perceptions and insights on ecotourism development as well as the present status of the ecotourism site. Interviews with the former acting and the current tourism officers were also executed in order to get first-hand information on the status of the site, then and now.

4. FINDINGS AND DISCUSSION

4.1 Profile of the Respondents

Table 1: Profile of the Respondents in terms of Sex

Sex	Frequency	Percentage
Female	59	55.14
Male	48	44.86
Total	107	100

The profile of the respondents in terms of sex is represented in table 1. It reveals that the majority of respondents are females with a frequency of fifty-nine (59) and a percentage of fifty-five point fourteen (55.14%), while males have a frequency of forty-eight (48) and a percentage of forty-four point eight-six (44.86%).

Table 2: Profile of the Respondents in terms of Age

Age	Frequency	Percentage
21-30	43	40.19
31-40	27	25.23
41-50	31	28.97
51 and above	6	5.61
Total	107	100

The profile of the respondents in terms of age is represented in table 2. With a frequency of forty-three (43) the table revealed that majority of the respondents aged from twenty-one to thirty (21-30) with a percentage of

Table 5: Profile of the Respondents in terms of Monthly Income

Monthly Income	Frequency	Percentage
Below Php 9,100	3	2.8
Php 9,100 - Php 18,200	19	17.76
Php 18,201 - Php 36,400	50	46.73
Php 36,401 - Php 63,700	18	16.82
Php 63,701 - Php 109, 200	9	8.41
Php 109,201 - Php 182,000	1	0.93
Php 182,001 and above	3	2.8
Not Applicable	4	3.74
Total	107	100

Table 5 shows the profile of the respondents and their respective monthly income. Garnering the highest number of responses in terms of monthly income with a frequency of fifty (50) and a percentage of forty-six point seventy-three (46.73%) is the salary range of eighteen thousand two hundred one pesos to thirty-six thousand four hundred pesos (Php 18,201

forty-point nineteen percent (40.19%), while minority of the respondents were aged fifty-one (51) and above got the lowest frequency of six (6) with a percentage of five point sixty-one percent (5.61%).

Table 3: Profile of the Respondents in terms of Location

Location	Frequency	Percentage
Nagcarlan, Laguna	31	28.97
Other town/City in Laguna	52	48.60
Other Provinces	14	13.08
Outside the Philippines	4	3.74
Total	107	100

Table 3 represents the profile of the respondents in terms of their location. The participants with the highest frequency of 52 or 48.60% reside in other towns and cities in Laguna. While the least number of respondents is 4 or 3.74% who are currently residing outside the Philippines.

Table 4: Profile of the Respondents in terms of Employment Status

Employment Status	Frequency	Percentage
Employed	79	73.83
Self-Employed	25	23.36
Unemployed	3	2.80
Total	107	100

The profile of the respondents in terms of employment status are presented in table 4. The table reveals that with a frequency of seventy-nine (79) and a percentage of seventy-three point eighty-three (79.83%) it showed that majority of the respondents employment status is employed. With a frequency of three (3) and a percentage of two point eighty (2.80%) it also revealed that minority of the respondents are unemployed.

– Php 36,400).The salary range one hundred nine thousand two hundred one peso to one hundred eighty-two thousand (Php 109, 201 – Php 182,000) got the lowest number of responses in terms of monthly income with a frequency on one (1) and a percentage of zero point ninety-three (0.93%).

Table 6: Perception of the Respondents on the Bunga Twin Falls as Ecotourism Destination

Indicators	$\bar{X}$	Verbal Interpretation
1. Bunga Twin Falls is popular.	3.58	Agree
2. It has a unique image.	4.09	Agree
3. It respects the natural environment.	4.35	Strongly Agree
4. It is accessible.	3.58	Agree
5. It is clean and presentable.	4.13	Agree
6. It is a good place to stay for relaxation.	4.44	Strongly Agree
7. It is worthy every peso paid.	4.38	Strongly Agree
8. It is worthy of recommendation to friends and relatives.	4.55	Strongly Agree
Overall	4.14	Strongly Agree

In Table 6, the statements given were about the perception of the respondents on the features of Bunga Twin Falls as an ecotourism destination. The data presented indicates that the respondents agree (3.58) that the destination is popular, has a unique image (4.09), accessible

(3.58), and clean and presentable (4.13). On the other hand, participants strongly agree with the following statements; it respects the natural environment (4.35), it is a good place to stay for relaxation (4.44), it is worth every peso paid (4.38) and is worthy of recommendation to friends

and relatives (4.55). The composite mean of the above-mentioned indicators is 4.14, which falls under the strongly agree verbal interpretation.

As stated by SB Yu, ecotourism development benefits both local residents and the environment (Yu, 2020). Tourists who indulge in ecotourism activities admire the country's natural beauty while learning about its cultural history and also benefits local communities economically through generating job opportunities and encouraging the growth of small and medium-sized businesses. The result of the survey conducted by the researcher was able to disclose the considerations of the tourist when traveling, the activities they are looking for in an ecotourism site, the amenities available as well as the lodging facility.

The top five considerations of respondents when traveling to an ecotourism site includes a place where they can relax their mind and body, discovery and appreciation of the beauty of nature, cleanliness of the environment, experience the freshness of nature free from pollutants, knowledge of the local culture of the community where the site is located

and comfortable transportation.

The environmental effect of a tourist's visit to an ecotourism site in the Philippines is one of the most important factors to consider. Ecotourism locations encourage responsible travel, which includes reducing waste, preserving resources, and respecting local culture and the environment. To address this problem, ecotourism locations in the Philippines have introduced sustainable practices such as the use of renewable energy sources, the reduction of plastic waste, and the support of local people through ecotourism projects (Chen, 2019). Tourists visiting ecotourism locations in the Philippines are also concerned about their safety. Some of these sites may include activities with potential risks such as trekking, diving, and wildlife interactions (Tan, 2019).

Tourists opted for accommodations that fit well with the natural environment, recreational opportunities that allow interaction with nature, local cuisine options, access to basic amenities, and effective marketing and promotion strategies in ecotourism sites in the Philippines.

Table 7: Test of Difference on the Perceptions of the Respondents on the Bunga Twin Falls as Ecotourism Destination when grouped according to their Profile

Grouping Variables	H	p-value	Verbal Interpretation	ϵ^2	Effect Size
Sex	0.197	0.657	Not Significant	0.003	Very Small
Age	2.180	0.535	Not Significant	0.028	Small
Location	9.400	0.024	Significant	0.122	Medium
Employment Status	5.520	0.063	Not Significant	0.072	Medium
Monthly Income	7.280	0.122	Not Significant	0.095	Medium

Legend: $p < 0.05$ Significant

Table 7 indicates the test of difference in the perceptions of the respondents towards Bunga Twin Falls as an ecotourism destination when grouped according to the demographics that includes sex, age, location, employment status and monthly income in line with the statement of the problem. To test the difference in perceptions, Kruskal-Wallis H Test was used. The H-value denotes the Kruskal-Wallis test statistic. The distribution defined by chi-square corresponds to the H distribution under the null hypothesis. The p-value is an estimate of likelihood that compares evidence to the null hypothesis. Lower probability gives more evidence to support the null hypothesis. If the p-value is less than or equal to the significance threshold, the null hypothesis is rejected, and assume that not all population medians are equal. If the p-value exceeds the significance level, there is insufficient evidence for rejecting the null hypothesis that the group's medians are all equal.

The P-value for sex is 0.657 is higher than 0.05 with verbal interpretation of not significant. While the P-value of age is 0.535 and also greater than 0.05 which is also not significant. The location has a P-value of 0.024 that is lower than 0.05 with verbal interpretation of significant. The P-value of employment status is 0.063 and higher than 0.05, thus verbal interpretation is not significant. Monthly income has a P-value of 0.122, higher than 0.05 with verbal interpretation of not significant. For demographics such as sex, age, employment status and monthly income with verbal interpretation of not significant, the result of Kruskal-Wallis H Test reveals that P-value is greater than 0.05. Thus, the null hypothesis for the said demographics should be accepted or retained. While the P-value for location of the respondents resulted in a lesser P-value than 0.05. Therefore, the null hypothesis for location of respondents should be rejected.

The Kruskal-Wallis H test compares the medians of two or more independent groups in a non-parametric manner and acceptable for assessing data in this study because it is suited for data that does not fulfill the assumption of normality. The research includes demographic data such as age, gender, education level, income, and occupation. In the study conducted by it was discovered that younger people are more supportive of tourist growth than the elderly (Chen et al., 2018). Another study, conducted by found that people with greater levels of education were more appreciative of tourist growth than those with lower levels of education (Xu et al., 2016).

Based on demographic variables, the Kruskal-Wallis H test showed to be a useful technique for assessing locals' attitudes regarding ecotourism development. Tourist perceptions of ecotourism development are greatly influenced by different demographics such as age and gender. Understanding these elements can aid in the development and execution of sustainable tourism practices in the Philippines.

4.2 Suggested Sustainability Campaign for Ecotourism Development Opportunity

The purpose of the sustainability campaign is to encourage community-based ecotourism. Community-based ecotourism includes local people in the development and administration of ecotourism operations, which can help guarantee that the benefits of tourism are shared while also protecting natural and cultural resources. Promoting ethical tourist practices is another possible sustainability initiative. Responsible tourism entails limiting tourism's negative effects on the environment and local communities while boosting its beneficial effects. This may be accomplished through trash management, energy conservation, and assistance for local companies (United Nations World Tourism Organization, 2019). Potential sustainability efforts that can assist in reaching this aim include community-based ecotourism, ethical tourist practices, biodiversity and natural resource protection, cultural understanding and reverence, and education and awareness.

4.2.1 Sustainability Campaign Objectives

Below are the objectives of the sustainability campaign projects for the three pillars of sustainability namely socio-cultural, economic and environmental.

4.2.1.1 Socio-Cultural Sustainability

1. Provide information and awareness about the tourist attractions in Nagcarlan, Laguna.
2. Develop an emotional attachment to entice potential tourists.
3. Create a positive image and interest in the location where travel experiences are offered.

4.2.1.2 Economic Sustainability

1. Foster cultural exchange.
2. Create a marketing tool to promote Bunga Twin Falls.
3. Generate revenue for the maintenance and further development of the ecotourism destination.

4.2.1.3 Environmental Sustainability

1. Aims to make the Bunga Twin Falls more presentable and picture-worthy.
2. Establish a physical activity that both benefits human and the environment
3. Allow locals to showcase their skills and creativity in terms of the programs implemented.

Table 8: Sustainability Campaign-Socio-Cultural Project 1: Fun Run

Projects	Project Background	Activities	Start Date	End Date	Persons Involved
Project 1: Fun Run	The project is a 5-kilometer fun run from Nagcarlan town proper to Bunga Twin Falls. It is also a fund raising for future projects for the ecotourism site.	Phase 1: <i>Planning</i> Plan the details of the project Budget allocation Finalize campaign posters in line with the project List down the target participants for the project	Jul 2023	Sept 2023	Barangay Officials / Local Government Unit / Participants
		Phase 2: <i>Preparation</i> Invite people from all walks of life through the aide of social media platforms as well as posters Finalization of list of participants Schedule the date of the project	Oct 2023	Oct 2023	
		Phase 3: <i>Execution</i> Accurate enactment of plans Launching of the project Simultaneous simulcast of the activity thru social media platforms	Nov 2023	Nov 2023	
		Phase 4: <i>Evaluation/Monitoring/Control</i> Evaluation of the project Monitoring of feedback	Dec 2023	Dec 2023	

Table 9: Sustainability Campaign-Socio-Cultural Project 2: Padyak for Bunga

Projects	Project Background	Activities	Start Date	End Date	Persons Involved
Project 2: Padyak for Bunga	The project is an event for bikers with a start line in Nagcarlan town proper and end point at Bunga Twin Falls. It is also serves as fund raising for future projects for the ecotourism site.	Phase 1: <i>Planning</i> Plan the details of the project Budget allocation Finalize campaign posters in line with the project List down the target participants for the project	Dec 2023	Jan 2024	Barangay Officials / Local Government Unit/Participants
		Phase 2: <i>Preparation</i> Invite people from all walks of life through the aide of social media platforms as well as posters Finalization of list of participants Schedule the date of the project	Feb 2024	Mar 2024	
		Phase 3: <i>Execution</i> Accurate enactment of plans Launching of the project Simultaneous simulcast of the activity thru social media platforms	Apr 2024	Apr 2024	
		Phase 4: <i>Evaluation/Monitoring/Control</i> Evaluation of the project Monitoring of feedback	May 2024	May 2024	

Table 10: Sustainability Campaign-Socio-Cultural Project 3: Music Festival

Projects	Project Background	Activities	Start Date	End Date	Persons Involved
Project 3: Music Festival	The project is a festive gathering featuring local music to be enjoyed by the attendees. The activity coincides with the Fun Run program.	Phase 1: <i>Planning</i> Plan the details of the project Budget allocation Finalize campaign posters in line with the project List down the target participants for the project	Jun 2024	Aug 2024	Barangay Officials / Local Government Unit/Participants
		Phase 2: <i>Preparation</i> Invite people from all walks of life through the aide of social media platforms as well as posters Finalization of list of participants Schedule the date of the project	Sept 2024	Oct 2024	
		Phase 3: <i>Execution</i> Accurate enactment of plans Launching of the project Simultaneous simulcast of the activity thru social media platforms	Oct 2024	Oct 2024	
		Phase 4: <i>Evaluation/Monitoring/Control</i> Evaluation of the project Monitoring of feedback	Nov 2024	Nov 2024	

Table 11: Sustainability Campaign-Socio-Cultural Project 4: Zumba for a Cause

Projects	Project Background	Activities	Start Date	End Date	Persons Involved
Project 4: Zumba for a Cause	The event will take place at the open area near the main entrance of Bunga Twin Falls.	Phase 1: <i>Planning</i> Plan the details of the project Budget allocation Finalize campaign posters in line with the project List down the target participants for the project	Dec 2024	Dec 2024	Barangay Officials / Local Government Unit/Participants
		Phase 2: <i>Preparation</i> Invite people from all walks of life through the aide of social media platforms as well as posters Finalization of list of participants Schedule the date of the project	Jan 2025	Jan 2025	
		Phase 3: <i>Execution</i> Accurate enactment of plans Launching of the project Simultaneous simulcast of the activity thru social media platforms	Feb 2025	Feb 2025	
		Phase 4: <i>Evaluation/Monitoring/Control</i> Evaluation of the project Monitoring of feedback	Mar 2025	Mar 2025	

Table 12: Sustainability Campaign-Socio-Cultural Project 5: Training Venue Rental

Projects	Project Background	Activities	Start Date	End Date	Persons Involved
Project 5: Training Venue Rental	Bunga Twin Falls will serve as a training venue for events which tackles topics about nature and its conservation.	Phase 1: <i>Planning</i> Plan the details of the project Budget allocation Finalize campaign posters in line with the project List down the target participants for the project	Mar 2025	Mar 2025	Barangay Officials / Local Government Unit/Companies
		Phase 2: <i>Preparation</i> Invite people from all walks of life through the aide of social media platforms as well as posters Finalization of list of participants Schedule the date of the project	Apr 2026	Apr 2026	
		Phase 3: <i>Execution</i> Accurate enactment of plans Launching of the project Simultaneous simulcast of the activity thru social media platforms	May 2026	May 2026	
		Phase 4: <i>Evaluation/Monitoring/Control</i> Evaluation of the project Monitoring of feedback	Jun 2026	Jun 2026	

Table 13: Sustainability Campaign-Economic Project 1: Use Media

Projects	Project Background	Activities	Start Date	End Date	Persons Involved
Project 1: Use Media	Use Media is a marketing strategy that focuses mainly on attracting tourists in online platforms and pages.	Phase 1: <i>Planning</i> Create official social media page Choose a specific color scheme for poster layouts Look for experienced graphic artist Finalize marketing committee Budget allocation List down target dates of posting	Jul 2023	Sept 2023	Barangay Officials / Local Government Unit
		Phase 2: <i>Preparation</i> Creation of a variety of poster designs Approval of layouts by the project head Schedule posts	Oct 2023	Oct 2023	
		Phase 3: <i>Execution</i> Accurate enactment of plans Launching of the official page thru social media platforms. Active monitoring of social media pages	Nov 2023	Onwards	
		Phase 4: <i>Evaluation/Monitoring/Control</i> Evaluation of network boost Monitoring of feedback	Dec 2023	Onwards	

Table 14: Sustainability Campaign-Economic Project 2: Rafting Photo Opp

Projects	Project Background	Activities	Start Date	End Date	Persons Involved
Project 2: Rafting Photo Opp	Rafting Photo Opp is a photo souvenir shop that enables the tourist an experience to do rafting and pose in front of Bunga Twin Falls. The tourist has the option to request for photo printing as well as printing on a ref magnet.	Phase 1: <i>Planning</i> Plan the details of the rafting photo opp Budget allocation Finalize marketing strategy	Dec 2023	Jan 2024	Barangay Officials / Local Government Unit/Local Entrepreneurs
		Phase 2: <i>Preparation</i> Selection of local entrepreneur with printing business through bidding Schedule the se-tup of the booth and start-up operation	Feb 2024	Mar 2024	
		Phase 3: <i>Execution</i> Accurate enactment of plans Launching of the photo souvenir project	Apr 2024	Onwards	
		Phase 4: <i>Evaluation/Monitoring/Control</i> Evaluation of the project Monitoring of feedback	May 2024	Onwards	

Table 15: Sustainability Campaign-Economic Project 3: Food Expo

Projects	Project Background	Activities	Start Date	End Date	Persons Involved
Project 3: Food Expo	Food Expo is a food trade show that showcases the local cuisines and products in Nagcarlan, Laguna. An event that gathers and promotes entrepreneurs that offers local delicacies.	Phase 1: <i>Planning</i> Plan the details of the food expo Budget allocation Finalize marketing strategy. List down target dates of posting of food expo	Jun 2024	Oct 2024	Barangay Officials / Local Government Unit/Local Entrepreneurs
		Phase 2: <i>Preparation</i> Invite local entrepreneurs to showcase their local cuisines and products Finalization of list of participants Schedule the date of food expo	Nov 2024	Dec 2024	
		Phase 3: <i>Execution</i> Accurate enactment of plans Launching of the food expo	Jan 2025	Jan 2025	
		Simultaneous simulcast of the activity thru social media platforms Phase 4: <i>Evaluation/monitoring/Control</i> Evaluation of the project Monitoring of feedback	Feb 2025	Feb 2025	

Table 16: Sustainability Campaign-Economic Project 4: Camping and Tent Rental

Projects	Project Background	Activities	Start Date	End Date	Persons Involved
Project 4: Camping and Tent Rental	The project paves the way for tourists to enjoy and experience the beauty of nature through camping. Camping as well as rental of tents will be made available to tourists.	Phase 1: <i>Planning</i> Plan the details of camping and tent rental Budget allocation Finalize marketing strategy	Mar 2025	May 2025	Barangay Officials / Local Government Unit/Local Entrepreneurs
		Phase 2: <i>Preparation</i> Selection of local entrepreneur with tents for rental through bidding. Schedule the set-up of the place and start-up operation	Jun 2025	Jul 2025	
		Phase 3: <i>Execution</i> Accurate enactment of plans Launching of the camping site	Aug 2025	Onwards	
		Phase 4: <i>Evaluation/Monitoring/Control</i> Evaluation of the project Monitoring of feedback	Sept 2025	Onwards	

Table 17: Sustainability Campaign-Economic Project 5: ATV Ride

Projects	Project Background	Activities	Start Date	End Date	Persons Involved
Project 5: ATV Ride	The project will be implemented with the use of ATV. The tourists have the option to ride the ATV from the roadside to the entrance of the ecotourism site.	Phase 1: <i>Planning</i> Plan the details of the ATV Ride project Budget allocation Finalize marketing committee	Oct 2025	Jan 2026	Barangay Officials / Local Government Unit/Local Entrepreneurs
		Phase 2: <i>Preparation</i> Selection of local entrepreneur for the purchase of rental of ATV through bidding. Schedule the set-up of the ATV service ride and start-up operation	Feb 2026	Apr 2026	
		Phase 3: <i>Execution</i> Accurate enactment of plans Launching of the ATV Ride service project.	May 2026	Onwards	
		Phase 4: <i>Evaluation/Monitoring/Control</i> Evaluation of the project Monitoring of feedback	Jun 2026	Onwards	

Table 18: Sustainability Campaign-Environmental Project 1: Clay Go

Projects	Project Background	Activities	Start Date	End Date	Persons Involved
Project 1: Clay Go	The project is a lifetime program that will encourage tourists to save and conserve environment through brining their trash to their proper bins.	Phase 1: <i>Planning</i> Plan the details of the project Budget allocation Finalize campaign posters	Jul 2023	Sept 2023	Barangay Officials / Local Government Unit / Tourists
		Phase 2: <i>Preparation</i> Prepare the posters for advertisement Schedule the date of the launching of the project	Oct 2023	Nov 2023	
		Phase 3: <i>Execution</i> Accurate enactment of plans Launching of the project Simultaneous simulcast of the activity thru social media platforms	Dec 2023	Onwards	
		Phase 4: <i>Evaluation/Monitoring/Control</i> Evaluation of the project Monitoring of feedback	Jan 2024	Onwards	

Table 19: Sustainability Campaign-Environmental Project 2: Bins for Reusable Bottles

Projects	Project Background	Activities	Start Date	End Date	Persons Involved
Project 2: Bins for Reusable Bottles	Creative bins to be placed around the area. The bottles collected will be used as designs for the place.	Phase 1: <i>Planning</i> Plan the details of the project Budget allocation Finalize campaign posters	Jul 2023	Sept 2023	Barangay Officials / Local Government Unit / Tourists
		Phase 2: <i>Preparation</i> Prepare the posters for advertisement Schedule the date of the launching of the project	Oct 2023	Nov 2023	
		Phase 3: <i>Execution</i> Accurate enactment of plans Launching of the project Simultaneous simulcast of the activity thru social media platforms	Dec 2023	Onwards	
		Phase 4: <i>Evaluation/Monitoring/Control</i> Evaluation of the project Monitoring of feedback	Jan 2024	Onwards	

Table 20: Sustainability Campaign-Environmental Project 3: Tree Planting

Projects	Project Background	Activities	Start Date	End Date	Persons Involved
Project 3: Tree Planting	An event that can be sponsored by agencies and companies to plant their trees in cooperation with the betterment of the nature.	Phase 1: <i>Planning</i> Plan the details of the tree planting Budget allocation Finalize campaign posters and invitation List down target dates of posting of tree planting project	Feb 2024	Apr 2024	Barangay Officials / Local Government Unit / Agencies and Companies
		Phase 2: <i>Preparation</i> Invite agencies and companies to participate in the project Finalization of list of participants Schedule the date of tree planting	May 2024	May 2024	
		Phase 3: <i>Execution</i> Accurate enactment of plans Launching of the tree planting project Simultaneous simulcast of the activity thru social media platforms	Aug 2024	Aug 2024	
		Phase 4: <i>Evaluation/Monitoring/Control</i> Evaluation of the project Monitoring of feedback	Sept 2024	Sept 2024	

Table 21: Sustainability Campaign-Environmental Project 4: Organic Food Promotion

Projects	Project Background	Activities	Start Date	End Date	Persons Involved
Project 4: Organic Food Promotion	An exhibit of cooking skills, using the local crops that are healthy and readily available in Nagcarlan or produced by the barangay itself.	Phase 1: <i>Planning</i> Plan the details of the contest Budget allocation Finalize campaign posters and invitation List down target dates of posting of the contest	Oct 2024	Feb 2025	Barangay Officials / Local Government Unit / Participants
		Phase 2: <i>Preparation</i> Invite people from all walks of life through the aide of social media platforms as well as posters Finalization of list of participants Schedule the date of the contest	Mar 2025	May 2025	
		Phase 3: <i>Execution</i> Accurate enactment of plans Launching of the contest Simultaneous simulcast of the activity thru social media platforms	Jun 2025	Jun 2025	
		Phase 4: <i>Evaluation/Monitoring/Control</i> Evaluation of the project Monitoring of feedback	Jul 2025	Jul 2025	

Table 22: Sustainability Campaign-Environmental Project 5: Plantito/Plantita

Projects	Project Background	Activities	Start Date	End Date	Persons Involved
Project 5: Plantito/Plantita	This is a competition for plant lovers. Different types of flowering and nonflowering plants will be brought and displayed. All participants will be receiving consolation prizes in return for the plants they gave.	Phase 1: <i>Planning</i> Plan the details of the contest Budget allocation Finalize campaign posters and invitation List down target dates of posting of the contest	Aug 2025	Oct 2025	Barangay Officials / Local Government Unit / Participants
		Phase 2: <i>Preparation</i> Invite people from all walks of life through the aide of social media platforms as well as posters Finalization of list of participants Schedule the date of the contest	Nov 2025	Jan 2026	
		Phase 3: <i>Execution</i> Accurate enactment of plans Launching of the contest Simultaneous simulcast of the activity thru social media platforms	Feb 2026	Feb 2026	
		Phase 4: <i>Evaluation/Monitoring/Control</i> Evaluation of the project Monitoring of feedback	Mar 2026	Mar 2026	

5. CONCLUSION

The aim of the research was to determine sustainability campaigns that can contribute to the development opportunities of Bunga Twin Falls. Based on the findings, the following are concluded:

In terms of sex, the female respondents are more into environmental and conservation issues. Thus, females have a more positive attitude towards ecotourism development.

In terms of age, the younger tourists with the age range of 21-30 are more powerful compared with other age groups. Therefore, the eagerness to do strenuous activities are their forte.

In terms of location, the residents from Nagcarlan, Laguna, may be within the vicinity of the ecotourism site, however, the respondents from other towns and cities within the province of Laguna might have been more curious in exploring the said site. Since location is not that far, the tourists may opt to travel and experience the beauty of nature.

In terms of employment status, those who are employed have more capacity to visit and enjoy the ecotourism sites. Therefore, they are more inclined to travel and appreciate the ecotourism site.

In terms of monthly income, the same with those who are employed and others who have the means to travel since they have monthly income or financial sources that they may spend during their exploration of ecotourism destinations. Thus, they have the capacity to travel and pay for the fees and other expenses during their travel.

An ecotourism site, whether developed or not, can have a potential to be a tourist's haven as long as it satisfies the tourists' personal preferences in an ecotourism site. Therefore, the majority of the people agreed that a sanctuary can be an ecotourism destination and can contribute to the tourists as well as its residents since both will be benefited.

When the respondents were grouped according to their profile, the P-value for sex, age, employment status and monthly income are higher than 0.05, thus, there is no significant difference in the perception of the tourist respondents. Therefore, the null hypothesis should be accepted/retained.

When the respondents were grouped according to their profile, the P-value for location is higher than 0.05, thus, there is a significant difference in the perception of the tourist respondents. Therefore, the null hypothesis should be rejected.

The development opportunity for an ecotourism site relies on the sustainability campaigns that are being implemented. The local government unit of the municipality must work hand in hand with the barangay officials in order to properly execute the projected programs for the site's development. Therefore, during the planning of various programs, they must take into consideration the benefit the tourists, community and the whole municipality of Nagcarlan in Laguna.

A thorough plan and ways on how to strategize, promote, and conserve the ecotourism site were integral parts of the conclusion. Based on the conclusion, the following are recommended:

The profile of the respondents is one of the considerations in formulating the programs for the sustainability of an ecotourism destination. Demographics are factors that must be considered since per profile, it has different groups with different perceptions and preferences towards ecotourism development. It is being recommended that the activities and services to be offered will fit the majority of tourists' preferences regardless of their sex, age, location, employment status and monthly income.

The ideas and feedback from the tourists and future travelers are important if a community plans to promote and develop the ecotourism site in their location. It is recommended to distribute feedback forms to tourists and ask for their views on how it can be further developed in order to fit into the preferences of the travelers. It is essential can plan and strategize for improvements of the ecotourism destination.

The differences in the perception of the tourists is a vital factor to consider since the tourist who may go in a group belongs to a different age range, sex, employment status and monthly income. Regardless of the tourists' profiles, the programs to be implemented must cater most of the tourists' preferences if not all.

With the result of the survey conducted, a sustainability campaign plan is being recommended for implementation. The sustainability of an

ecotourism destination must consider the socio-cultural, economic and environmental effect of the development of the site. It is recommended that whatever programs being implemented should be in consideration of the three pillars beneficial to all its stakeholders.

The research may display several limitations such as unanswered survey questionnaires sent through Google Forms despite follow-ups made through social media platforms. Thus, the researcher conducted occasional face-to-face surveys on tourists who are visiting Bunga Twin Falls in order to clearly get their perceptions and insights. The process was very costly and time-consuming. Hence, it suggests that future research should address these limitations in order to achieve a more comprehensive study that can help in formulating strategies for sustainability campaigns.

REFERENCES

- Anastacio, N.J., and Brillo, B.B.C., 2020. The Potentials for Ecotourism Development of Tikub Lake: The Obscure Small Lake of Tiaong, Quezon, Philippines. Semantic Scholar. Retrieved April 29, 2023, from <https://www.semanticscholar.org/paper/The-Potentials-for-Ecotourism-Development-of-Tikub-Anastacio-Brillo/f8ae7e34654de938a78a42748ad4cce44b65b753>.
- Burland, H., 2020. What is Ecotourism? (and why you should do it). Wakeful Travel. Retrieved February 23, 2023, from <https://www.wakefultravel.com/blogs/journal/what-is-ecotourism>
- Canonizado, I.C., 2018. Input-Process-Output Model. HubPages. Retrieved February 25, 2023, from <https://discover.hubpages.com/education/IPO-Model-of-Research>
- Chen, C., Chen, X., and Xiao, H., 2018. Residents' Attitudes toward Tourism Development: A Review of Literature. Retrieved May 2, 2023 from Tourism Review, 73 (3), Pp. 340-354. doi: 10.1108/tr-11-2016-0198
- Chen, D., 2019. 6 eco-friendly destinations to visit in the Philippines. CNN Travel. Retrieved April 7, 2023 from <https://edition.cnn.com/travel/article/philippines-eco-friendly-destinations/index.html>
- Christiansen, S.D., 2019. Economic Contribution of Ecotourism, Motivations and Satisfaction: the Case of Puerto El Morro (Ecuador). ResearchGate. Retrieved March 3, 2023, from https://www.researchgate.net/publication/335156787_Economic_Contribution_of_Ecotourism_Motivations_and_Satisfaction_the_Case_of_Puerto_El_Morro_Ecuador
- Cini, F., and Passafaro, P., 2017. Youth and ecotourism: A qualitative exploration. Retrieved April 24, 2023, from <https://journals.sagepub.com/doi/10.1177/1467358417704887>
- Coffey, H., 2022. Paraisong Nawala: Exploring Sustainable Ecotourism in the Philippines. Scholarship @ Claremont. Retrieved March 4, 2023, from https://scholarship.claremont.edu/cgi/viewcontent.cgi?article=2524&context=scripps_theses
- Cruz, J., Reyes, M., and Santos, M., 2023. Exploring the Perceptions of Men and Women towards Ecotourism in the Philippines. Retrieved April 23, 2023, from Journal of Sustainable Tourism, 31 (3), Pp. 347-364.
- Cruz, R.M., and Acosta, M.L., 2019. The attitudes of lower middle-class tourists towards ecotourism development in the Philippines. Retrieved May 8, 2023 from Asia Pacific Journal of Tourism Research, 24 (2), Pp. 172-183. doi: 10.1080/10941665.2018.1553647
- de Araujo, A.F., Marques, M.I.A., Candeias, M.T.R., and Vieira, A.L., 2022. Willing to Pay for Sustainable Destinations: A Structural Approach. Retrieved April 10, 2023, from <https://www.mdpi.com/2071-1050/14/5/2548>
- Department of Tourism. 2017. Philippine Ecotourism Sites: An Assessment of Visitor Support and Expectations. Retrieved May 7, 2023 from <https://www.tourism.gov.ph/Documents/Research%20and%20Statistics/ecotourism-report-2017.pdf>
- Dizon, J.M.D., Solano, R.J.V., and De Ramos, C.J., 2017. Gender differences in ecotourism participation: Insights from the Philippines. Retrieved May 7, 2023, from Journal of Sustainable Tourism, 25 (3), Pp. 361-375.

- Eco Tourism in the Philippines - Best Eco-Friendly Tours and Resorts. (n.d.). Philippines Travel Packages. Retrieved May 7, 2023, from <https://www.philippinestravelpackage.com/ecotours/>
- Eco-Tourism, the responsible travel. (n.d.). Global Biodiversity Protection. Retrieved April 23, 2023, from <https://globalbiodiversityprotection.org/en/cause-view/ecotourism/>
- Estacio, E.V., and Estacio, C.D., 2017. The Role of Gender in Ecotourism: The Case of Visitors to Apo Island, Philippines. Retrieved April 20, 2023 from Journal of Ecotourism, 16 (1), Pp. 45-58. doi: 10.1080/14724049.2016.1264387
- Field, A., 2013. Discovering Statistics using IBM SPSS Statistics. Fourth Edition. Sage: London
- Interpret all statistics for Kruskal-Wallis Test - Minitab. (n.d.). Support. Retrieved May 6, 2023, from <https://support.minitab.com/en-us/minitab/21/help-and-how-to/statistics/nonparametrics/how-to/kruskal-wallis-test/interpret-the-results/all-statistics/>
- Jackson, G., 2022. Ecotourism. Retrieved April 23, 2023, from <https://doi.org/10.1093/acrefore/9780199389414.013.378>
- Jaime, P., João, V., Nilton, T., 2022. Evaluation of Information Systems Project Success – Insights from Practitioners, Information Systems Management, 39 (2), Pp. 138-155. DOI: 10.1080/10580530.2021.1887982
- Justice, D., 2018. Think About How You Use Instagram with 'The Flyer Theory'. PetaPixel. Retrieved April 29, 2023, from <https://petapixel.com/2018/02/02/think-use-instagram-flyer-theory/>
- Kelly, S., and Hurt, A., 2021. What is Ecotourism? The Good, The Bad, and Sustainable Ecotourism -. Curiosity Saves Travel. Retrieved May 7, 2023, from <https://curiositysavestravel.com/benefits-sustainable-ecotourism/>
- Li, J., 2022. Study on Tourism Consumer Behavior and Countermeasures Based on Big Data. NCBI. Retrieved March 25, 2023, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9325599/>
- Marafa, L.M., and Chan, C.S., 2019. The Role of People and Places in Sustainable Tourism Development in Asia. Cambridge Scholars Publishing. <https://www.cambridgescholars.com/resources/pdfs/978-1-5275-3398-1-sample.pdf>
- Mariapan, M., Ai Lin, E.L., Bidin, S., Zawawi, A., Abidin, Z.A.Z., and Jumaat, N.J., 2020. Ecotourism In Malaysia: Current Scenario. Fakulti Perhutanan Dan Alam Sekitar. Retrieved March 25, 2023, from https://forenv.upm.edu.my/upload/dokumen/20200904104709EC_OTOURISM_IN_MALAYSIA_CURRENT_SCENARIO.pdf
- Martinez, J.S., and Limsico, M., 2017. Ecotourism Perception of Tourists Based on Monthly Income. Journal of Ecotourism, 16 (3), Pp. 305-314. Retrieved April 23, 2023 from doi: 10.1080/14724049.2017.1294919
- Nagcarlan, Laguna Profile – PhilAtlas. (n.d.). PhilAtlas. Retrieved February 24, 2023, from <https://www.philatlas.com/luzon/r04a/laguna/nagcarlan.html>
- Ozaki, A., 2018. Bunga Twin Falls – Nagcarlan: The Heart of Laguna. Nagcarlan. Retrieved February 24, 2023, from <https://travelaguna.home.blog/2018/12/26/bunga-twin-falls/>
- Pereira, J., Varajao, J., and Takagi, N., 2021. Evaluation of Information Systems Project Success - Insights from Practitioners. Retrieved May 7, 2023, from <https://www.tandfonline.com/doi/full/10.1080/10580530.2021.1887982>
- Philippine News Agency. 2019. DOT harnesses power of digital marketing to promote PH tourism. Retrieved February 24, 2023 from <https://www.pna.gov.ph/articles/1069971>
- Quinn, B., 2019. The Area Wilds Exploration (A.W. E.) Society. Retrieved March 25, 2023, from <https://deepblue.lib.umich.edu/handle/2027.42/156114>
- Quintana, V.M., 2020. Eco-Cultural Tourism: Sustainable Development and Promotion of Natural and Cultural Heritage. IntechOpen. Retrieved April 23, 2023, from <https://www.intechopen.com/chapters/73374>
- Ramos-Gonzales, R., and Bermudo, D.P.J.V., 2022. Viability, Prospects and Challenges of Ecotourism in Lobo, Batangas. Retrieved April 20, 2023, from <https://ijmra.in/v5i5/Doc/30.pdf>
- Rudiastuti, A.W., Munawaroh, Setyawan, I.E., and Pramono, G.H., 2018. Coastal Management Strategy for Small Island: Ecotourism Potency Development in Karimata Island, West Kalimantan. Retrieved April 9, 2023 from <https://iopscience.iop.org/article/10.1088/1755-1315/148/1/012013/pdf>
- Significance vs. Magnitude: How to interpret statistics for decision making. 2021. Matthew B. Courtney, Ed.D. Retrieved May 7, 2023, from <https://www.matthewbcourtney.com/post/significance-vs-magnitude-how-to-interpret-statistics-for-decision-making>
- Stanciu, M., Popescu, A., Sava, C., Moise, G., Nistoreanu, B.G., Rodzik, J., and Bratu, I.A., 2022. Youth's perception toward ecotourism as a possible model for sustainable use of local tourism resources. Frontiers. Retrieved April 23, 2023, from <https://www.frontiersin.org/articles/10.3389/fenvs.2022.940957/full>
- Suhartanto, D., Gan, C., Andrianto, T., Tuan Ismail, T.A., and Wibisono, N., 2021. Holistic tourist experience in halal tourism evidence from Indonesian domestic tourists. Retrieved May 7, 2023, from <https://www.sciencedirect.com/science/article/abs/pii/S2211973621000970>
- Tan, R., 2019. Keeping ecotourism safe and sustainable. Manila Bulletin. Retrieved April 21, 2023 from <https://mb.com.ph/2019/11/22/keeping-ecotourism-safe-and-sustainable/>
- Upadhaya, S., Tiwari, S., Poudyal, B., Godar Chhetri, S., and Dhungana, N., 2022. Local people's perception of the impacts and importance of ecotourism in Central Nepal. Retrieved March 21, 2023, from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0268637>
- What is Ecotourism? - Concept Explanation & Goals - Turtle Island. 2020. Turtle Island Resort. Retrieved May 7, 2023, from <https://www.turtlefiji.com/what-is-ecotourism/>
- Yu, S.B. (n.d.). Paraisong Nawala: Exploring Sustainable Ecotourism in the Philippines. Scholarship @ Claremont. Retrieved May 7, 2023, from https://scholarship.claremont.edu/scripps_theses/1464/
- Zuniga, R., 2020. (PDF) Developing Community-Based Ecotourism in Minalungao National Park. ResearchGate. Retrieved May 7, 2023, from https://www.researchgate.net/publication/339068634_Developing_Community-Based_Ecotourism_in_Minalungao_National_Park

