

Assessment on the Sustainability of Tourism in Selected Tourist Destinations in Puerto Galera

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Abstract:

The researchers assessed the sustainability of tourism in certain Puerto Galera tourist destinations, specifically by distributing the respondents according to their age, sex, civil status, highest educational attainment, monthly income, and type of respondents, as well as their variables in terms of the environment, economy, and social. The study used a descriptive method to acquire information wherein, the researchers used survey questionnaires as data gathering tool. There are 430 participants in the study made up of tourists, local government unit, and local residents. Researchers computed how the percentage and one-way analysis of variance to interpret the data. The research findings revealed that the majority of the respondents were local residents of Puerto Galera who were females aged 18-35 years, single, high school graduates, with monthly incomes ranging from Php 10,957.00 to Php 21,914.00. The respondents assessed that Puerto Galera is sustainable in terms of environmental, economic, and social aspects. The results suggest that there are differences in the assessment of sustainability when considering factors such as age, sex, civil status, educational attainment, monthly income, and type of respondents. The proposed inputs from the study can be utilized for the development and improvement of a sustainable tourism plan for Puerto Galera, with the aim of establishing it as a sustainable tourism destination.

Keywords — sustainability, tourist destinations, environmental, economic, and social.

I. INTRODUCTION

Sustainable tourism is gaining increasing global importance as a means of protecting the environment and natural resources. In the Philippines, the tourism industry has experienced significant growth, attracting both domestic and international visitors.

To promote sustainability in the development and practice of ecotourism, various government, non-government and private institutions collaborate in the Philippines.

For instance, the Biodiversity Partnerships Project (BPP), launched by the Department of Environment and Natural Resources (DENR) in

2012, focuses on training local government units in threatened areas on how to plan and manage economic activities without harming natural habitats. The Department of Tourism (DOT) also assists local communities in establishing sustainable tourism enterprises and activities, in accordance with a Sustainable Tourism – Biodiversity Conservation Framework and Implementation Plan. However, studies have shown that rapid tourism development in certain areas such as Puerto Galera in Oriental Mindoro, had led to negative environmental, social, and cultural impacts. Therefore, the researchers conducted the study to gather data that can be used as inputs for a proposed sustainability plan to address these issues.

II. OBJECTIVES

The main focus of this study was to assess the sustainability of tourism in selected tourist destinations in Puerto Galera. The objective was to gather that could potentially be used to develop new inputs for a sustainability plan. The variables used to assess the profile of the respondents included age, sex, civil status, highest educational attainment, monthly income, and type of respondents. The sustainability of tourism on these destinations was evaluated based on environmental, economic, and social factors. As a result, this study proposed a sustainability of tourism in the selected tourist destination in Puerto Galera.

III. MATERIALS AND METHODS

The researchers chose to use a descriptive research method to assess the sustainability of tourism in this study, as it involves collecting data to draw precise conclusions. Descriptive research is the most appropriate research design for this study, as it aimed to propose inputs for sustainability and utilized survey questionnaire to collect the necessary information. Descriptive research involves gathering data without altering its structure, and described the characteristics of the population or phenomenon being studied, as stated by Calderon (2008). The researchers opted for this approach as it is a convenient way to collect data. To ensure smooth data collection and avoid conflicts among respondents, the survey forms and data processing

procedures were prepared in both English and Tagalog languages. This was done with the intention of establishing trust between the researchers and the participants.

The respondents for this study consisted of the Local Government Unit (LGU) representatives, local residents and tourists in Puerto Galera. These respondents were chosen based on their availability and capability to provide answers to the given questions, as well as their knowledge and capacity to assess the sustainability of tourism in the selected tourist destinations. The researchers distributed the questionnaire to a total of 380 respondents, including at least 200 local residents, 100 tourists, and 80 LGU representatives. The sample size was calculated to determine sample sizes in research and surveys.

Local residents of Puerto Galera were included in the study as respondents because they are likely to have a comprehensive understanding of and firsthand experience with the sustainability of tourism in the area. Tourists were also selected as study participants because they could provide observations from their participation in various tourist activities in Puerto Galera. Lastly, LGU representative from the different barangays in the municipality were chosen as respondents due to their expertise and capacity to respond to inquiries related to the study.

The researchers utilized quota sampling, a non-probability sampling technique that involves non-random selection of a specific number or percentage of respondents. The respondents were initially divided into mutually exclusive groups or strata, and the sample size was gathered until the quota was met. As a result, the researchers were able to access a selected group of participants who could provide necessary data for the study. A total of 430 respondents participated in the survey, which was conducted both online and through hardcopy questionnaires. The researchers exceeded the sample size as they did not have the exact data on the population or tourist arrivals in the destination.

Frequency and percentage. It was used in the study to determine the proportion of responses for each demographic profile category, allowing for the identification of the highest and lowest amount chosen by the respondents.

Weighted mean. It was employed to calculate the average value of the data obtained from the survey questionnaire. This measure was used to determine the level of agreement or disagreement among the respondents, as well as to establish the overall average rating of the surveyed variables based on the sample size.

IV. RESULTS AND DISCUSSIONS

1. Profile of the Respondents

The study developed a profile of the respondents to provide a comprehensive background for assessing the sustainability of tourism in selected tourist destination in Puerto Galera. The profile includes variables such as age, sex, civil status, highest educational attainment, monthly income, and type of respondents.

1.1 Age

Table 1 shows the profile of the respondents in terms of age.

TABLE 1
DISTRIBUTION OF RESPONDENTS IN TERMS OF AGE

Age Bracket	Frequency	Percentage
18-35	218	50.7
35-55	163	37.9
55 and above	49	11.4
Total	430	100

The majority of the respondents in the study are between the ages of 18 and 35, accounting for 50.7% of the total number of respondents. The next largest group of respondents falls into the age bracket of 35-55 years old, comprising 37.9%, while the smallest group is aged 55 years old and above, representing 11.4%.

The findings indicate that most of the respondents are adults and teenagers who are capable of meeting their own needs and are likely to travel and compare different destinations. Young adult is a phase where individuals are navigating various life changes and experiencing personal growth, which may influence their opinions and lifestyles in the future. They are also more likely to engage in leisure activities, travel and support changes in tourism, similar to how the financial market constantly is evolving. [7]

1.2 Sex

Table 2 shows the profile of the respondents in terms of sex.

TABLE 2
DISTRIBUTION OF RESPONDENTS IN TERMS OF SEX

Sex	Frequency	Percentage
Male	177	41.2
Female	253	58.8
Total	430	100

The majority of the respondents in the study, accounting for 58.8% of the total with 253 responses are female. On the other hand, men make up the smallest proportion of respondents, with 41.2% of the total represented by 177 responses.

The findings reveal that there are more female respondents in Puerto Galera compared to male respondents. This could be due to the stereotype that women enjoy travelling and exploring new places. It is also observed that female respondents allocate time to visit popular beach destinations for relaxation and socializing with friends. Nature seems to provide them with a sense of calmness after work.

Females tend to be more familiar with the rules and structures of their workplace and organization, and they tend to appreciate things more. Additionally, creativity and appreciation for nature come naturally to them in terms of their communication styles and behaviors, in contrast to men. [14]

1.3 Civil Status

Table 3 shows the profile of the respondents in terms of civil status.

TABLE 3
DISTRIBUTION OF RESPONDENTS IN TERMS OF CIVIL STATUS

Civil Status	Frequency	Percentage
Single	205	47.7
Married	195	45.3
Separated	12	2.8
Widowed	18	4.2
Total	430	100

The majority of the respondents in the study are single, accounting for 47.7% of the total with a frequency of 205. It is followed by married with a frequency of 195, equivalent to 45.3% of the total. It was followed by widowed with a frequency of 18, equivalent to 4.2% and the least number of respondents are separated, with a frequency of 12, equivalent to 2.8%.

These findings suggest that there is a significant population of single individuals in Puerto Galera.

Single people tend to travel frequently as they have fewer responsibilities compared to married couples. They often have more leisure time after work and can plan vacations on weekends or holidays. Additionally, they may have extra savings that can be allocated for travel as they do not have additional expenses associated with marriage. Traveling for single people has become popular as it provides opportunities to meet new friends and potential life partners in different destinations they visit.

Single individuals enjoy the freedom and unlimited time for leisurely activities, as they do not have children to take care of, unlike married adults who are often busy with domestic duties. It is also socially acceptable for single individuals to enjoy a night out with their friends.[9]

1.4 Highest Educational Attainment

Table 4 shows the profile of the respondents in terms of highest educational attainment.

TABLE 4
 DISTRIBUTION OF RESPONDENTS IN TERMS OF HIGHEST EDUCATIONAL ATTAINMENT

Educational Attainment	Frequency	Percentage
Highschool Undergraduate	122	28.4
Highschool Graduate	145	33.7
Vocational Graduate	14	3.3
College Degree	138	32.1
Masters Degree	9	2.1
Doctorate Degree	2	0.5
Total	430	100

The table reveals that the majority of respondents in Puerto Galera have completed high school, with a frequency of 145, equivalent to 33.7%. This is followed by college degree holders, with a frequency of 138, equivalent to 32.1%. High school undergraduates come next with a frequency of 122, equivalent to 28.4%. Vocational graduates account for a smaller proportion with a frequency of 14, equivalent to 3.3%. Master's degree holders make up an even smaller proportion with a frequency of 9, equivalent to 2.1%. Lastly, the least number of respondents are doctoral degree holders, with a frequency of 2, equivalent to 0.5%.

The data indicates that the majority of respondents in Puerto Galera have completed high school, suggesting they may have a deeper understanding of the importance of the tourism industry for the long-term sustainability of the area.

However, it also suggests that many respondents may not pursue further education due to the current situation in Puerto Galera, and may rely on tourism as a primary source of income.

Education can influence how individuals perceive their surroundings and make purchasing decisions. Educated consumers are more likely to exercise better judgment and consider various options, including their choice of travel destinations. [12]

1.5 Monthly Income

Table 5 presents the distribution of Respondents in terms of monthly income.

TABLE 5
 DISTRIBUTION OF RESPONDENTS IN TERMS OF MONTHLY INCOME

Monthly Income	Frequency	Percentage
Below 10,957.00	269	62.6
Php 10,957.00 – Php 21,914.00	101	23.5
Php 21,914 and above	60	14.0
Total	430	100

The table indicates that the majority of respondents have incomes falling under the "below Php 10,957.00" category, with a frequency of 269, equivalent to 62.6%. This is followed by the "Php 10,957.00 - Php 21,914.00" category, with a frequency of 101, equivalent to 23.5%. The smallest number of respondents are from the "Php 21,914 and above" category, with a frequency of 60, equivalent to 14%.

Most of the respondents belong to the low-income and poor-income family classes, as defined by the Philippine Statistics Authority (PSA), indicating that the tourism sector in the area is seasonal and locals heavily rely on tourists for their income. The revenue is dependent on the number of tourist arrivals, and during lean seasons, locals may rely on fishing and selling it in the municipality to make a living for their families.

Destinations with significant seasonal changes often face challenges such as overcrowding, high prices, and inadequate infrastructure during peak seasons, as well as limited services and employment opportunities during off-peak periods. Seasonality has significant impacts on the economy and society. [15]

1.6 Type of Respondents

Table 6 shows the distribution of respondents in terms of type of respondents.

TABLE 6
 DISTRIBUTION OF RESPONDENTS IN TERMS OF TYPE OF RESPONDENTS

Type of Respondents	Frequency	Percentage
LGU	80	18.6
Local Resident	245	57.0
Tourist	105	24.4
Total	430	100

The majority of respondents, with a frequency of 245 and equivalent to 57.0%, are local residents who either live or work in Puerto Galera. This is followed by tourists, with a frequency of 105 and equivalent to 24.4%. The smallest number of respondents are from local government units, with a frequency of 80 and equivalent to 18.6%.

The table indicates that a significant portion of respondents are local residents who are either employed or residing in Puerto Galera, likely due to the high number of jobs related to tourism in the area. It also suggests that local residents may also act as tourists on special occasions or when they want to visit other tourist destinations within their own locality.

The awareness of local residents about the economic impact of ecotourism may also indicate that they see it as a means to generate additional revenue for themselves or local businesses, and that socio-cultural influences can potentially improve the quality of life for both locals and tourists. [1]

2. Assessment on the Sustainability of Tourism in selected tourist destinations in Puerto Galera

This study focused on the assessment on the sustainability of tourism in selected tourist destinations in Puerto Galera. In this section, there are three variables being assessed by the respondents which are environmental, economic and social.

2.1 Environmental

Table 7 shows the assessment of the sustainability of tourism in selected tourist destinations in Puerto Galera in terms of environmental pillar.

TABLE 7
 ASSESSMENT ON THE SUSTAINABILITY OF TOURISM IN SELECTED TOURIST DESTINATIONS IN PUERTO GALERA IN TERMS OF ENVIRONMENTAL.

ENVIRONMENTAL	Weighted mean	Verbal Interpretation
1. Tourism establishments ensure proper segregation, collection, storage, treatment and disposal of solid waste through the formulation and adaptation of best eco-waste products.	2.7465	Agree
2. Tourism establishments and other tourist destinations have designated smoking areas.	2.5907	Agree
3. There is good water quality because tourism establishments practice discharging sewage sludge into designated areas.	2.3814	Disagree
4. There are enough signages in every tourist destination to inform tourists about different sustainable practices.	2.3791	Disagree
5. Tourism encourages the establishment of nature reserves for sustainability.	2.4814	Disagree
6. Number of visitors in any destination is limited to avoid overcrowding.	2.4884	Disagree
7. Solid wastes are properly disposed of in designated areas.	2.5093	Agree
8. Tourism businesses help in improving infrastructure such as better sewage, water and transportation systems.	2.5349	Agree
9. Environmental programs/projects for cleanliness are well implemented in every tourist destination.	2.5977	Agree
10. Activities in Puerto Galera always consider the protection of marine species.	2.7186	Agree
COMPOSITE MEAN	2.5428	Agree

Overall, the sustainability of tourism in terms of environmental pillar garnered a composite mean of 2.5428 with an interpretation of agree.

The respondents agreed that tourism in Puerto Galera is sustainable in terms of environmental. Respondents show that they agree tourism is sustainable but there are areas to improve. Improved water quality and other related ways such as avoiding overcrowding and signage related to

sustainability should be seen to help the tourism industry of Puerto Galera to maintain its beauty.

To address the issues on negative environmental effects of tourism, many countries are switching to sustainable tourism as a substitute. With the practices of sustainable tourism and its rapid expansion to many developing countries, such as the Philippines, this resulted in the preservation of natural resources and economic development at the same time. [11]

2.2 Economic

Table 8 showed the assessment of the sustainability of tourism in selected tourist destinations in Puerto Galera in terms of economic pillar.

TABLE 8
ASSESSMENT ON THE SUSTAINABILITY OF TOURISM IN
SELECTED TOURIST DESTINATIONS IN PUERTO GALERA IN
TERMS OF ECONOMIC

ECONOMIC	Weighted mean	Verbal Interpretation
1. Tourism generates employment.	3.3907	Agree
2. Increase in tourism demand allows businesses to fulfill their legal responsibilities.	2.9744	Agree
3. Tourists pose a greater demand for local food and crafts.	2.7349	Agree
4. Water, electricity, and space are all in sufficient supply which attracts more investors.	2.2907	Disagree
5. Environmental fees are collected to be used in conserving tourism attractions.	2.5674	Agree
6. Tourism allows local residents to revitalize and generate income through arts, crafts and other local products.	2.7558	Agree
7. Tourism activities in Puerto Galera like hiking, shooting ranges, scuba diving and zip lines provide significant financial return.	2.8163	Agree
8. Tourism is recognized in demand that allows institutions in Puerto Galera to offer tourism and hospitality programs.	2.6837	Agree
9. There is a terminal fee from tourists that can be used for future plans in development of ports.	2.6279	Agree
10. Tourism provides increased funding for public services like health, police and fire services.	2.6302	Agree
COMPOSITE MEAN	2.7472	Agree

The sustainability of tourism in terms of economic pillar garnered a composite mean of 2.7472 with an interpretation of agree.

The respondents agreed that tourism in Puerto Galera is economically sustainable. It might be due to a reason that tourism in Puerto Galera evidently helps generate jobs and were able to increase the standard of living of the people in the community. Tourism could have also increased tax revenue for the municipality.

Tourism has strong backward links to industries that serve tourist consumer demand, such as lodging,

restaurants, beverages and food, retail trade, and transportation. Tourism in transportation and lodging is inextricably related to the building industry, which provides infrastructure for both. Tourism can help to increase tax income and exchange gains from related industries. Furthermore, links to natural resource sectors can be extremely beneficial to the tourism value chain. Tourism boosts domestic production, employment, and tax revenue.

Around the world, travel and tourism are significant economic activity. The tourist sector continues to play a significant role in many nations in terms of generating jobs and income of the formal and informal sectors of the economy, direct and indirect job opportunities in the tourism industry can be recognized. [10]

2.3 Economic

Table 9 shows the assessment of the sustainability of tourism in selected tourist destinations in Puerto Galera in terms of social pillar.

TABLE 9
ASSESSMENT ON THE SUSTAINABILITY OF TOURISM IN
SELECTED TOURIST DESTINATIONS IN PUERTO GALERA IN
TERMS OF SOCIAL

SOCIAL	Weighted mean	Verbal Interpretation
1. Staff shows great hospitality in welcoming the guests.	3.1814	Agree
2. Locals and tourists have good engagement.	3.1000	Agree
3. Tourism helps in providing knowledge about the culture of Puerto Galera through cultural exchange.	2.9302	Agree
4. Tourism helps to strengthen the communities to work together and provide excellent service.	2.8581	Agree
5. Local traditions and customs are preserved.	2.8093	Agree
6. Tourism serves as a force for peace and unity.	2.8837	Agree
7. The local community of Puerto Galera feel proud of tourism because it strengthens their cultural values.	2.9442	Agree
8. Tourism helps the community to elevate awareness of their local goods and products to the tourists.	2.9209	Agree
9. Tourism contributes to a good change of lifestyle for the local residents.	3.0256	Agree
10. Because of tourism, local residents feel secure in their place.	2.9721	Agree
COMPOSITE MEAN	2.9626	Agree

The table reveals that the respondents see Puerto Galera as socially sustainable with a composite mean of 2.9626 with an interpretation of agree.

It might be due to a reason that as a Filipino citizen, part of the culture is being hospitable. Filipinos typically ensure that their guest will feel at home and be comfortable in their stay. It is natural for Filipinos to warmly welcome their guest. It might also be due to a reason that the community in Puerto Galera really put in efforts to cater tourists. They actually attend seminars for upcoming projects related to hospitality in order to make sure that guests will not just enjoy during their stay, but will also comeback.

The efforts of the Puerto Galera community are supported by the local government and organizations that facilitate hospitality-related seminars. Such initiatives play a crucial role in keeping the local tourism sector competitive. Training programs ensure that hospitality staff are well-prepared to deliver high-quality service, and they foster an environment where locals actively participate in the development of tourism strategies that reflect the region's cultural uniqueness. These activities contribute not only to the economic welfare of the area but also to the development of a sustainable tourism model that prioritizes cultural exchange and guest satisfaction. [4]

3. Comparison on the Assessment in terms of Profile of the Respondents

3.1 Age

Table 10 shows the comparison in the assessment on the sustainability of tourism in selected tourist destinations in Puerto Galera in terms of age.

TABLE 10
COMPARISON ON THE ASSESSMENT ON THE SUSTAINABILITY OF
TOURISM IN TERMS OF AGE

Age	Environmental	Economic	Social
18-35	2.5651	2.7844	2.9872
35-55	2.5031	2.7031	2.9546
55 and above	2.5755	2.7286	2.8796
Total	2.5428	2.7472	2.9626

Based on the result, it is revealed that the age bracket of 18-35 years old had the highest mean of 2.9872 in terms of social. It is followed by economic at 2.7844 and environmental at 2.5651. It can be

gleaned that among other ages, 18-35 years old mostly enjoyed how the community in Puerto Galera make them feel welcomed.

It connotes that among other ages, mostly 18-35 years old showed a higher mean in terms of social garnering the highest mean at 2.9872. It can be gleaned that young adults, defined as those between the ages of 18 and 35, are those who are most likely to travel and are capable of doing so. When compared to the other age group, they most likely tend to travel as it is their way of checking out new things. Furthermore, children of this age can easily pick up on affects and changes in the environment around them. They had a great experience on how they were treated. It can be gleaned that for them, Puerto Galera showed great hospitality among tourists.

Young adults, especially those aged 18-35, are increasingly motivated by personal growth, social experiences, and cultural exploration. They are highly influenced by the travel experiences shared on social media and tend to engage more with the environments they visit, appreciating both the local and culture and hospitality. The study further emphasizes the role of digital platforms in shaping young adults' perceptions of destinations and their expectations regarding hospitality and social interactions during their travels. [16]

3.2 Sex

Table 11 shows the comparison in the assessment on the sustainability of tourism in selected tourist destinations in Puerto Galera in terms of sex.

TABLE 11
 COMPARISON ON THE ASSESSMENT ON THE SUSTAINABILITY OF TOURISM IN TERMS OF SEX

Sex	Environmental	Economic	Social
Male	2.5096	2.6921	2.9384
Female	2.5660	2.7858	2.9794
Total	2.5428	2.7472	2.9626

Based on the result, it is revealed that females had the highest mean of 2.9794 in terms of social. It is followed by economic at 2.7858 and environmental at 2.5661. It can be gleaned that in contrast to men, the majority of female respondents agreed that tourism industry in Puerto Galera has shown that it is socially sustainable.

It can be concluded that women are more likely than men to travel. Perhaps it's because they want to go on adventures and travel to new places. Females also tend to observe more about the environment they are in due to the well-known stereotype that they are more appreciative than guys. It could be attributed to the assumption that they were more attentive. They are also known as more active in interactions.

An article explores how gender differences influence travel behaviors, particularly highlighting that woman are more likely to travel due to a desire for adventure and exploration. It examines the motivations and travel patterns of men and women, suggesting that women often seek more meaningful and enriching travel experiences. [8]

3.3 Civil Status

Table 12 shows the comparison in the assessment on the sustainability of tourism in selected tourist destinations in Puerto Galera in terms of civil status.

TABLE 12
 COMPARISON ON THE ASSESSMENT ON THE SUSTAINABILITY OF TOURISM IN TERMS OF CIVIL STATUS

Civil Status	Environmental	Economic	Social
Single	2.5493	2.7688	2.9883
Married	2.5210	2.6913	2.9364
Separated	2.8583	3.1167	3.0750
Widowed	2.4944	2.8611	2.8778
Total	2.5428	2.7472	2.9626

In terms of civil status, separated respondents got the highest mean in terms of economic, with a mean of 3.1167. It is followed by social with a mean of 3.0750 and environmental at 2.8583. It can be gleaned that the majority of separated individuals mostly consider Puerto Galera's tourism industry as economically sustainable compared to others.

The fact that solo individuals must take care of their family twice, as opposed to married or paired people, may be the source of their increased awareness of their surroundings. It might also be that they often travel in order to reduce stress for their mental health. Most of them also has the means to travel due to being employed. Most of them are the only ones taking care of themselves. It might be the why they tend to engaged more in economic views compared to another category.

Solo travelers often travel for personal well-being and mental health benefits, including stress reduction. This aligns with the idea that solo individuals may have a heightened awareness of their surroundings and are more likely to travel to manage their mental health. [13]

3.4 Highest Educational Attainment

Table 13 shows the comparison in the assessment on the sustainability of tourism in selected tourist destinations in Puerto Galera in terms of highest educational attainment.

TABLE 13
COMPARISON ON THE ASSESSMENT ON THE SUSTAINABILITY OF TOURISM IN TERMS OF HIGHEST EDUCATIONAL ATTAINMENT

Highest Educational Attainment	Environment al	Econ omic	Social
Highschool Undergraduate	2.4713	2.6287	2.8500
Highschool Graduate	2.3579	2.5986	2.8586
Vocational Graduate	2.9429	3.2214	3.1000
College Degree	2.7638	2.9638	3.1529
Masters Degree	2.4000	2.6222	2.9222
Doctorate Degree	2.9000	3.0500	3.4500
Total	2.5428	2.7472	2.9626

It can be gleaned on the table that doctorate degree got the highest mean of 3.4500 in terms of social. Followed by vocational graduate that shows higher mean in terms of economic at 3.2214 and environment at 2.9429.

This shows that the different variables of the study were viewed by the respondents from different groups depending on what mattered to them. Respondents that has a doctorate degree mostly agreed that tourism in Puerto Galera is sustainable in terms of social. It might be due to the reason that different educational status also affects the point of view of an individual. They can easily observe if there are certain changes in asocial aspect affected by an activity in that area. It might also be due to reason of being more observant to the environment they are in as they are more induced to learning new things.

Higher educational attainment, particularly a doctorate or advanced degree, is often associated with increased awareness and sensitivity to social, cultural, and environmental issues. People with higher education levels tend to be more observant of changes in their environment and can better understand the implications of tourism. [6]

3.5 Monthly Income

Table 14 shows the comparison in the assessment on the sustainability of tourism in selected tourist destinations in Puerto Galera in terms of monthly income.

TABLE 14
COMPARISON ON THE ASSESSMENT ON THE SUSTAINABILITY OF TOURISM IN TERMS OF MONTHLY INCOME

Monthly Income	Environment al	Econo mic	Social
Below Php 10,957.00	2.4457	2.6494	2.8955
Php 10,957.00 – 21,914.00	2.7634	2.9475	3.0663
Php 21,914.00 and above	2.6067	2.8483	3.0883
Total	2.5428	2.7472	2.9626

In terms of monthly income, it was revealed that respondents earning Php21, 914.00 and above got the highest mean of 3.0883 in terms of social. Followed by economic at 2.8483 and environmental at 2.6067.

It can be gleaned that mostly respondents earning Php 21,914.00 and above showed a higher mean that tourism in Puerto Galera is sustainable in terms of social. It might be due to the reason that they are more capable of being able to travel compared to those who earn less than 21 thousand. They have more experience in visiting destinations and has direct experiences on how they are treated as a tourist. Due to them working, they tend to travel often to seek for nature to reduce stress.

Studies have consistently shown that income levels affect travel behaviors and perceptions of tourism. Higher-income individuals tend to travel more frequently and have more experiences with various tourist destinations, which could lead to a

better understanding of the social sustainability of tourism. [2]

3.6 Type of Respondents

Table 15 shows the comparison in the assessment on the sustainability of tourism in selected tourist destinations in Puerto Galera in terms of type of respondents.

TABLE 15
 COMPARISON ON THE ASSESSMENT ON THE SUSTAINABILITY OF TOURISM IN TERMS OF TYPE OF RESPONDENTS

Type of Respondents	Environmental	Economic	Social
LGU	3.2925	3.3763	3.3937
Local Resident	2.2604	2.4955	2.7637
Tourist	2.6305	2.8552	3.0981
Total	2.5428	2.7472	2.9626

In terms of the type of respondents, local government unit got the highest mean of 3.3937 in terms of social. Followed by mean of 3.3763 in economic and 3.2925 in environmental.

It can be gleaned that mostly, respondents that are part of the local government unit shows a high response that tourism in Puerto Galera’s sustainable in terms of social. It might be due to a reason that they are the first ones who experienced tourism of Puerto Galera compared to other types of respondents. Due to this, they can easily see different effects or changes in tourism firsthand. They are also part of those who provide great experience to tourist. Part of their goal is to feel the tourist welcomed and comfortable while they travel.

The local government sector has traditionally played an important role in supporting tourism development of local areas. This included the provision of infrastructure, the development of tourist attractions and experiences, support for festivals and events and the implementation of tourist promotion plans. Tourism plans, policies and development objectives are core elements of the County and City Development Plans. Importantly, the sector mobilized a network of stakeholders including agencies, community groups and the private sector to invest in and promote their local tourist offering. [3]

4. Proposed inputs to Sustainability Plan

Based on the study's findings, it appears that there are areas to improve in terms of environmental and

economic aspects, the researchers suggested inputs to a sustainability plan that might be used later to enhance and implement forward sustainable practices for tourism in Puerto Galera. The proposed sustainability plan will be presented to the LGU as an input for their sustainability plans in the municipality and is intended to enhance how tourists perceive and value Puerto Galera.

TABLE 16
 PROPOSED INPUTS TO SUSTAINABILITY PLAN FOR TOURISM OF PUERTO GALERA

Key Areas	Findings	Objectives
Environmental	There is a good water quality because tourism establishments practice discharging sewage sludge into designated areas.	To prevent undisciplined disposal of wastes in the water.
Environmental	There are enough signages in every tourist destination to inform tourists about different sustainable practices.	To avoid littering in destinations that tourists visit.
Environmental	Tourism encourages the establishment of nature reserves for sustainability.	To promote preservation and conservations of all aspects in tourism for long term use.
Environmental	Number of visitors in any destination is limited to avoid overcrowding.	To ensure they follow the given carrying capacity in each tourist destination.
Economic	Water, electricity, and space are all in sufficient supply which attracts more investors.	To achieve sustainable and wise use of water and electricity.
Social	Local traditions and customs are preserved.	To keep the culture, shape values, beliefs, aspirations and preserve the cultural heritage.

Proposed Inputs	Persons Involved	Expected Outcome
Proper disposal and waste management must be utilized and the collection of wastes must be performed every other day.	Tourism establishments/local government and residents.	After providing clear proposed strategies on each findings, the given strategies are expected to be utilize, observe and monitor in order to lessen the negative impacts on environment, economic and social brought by tourism.
The local government together with attractions care takers may provide signages like “do not litter”, “segregate trash properly” and “preserve our environment” in different tourist destinations especially natural ones to keep it protected.	Local government/Tourism office/Attraction owner’s/care takers/ tourists.	
The tourism office together with the local government may implement awareness campaigns with regards to sustainable practices like “alaylakad, alaytanim” , coastal cleanup and programs showing the importance of taking care the environment, natural resources and tourist destinations.	Local government/tourism office/local residents	
Tourism office may work or guide travel agencies and tour operators to provide organized travel itineraries, ensure to follow the carrying capacity and promote other tourist attractions with lower tourist arrivals.	Local government, tourism office, travel agencies, tour operators.	
The use of solar powered energy may be utilized, usage control of water and electricity may be possible when there are reminders posted in tourism establishments to turn off the lights and faucet when not in use and the likes.	Tourism establishment owners, employees, tourists and local residents	
Spend time with other members of the community to keep the culture alive. When doing tours and excursions, always take time to introduce the history of the destination and culture of the residents.	Local government unit, tourism establishment owners, employees, tourists and local residents	

CONCLUSIONS

1. Majority of the respondents are from the age bracket of 18-35 years of age, female, single, high school graduates, falls below Php 10, 957.00 and local residents.
2. The respondents agreed that there is sustainability of tourism in selected tourist destinations in Puerto Galera in terms of environmental, economic and social.
3. About the findings of the study, it can be concluded that there is a comparison on the assessment on the sustainability of tourism in selected tourist destinations in Puerto Galera

when grouped according to profile. The researchers found out that tourism in Puerto Galera is socially sustainable as perceived by the age bracket of 18-35 years old with the highest mean. On the other hand, female respondents show a highest mean for social. For separated respondents, it has the highest mean in terms of economic. Additionally, the researchers also found out that respondents that has a doctorate degree got the highest mean in terms of social. Also, respondents earning Php 21, 914.00 and above got the highest mean of 3.0883 in terms of social as well. Lastly, in terms of the type of respondents, local government unit got the highest mean in terms of social.

4. The proposed inputs for tourism sustainable plan were designed to promote and improve the areas that need further improvement.

RECOMMENDATIONS

In connection with the findings and conclusions, the following recommendations are stated:

1. To the local residents, they may think of environmentally friendly activities and practices that they may suggest to the local government.
2. To local government unit of Puerto Galera, they can use the proposed input from the study to manage the tourist attractions for the benefit of the local community.
3. To the tourism of Puerto Galera, this may serve as a guide plan to preserve and conserve their natural resources and traditions by means of pre orientation about sustainable tourism.
4. To the International Hospitality Management students, they may use the proposed inputs for sustainable plan and its results for academic purposes.
5. To tourism students, they may use the information about the significance of sustainability for the preservation and promotion of a destination.
6. To future researchers, this may serve as a basis to be familiar with different sustainable practices and this will also serve a new theory for their study.

7. To the researchers, this may serve as a learning tool to be updated with current situations related to their chosen field and this will improve their capabilities in gathering data, analysing different studies in application to real life.

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