



Sustainability of ecotourism destinations in tublay, Benguet

Roanne Mylene Kiat-ong Yango

Business Administration, Lecture, Faculty of the School of Business, Administration and Accountancy, Graduate Program,
University of Baguio, Philippines

Abstract

Offering tourism and protecting the local community is a balancing act. Many agree that pleasing tourists should maintain the satisfaction of the locals. It is then the aim of this study to determine the sustainability status of the ecotourism destination as perceived by tourism suppliers in Tublay, Benguet, in terms of sociocultural, economic, and environmental dimensions. Further, to find out the significant relationship between the perception of the tourism suppliers about the identified ecotourism sustainability indicators. It is further the intention to create an information pamphlet based on the need that arose from the survey data. The study used a quantitative approach, using a survey questionnaire. The questionnaire was subjected to reliability testing using Cronbach Alpha and was deemed reliable. The respondents were 50 tourism suppliers from the ecotourism establishment of Tublay, selected via purposive sampling. Data gathered were subjected to average weighted mean and ANOVA. The main findings showed that the environment is the most vital dimension among the Principles of Tourism Sustainability. The tourist respecting the locals appeared to be an area that needs improvement. Overall, Tublay tourism practices seem conscious of maintaining sustainability; however, it still show areas to improve. The result implies that the stakeholders of Tublay, the local government unit, management of the ecotourism destinations, suppliers, and residents necessitate having constant communication to strengthen partnerships towards tourism sustainability.

Keywords: eco-tourism, sustainability, socio-cultural, destination and tublay

Introduction

Tourism sustainability has become a key policy concern for governments around the world. There is a compelling need to regulate sustainable tourist development, perhaps even more than ever, which can only be accomplished by considering environmental issues and their worldwide scope. Various societal problems and needs, as well as the growth of metropolitan areas, can be addressed by making cities into appealing tourist destinations much more sustainably (Zamfir & Corbos, 2015) [27].

According to the World Tourism Organization, sustainable tourism development responds to current tourist and host region needs while preserving and increasing future potential. All resources may be managed through sustainable tourism to meet requirements while preserving cultural integrity, biological diversity, ecological dimensions, and the life system (Huibin, 2013) [13]. Sustainable tourism is classified as a form of tourism that considers current and future implications, whether economic, social, or environmental. It caters to the diverse demands of visitors, industry, local communities, and the environment (Minciu *et al.*, 2010) [15].

In order to guarantee long-term sustainability, the community should have policies and practices that can ensure long-term economic viability by delivering equitable socioeconomic advantages to all stakeholders, such as secure employment and income-earning possibilities for host communities and social services and alleviating poverty. In tourism, it should be evident that the tourism activities respect the host communities' sociocultural authenticity, preserve the living cultural heritage, and contribute to intercultural understanding and tolerance. Further, tourism sustainability makes the best possible use of environmental resources, which are a critical component

of tourism development, while preserving important ecological processes and contributing to the conservation of natural resources and biodiversity (APEC, 2013) [3].

Sustainability is all the more critical in ecotourism since this involves tourism activities where the prime attractions are the natural resources. Ecotourism is traveling to relatively undisturbed or uncontaminated natural places with the specific goal of studying, admiring, and enjoying the scenery and its wild plants and animals and any existing cultural representations, including past and current, found in these locations. In actual fact, ecotourism has already enriched several countries such as Madagascar, Ecuador, Kenya, and Costa Rica, as well as assisting in the economic development of some of the world's poorest populations. In 2019, the worldwide ecotourism market generated \$92.2 billion; by 2027, it is expected to earn \$103.8 billion (Gallager, 2021).

Costa Rica, a tropical country with a well-established hospitality sector dedicated to sustainability, appeals to environmental visitors. Costa Rica can boast about its adventure credentials, offering activities like volcano trekking, jungle zip-lining, and conservation programs that work in harmony with the nation's biodiverse flora and fauna and hosting hundreds of independent eco-lodges and green wellness retreats among its rainforests. Kenya, a region particularly famed for its grassland safaris giving intimate experiences with giraffes, lions, rhinos, and other wildlife, is home to one of Africa's best instances of ecotourism. Aside from the Masai Mara plains, Kenya's natural landscapes include mountains, beaches, and offshore coral reefs, each with unique ecology (Tucker, 2022). Ecotourism destinations are further abundant in the Philippines. One of which is the Masungi Georeserve, located near Baras, Rizal, surrounded by lush rainforests

and limestone rocks. Further, the Tubbataha Reefs is a 1,600-hectare conservation area that safeguards various native flora and animals. It has been named one of the best diving destinations in the world because of its spectacular underwater landscape of corals and marine life (Valdeavilla, 2018).

In the Cordillera Region, the Municipality of Tublay, Benguet has several ecotourism destinations, including Ahonda Caves, Rock Formation and Jungle Adventures, Winaca Eco-Cultural Village, and Polig's Berry Farm (Baguio City Guide, 2021). The Polig's Berry Farm is located at KM. 20, Golon Ambassador, Tublay, Benguet, and has a large kettle café. The place offers outdoor activities such as trekking on the Yamashita Trail and gathering blueberries and other seasonal fruits available at the family-owned business (Alimondo, 2021)^[1].

Unfortunately, all across the globe, many so-called "eco-tour operators" have become greedy, enticing tourists without genuinely being environmentally conscious. The operation does not advise tourists about proper practices for roaming into vulnerable habitats and continues to create additional infrastructure to accommodate tourists, among other problems which ultimately disrupt the ecosystem. Such activities cannot be called actual eco-tourism, rather, conventional tourism is disguised as ecotourism (Singh, 2017)^[24].

Similar to what is happening in Machu Picchu, Peru, an ancient Inca civilization landmark and a UNESCO world heritage site, the attraction attracts enormous numbers of tourists, way over its maximum capacity. As early as 2002, National Geographic was already concerned about the landslide that may occur due to overcrowding (Blair, 2018). Baguio City further has its issues when it comes to sustainability. There have been serious concerns about the city's seemingly unchecked urban development and over-tourism, resulting in significant city issues such as traffic, overcrowding, water shortages, and rising pollution (San Juan, 2020)^[23].

The Study by Rodriguez (2016)^[21] focused on assessing the sustainability of ecotourism in Costa Rica, revealing that unfortunate rural development policies led to a significant loss of forested areas. He further narrates that the government of Costa Rica reacted to this issue by coming up with innovative strategies which eventually stopped deforestation and repaired the forest. At present, Costa Rica's multibillion-dollar ecotourism business relies on the country's biodiversity and protected areas; as tourism has

grown, so has an awareness of environmental protection. Several scholarly works of literature assess the sustainability of ecotourism destinations. For instance, the Study of Hosseinalizadeh *et al.* (2018)^[12] assessed the ecotourism of the Azerbaijan Region of Iran using sustainable development indexes, including political, sociocultural, economic, and technological indexes. The study revealed that the weakness in ecotourism in the Azerbaijan Region of Iran is the lack of drinking water in the village, the increase in the village area, the lack of construction supervision, and an increase in rural-to-urban migration.

In contrast, the Study of Salman & Munir (2016)^[22] used a different approach to assessing ecotourism in India. The study focused on land resources, including community land, pastures, forest, wildlife, and social forestry. The result revealed an eminent need for the conservation of resources to ensure livelihood and provisions to its users.

On the other hand, McKeown (2021)^[14] proposed a simplified assessment measure for sustainability that evolves into three indicators; economic, social, and environmental, which are common indicators used in the Study of Thomas *et al.* (2014), Zamfir and Corbos (2015)^[27], and White *et al.* (2015). These indicators will further be used in this study.

Based on the aforementioned past research, there is a recognizable knowledge gap for several reasons. First, most of the research is internationally based in India (Salman & Munir, 2016)^[22], Iran (Hosseinalizadeh *et al.*, 2018)^[12], and Costa Rica (Rodriguez, 2016)^[21]. The researcher recognizes that the international locations' demographics and micro and macro environments are much different in Tublay, Benguet. Secondly, the variables being studied in the published research are more on the agricultural industry rather than on ecotourism.

Theoretical and Conceptual Framework

As seen in Fig. 1, the framework of this research is anchored on the Principles of Sustainable Tourism adapted from the Study of White *et al.* (2015). Tourism sustainability is multidimensional, with three distinct sustainability dimensions: environmental, social, and economic sustainability. As a result, sustainable tourism must adhere to sustainability's environmental, social, and economic objectives. The synergistic effect is created at the level of tourist sustainability in this way. Synergy generally refers to when specific characteristics occur throughout the entire system, however not in any of the subsystems.

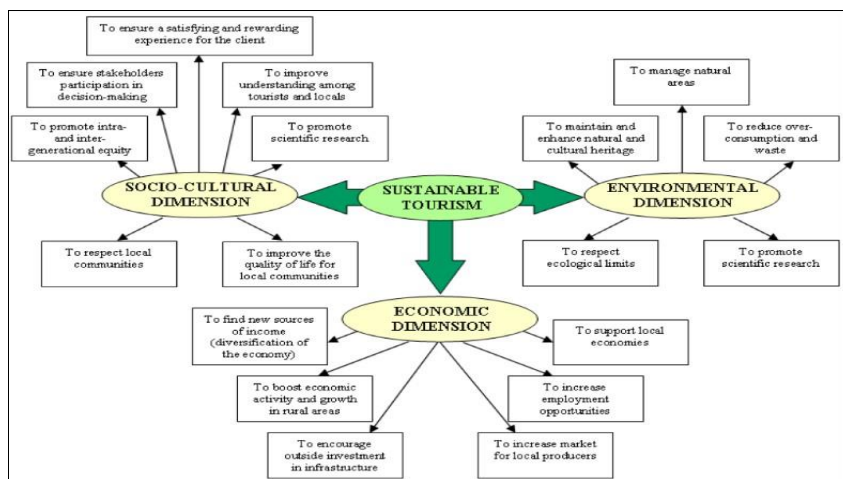


Fig 1: Principles of sustainable tourism (adapted from White *et al.* 2015)

The article of Dumbraveanu (2007) ^[11] developed a theoretical introduction of the Theory of Principle of Tourism. The article delineates that sustainable tourism is a form of alternative tourism based on the following principles;

a. Sociocultural dimension

reducing the negative influence of tourism on the local community and its residents to achieve social sustainability. Developing tourism forms that do not disrupt and disrupt the daily lives of the people who live in tourist locations. Avoid confrontational situations, limiting the harmful influence of tourism on local communities' culture, traditions, and customs to achieve cultural sustainability.

b. Economic dimension

optimizing the economic benefits of tourism development to the local population to achieve economic sustainability. One of the most important principles of sustainable tourism is that it should serve the security and economic growth of local communities and natural areas.

c. Environmental aspects

reducing the impact of tourism on the environment in order to achieve ecological sustainability by contributing to the preservation and enhancement of conservation through the return of a portion of revenue to the protected area. Using tourist methods that have no negative influence on the environment.

Indeed, tourism can be a good source of revenue, however it further has inevitable detrimental consequences. These consequences are both physical and cultural. The effects vary depending on the number of tourists and their qualities, as well as the characteristics of the location where tourism activities take place. As natural resources are limited, it is essential to use them as conservatively as possible. Over-exploitation of natural resources harms ecosystem health and human well-being (Bansard & Schröder, 2021) ^[6]. These harmful effects can only be handled appropriately if recognized, assessed, and evaluated (Nath & Nath, 2018). McKeown (2021) ^[14] suggests that since the ecotourism industry is growing rapidly, assessment is necessary in order to maintain focus on the sustainability goals of ecotourism. Furthermore, Thomas *et al.* (2019) believes that there is a need to conduct a sustainability assessment to lower risks or costs through better decision-making and planning that identifies limits and opportunities, prevention of emerging risks and or conflictive issues, and timely identification of impacts and corrective action needed.

Significance of the Study

Since Tublay, Benguet shows good potential in becoming a popular destination, having several ecotourism tourist destinations, leveling up to Baguio City, it is beneficial and strategic to look into the present condition of sustainability of tourism in that area. Several works of literature already report on the sustainability of ecotourism destinations. However, most focus on international destinations or the already popular ones in the Philippines. This article is likely the first attempt in the context of an ecotourism destination in Tublay, Benguet, to look into the condition of its sustainable tourism.

The result of the study will benefit the local micro, small, to medium tourism suppliers in assessing the products and services offered by their businesses. The local community

will further benefit by aligning the current tourism offerings with best practices for enhancing the ecotourism destination's sustainability. Further, the result of this study can coordinate efforts to maximize the benefits of sustainable ecotourism. Other researchers can use the tool used by this study to assess the sustainability of other ecotourism tourist destinations.

The discussion mentioned above has led the researcher to attempt to assess the sustainability of ecotourism destinations, focusing on Tublay and Benguet.

Specifically, it aims to attain the following

1. To determine the status of sustainability of the ecotourism destination as perceived by tourism suppliers in Tublay, Benguet using the following indicators;
 - a. Socio-cultural dimension
 - b. Economic dimension
 - c. Environmental dimension
2. To determine the significant difference of the perception of the tourism suppliers about the identified ecotourism sustainability indicators.
3. To create an information pamphlet on the improvement of sustainability of ecotourism destinations in Tublay, Benguet.

Methodology

Study Design

The study used a quantitative-descriptive research approach to assess ecotourism destinations' sustainability in Tublay, Benguet. Considering the assumed availability of time and the limited schedule that the respondent can give to this research, a survey questionnaire is deemed fit to extract data; hence, a quantitative approach is appropriate.

Population and Locale of the Study

The study took place in the landlocked agricultural municipality of Tublay, Benguet. Tublay's topography is generally hilly and mountainous, with several waterfalls. Having this brings the location an ideal ecotourism destination. The culture is further fascinating and rich since it comprises three ethnolinguistic groups. These are the Kankana-eyes, Ibalois, and Kalanguyas (LGU Tublay, n.d.). Being such makes it all the more a propitious ecotourism destination. Currently, Tublay offers several tourist attractions, including Ahonda Caves, Rock Formation and Jungle Adventures, Winaca Eco-Cultural Village, and Polig's Berry Farm. Asin Hotspring, Balete Tree, The Ridge Cafe, Paterno Cave, Bajokbok Falls, Ambassador View decks, and Vermicomposting Site, among others.

As inclusion criteria for the respondents of this study, the researcher invited the tourism suppliers of ecotourism destinations in Tublay. Table 1 shows the summary of respondents for this research. Tourism suppliers are operationally defined in this study as individuals providing tangible or intangible services to a tourist. The tourism suppliers are the tour guides, owners, or employees of a business that caters mainly to tourists. Since there are several ecotourism destinations in Tublay, only those privately owned and employed workforce were included in this study. As a limitation of this study, only tourism suppliers that service the following ecotourism destination were included: 1. Ahonda Caves, Rock Formation, and Jungle Adventures, 2. Winaca Eco-Cultural Village, 3.

Polig's Berry Farm, and 4. Asin Hot Springs. These destinations were selected based on the observed popularity of the destination. Tourism Suppliers that cater to non-ecotourism destinations were excluded from this study. As to the number of respondents, purposive sampling was done on the available tourism suppliers during the 1-week data gathering period, and they were invited to answer the data gathering tool. The researcher was able to invite 50 tourism suppliers.

Table 1: Summary of Respondents

| Categories | Number |
|--|--------|
| ▪ Business Owners | 2 |
| ▪ Tourguides | 7 |
| ▪ Vendors | 12 |
| ▪ Employees working in ecotourism destinations | 29 |

Date Gathering Tool

The primary data-gathering tool for this study is a survey questionnaire. The indicators in the survey are based on the Principles of Sustainable Tourism (adapted from White *et al.* 2015). The survey is composed of 2 parts. Part 1 of the questionnaire extracted the demographic profile of the respondents. Part 2 enumerated the variables under the sociocultural, economic, and environmental dimensions. Further, the respondents were asked to signify their level of agreement with the variables in the survey.

To ensure the validity of the data-gathering tool, the questionnaires were subjected to critiquing by an expert panel before using the tool. As Akeem (2015) stated, the validity of a questionnaire can be established using a panel of experts who would explore the theoretical construct represented in an operational measure. On the other hand, the tool's reliability was established using a pilot test by collecting data from 20 respondents that are not part of the study. The result from the pilot test was tallied and analyzed using IBM SPSS. The reliability test result revealed a greater than .70 score; hence is considered reliable.

| Likert Scale | Statistical Limit | Interpretation | Descriptive Interpretation |
|--------------|-------------------|------------------------|--|
| 4 | 3.25 - 4.00 | Highly Sustainable | I firmly find the statement correct to what I observe is happening |
| 3 | 2.50 - 3.24 | Moderately Sustainable | I find the statement correct to what I observe is happening |
| 2 | 1.75 - 2.49 | Slightly sustainable | I find the statement incorrect to what I observe is happening |
| 1 | 1.00 - 1.74 | Not sustainable | I firmly find the statement incorrect to what I observe is happening |

Ethical Considerations

To address the ethical issue in this research process, the researcher wrote a letter to the management/owner of the identified ecotourism destinations, seeking permission to include the destinations and their manpower in this study. During the consent process, the researcher informed the respondent about the study's nature, purpose, procedure, potential risks, potential benefits of participation, and confidentiality clauses. After which, to ensure that the participants will not be coerced, the respondent was given a voluntary choice through informed consent to participate in the study. The researcher disclosed all information deemed essential as the basis for the respondents to decide whether to participate in the study. The participants were made aware of the duration of their participation and that they could withdraw at any time from the research. The researcher was sensitive to non-verbal communication from the respondent, who may be unable to verbalize withdrawal

Data Gathering Procedure

The data was gathered during one week in May 2022. Upon approval of the management/owner, the researcher gave the survey questionnaire personally to the respondents. The researcher visited the ecotourism destination on several occasions. The researcher was present when the respondents were answering the survey to assist the respondents in answering the questionnaire and was available in case the respondents had questions about the content of the survey. Since most of the respondents are employees of the destinations and vendors outside and around the vicinity of the ecotourism destinations, the researcher explained the objectives of the study using the local dialect – Kankana-ey and Ilocano to help these respondents understand better the purpose and importance of answering the survey questionnaires and participating in the study.

Treatment of Data

For the treatment of data, statistical operations were conducted. To assess the sustainability status of the ecotourism destination as perceived by tourism suppliers, the data were subjected to an average weighted mean method. In order to establish if there is a significant relationship between the perception of the tourism suppliers about the identified ecotourism sustainability indicators, an ANOVA test was applied with the aid of IBM SPSS software. The weighted mean of the level of agreement of the respondents was interpreted through a 4-point Likert scale as follows: (1) = Highly Sustainable (I firmly find the statement incorrect to what I observe is happening). (2) = Moderately Sustainable (I find the statement incorrect to what I observe is happening). (3) = Slightly Sustainable (I find the statement correct to what I observe is happening). (4) = Not Sustainable (I firmly find the statement correct to what I observe is happening).

from this research but is evident from their action and ensured that the outcome of the negative or positive study was made clear to the respondent to avoid false assumptions about the benefits of participating. Further, the researcher ensured that both the management of the establishment and the employees were in unison in agreeing to participate in this Study (Philippine Health Research Ethics Board, 2017). Since this research is a social study involving human participants, the minimal risk of losing confidentiality is recognized. As risk management, the researcher ensured using codes, withholding respondents' names, and ensuring that identity was concealed. Personal information such as the name was not asked in any part of the survey. Moreover, the name of the ecotourism destination was coded as Establishment A, B, C, and D so as not to be able to identify from which establishment the data came. The result of the study will be presented in a public lecture inviting tourism suppliers, faculty, and students.

Since the printed Survey Questionnaires were used to collect data and to address the concerns on ethical issues in research, the answered documents were shredded properly and donated to UB - School of IHTM's Session Road in Bloom Working Committee to be used as Paper Mache Art which the School of Engineering and Architecture will design.

Results and discussion

Status of Sustainability of the Ecotourism Destination as Perceived by Tourism Suppliers in Tublay, Benguet

Socio-cultural Dimension

The principle of sustainable tourism includes the sociocultural dimension, which is one of the main focuses of this study. The survey included 7 identifiers under this variable and reflected a total average of 3.41, interpreted as highly sustainable. Of the seven identifiers, three are interpreted as highly sustainable, and the rest of the four are interpreted as moderately agree. It implies that the respondents recognize the contribution of tourism to the sustainability of the sociocultural dimension of ecotourism. A high result evidences the aspect: "tourism activities improve the quality of life for local communities."

Table 1: Status of Sustainability of the Ecotourism Destination as Perceived by Tourism Suppliers in Tublay, Benguet according to Socio-cultural Dimension

| | Average | Interpretation | Descriptive Interpretation | sd |
|---|---------|------------------------|--|------|
| 1. It is observed that the tourists respect the local community. | 3.22 | Moderately Sustainable | I find the statement correct to what I observe is happening | 0.62 |
| 2. Tourism activities allow meeting the present needs of the community without compromising the ability of future generations to meet their needs. (Intergenerational Equity) | 3.20 | Moderately Sustainable | I find the statement correct to what I observe is happening | 0.64 |
| 3. The stakeholders of the municipality are able to participate in the decision-making with regard to tourism activities. | 3.24 | Moderately Sustainable | I find the statement correct to what I observe is happening | 0.48 |
| 4. The tourist feels satisfied with their tourism experience in the community. | 3.72 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.45 |
| 5. There is an improvement in the understanding among tourists and locals. | 3.76 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.43 |
| 6. Tourism activities promote tourism-related research | 3.12 | Moderately Sustainable | I find the statement correct to what I observe is happening | 0.68 |
| 7. Tourism activities improve the quality of life for local communities. | 3.58 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.49 |
| Total Average | 3.41 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.54 |

As seen in Table 1, the result of the study speaks positively about the improvement in understanding among tourists and locals (3.76). Improvement in understanding between tourists and locals means no heightened negative emotions between them. The respondents echoed that the social relationship between tourists and locals has improved. The Study of Okulicz-Kozaryn & Strzelecka (2017) ^[19] pointed out that it is not all the time that a happy tourist always results in happy locals. According to their research, a large number of locals in Europe feel a sense of annoyance with tourism activities. This is, fortunately, quite the opposite of the reaction of respondents in this research.

In terms of the locals respecting the local community (3.22), which is interpreted as moderately sustainable, this aspect would be better for the local community's perception if it would reflect a higher rating. One reason for a tourist to travel is to experience other cultures; by doing so, tourists are encouraged to research first the local culture before entering the destination (World Travel & Tourism Council, 2017). Tublay has three major ethnolinguistic groups in the municipality, these are the Kankana-eyes, Ibalois, and Kalanguyas (Clark, 2022). These ethnic groups are soft-spoken and conservative; even now, in modern times, they still perform rituals and believe in omens. Hence, tourists visiting Tublay are highly encouraged not to be loud and rowdy, to be respectful to rituals, and especially to the elderly. According to White (2017), to achieve sociocultural sustainability, the negative impact of tourism should be minimal to none; hence, tourists need to respect the locals. Festa (2016) further stressed that tourists should respect the socio-cultural authenticity of the host communities, preserve

their traditional values, and build and live cultural assets, including advanced intercultural tolerance.

The result of this research further proves that tourism activities in Tublay have enhanced the locals' way of life. This is evidenced by a result of 3.58 or highly sustainable when asked if tourism activities improve the quality of life of local communities. Since most of the tourism suppliers in Tublay are further residents of Tublay, the income earned from tourism allows the locals to enjoy and indulge more in their family's wants. This implies that people visiting the ecotourism destinations in Tublay is an agent of change in the locals' daily lives and activities.

In the aspect of satisfaction of tourists with the tourism experience in Tublay, the respondents perceive that the visitors are pleased with their experience in visiting the ecotourism destinations having an average of 3.72 interpreted as highly sustainable. This reflects that the ecotourism destination can meet the travelers' expectations. According to Marinao (2017), achieving tourist satisfaction is one of the most critical factors regarding stewardship by the different actors in tourist destinations. Further, achieving customer satisfaction could lead to a booming tourism industry. Considering the crucial role of satisfaction in a tourist destination, it has been argued that the satisfaction experienced by the tourist in a destination will be a valuable factor in recommending or returning to a place. Satisfaction will be an explicit antecedent to tourist loyalty to a place. This would mean a promising future for the tourism suppliers and local community of Tublay if tourist satisfaction in ecotourism destinations would continue to thrive as it is at present.

The weakness of the sociocultural dimension is the initiation of tourism-related research from tourism activities (3.12, moderately sustainable). According to Ahmed (2017), it is through tourism research that tourism suppliers will be able to find out the strengths and weaknesses of the macro and microenvironment. Conducting market research will develop a tourism-based business and ensure awareness of the market, target audience, competitors, and growth strategy. Academic institutions, in partnership with the Tublay Tourism office, may take advantage of the possibilities of data collection and use of this data to improve ecotourism destinations.

Dimension

The economic dimension is one of the most valuable principles of sustainable tourism since it serves as the security and means of economic growth of the local community and natural area. Optimizing the economic benefits of tourism would lead to economic sustainability. Table 2 shows that the economic dimension reflected a total average of 3.70, interpreted as highly sustainable. This manifests that tourism activities from ecotourism destinations bring revenue and livelihood to the tourism suppliers and the Tublay local community.

Table 2: Status of Sustainability of the Ecotourism Destination as Perceived by Tourism Suppliers in Tublay, Benguet according to Economic Dimension

| | Average | Interpretation | Descriptive Interpretation | S d |
|--|---------|--------------------|--|------|
| 1. Tourism activities enable local communities to improve their quality of life. | 3.70 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.46 |
| 2. Tourism boosts economic activities in the community. | 3.78 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.41 |
| 3. Tourism encourages outside investment in infrastructure. | 3.62 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.52 |
| 4. Tourism activities increase buyers for local producers. | 3.60 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.49 |
| 5. Tourism increases employment opportunities. | 3.60 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.49 |
| 6. Tourism activities support local economies. | 3.70 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.46 |
| Total Average | 3.67 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.47 |

Tourism boosting the community's economic activities effected an average of 3.67 which is interpreted as highly sustainable. This result is congruent with the result of the Study by Manzoor *et al.* (2019) ^[4], which relays that in Pakistan, tourism has a favorable and considerable impact on Pakistan's economic growth as well as the employment sector. According to this Study, lawmakers should concentrate on legislation that specifically emphasizes the promotion of tourism, given the industry's enormous potential nationwide. The Study by Anup (2016) ^[2] further pointed out that ecotourism is one of the fastest-growing segments of the sustainable tourism industry that helps in poverty alleviation and economic development. It further claims that ecotourism is a preferred conservation and community development tool in many rural areas.

The local producers of Tublay further enjoy the benefits of tourism activities. For instance, Polig's Farm can sell Benguet coffee and other local produce. The main attraction, in fact, in this ecotourism destination is the Benguet coffee. The Benguet coffee is produced on the highland Farm of Atok, Itogon, La Trinidad, Tuba, Kibungan, and Tublay in Benguet. Benguet Arabica Coffee's distinct taste and quality makes it a leading coffee brand. Most of the ecotourism destinations in Tublay, like the Winaca Eco-cultural Village, offer food or dishes made from local produce from their own Farm. According to the article by Philippine Coffee Company (2018), the coffee industry is currently a good source of revenue among

farmers in Cordillera, including Tublay. This allows the local community to afford to send their children to universities, have improved housing, and have more families assured of a brighter future.

The respondents of this study recognize that tourism activities encourage outside investment in infrastructure (3.62). The local council of Tublay recognizes the potential of investors in their community. In a discussion during the BLISTT Development Council, the importance of extending investments outside the city was given focus. There was further a plan to convert private land in Tublay municipality into an economic zone that can be used to encourage investment from investors (NEDA-CAR, 2019).

Environmental Dimension

Of the three variables under the principles of sustainable tourism, the environmental dimension reflected the highest rating of 3.71, interpreted as highly sustainable, as seen in Table 3. The environmental dimension deals with reducing the adverse environmental impact of tourism activities. In order to achieve ecological sustainability, there should be practices that contribute to the preservation and enhancement of conservation. According to Rezaee *et al.* (2019), this dimension includes the reduction of the organization's carbon footprint, improving the natural resources, and creating of a better work environment for the business and the surrounding community.

Table 3: Status of Sustainability of the Ecotourism Destination as Perceived by Tourism Suppliers in Tublay, Benguet according to Environmental Dimension

| | Average | Interpretation | Descriptive Interpretation | sd |
|---|---------|--------------------|--|------|
| 1. Current tourism regulations respect ecological limits. | 3.61 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.49 |
| 2. Current tourism practices maintain the natural-cultural heritage. | 3.86 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.35 |
| 3. Current tourism practices manage the natural areas properly. | 3.78 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.41 |
| 4. Current tourism policies reduce over-consumption of natural resources. | 3.76 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.47 |
| 5. Current tourism practices ensure protection of wildlife | 3.55 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.61 |
| Total average | 3.71 | Highly Sustainable | I firmly find the statement correct to what I observe is happening | 0.47 |

The strongest suit of the environmental dimension is that the current tourism practices maintain the natural-cultural heritage (3.86). This implies that the tourism activities, tourists, and tourism suppliers are responsible for dealing with the environment. As stated by Kienberger *et al.* (2014), assessing the environmental dimension is often mistreated because of a need for more awareness of the root cause of the degradation of the environment. Fortunately, the municipality of Tublay is aware of the danger that is brought about by the degradation of the environment. Some parts of the ecotourism destination in Tublay, the Asin hot springs and Boyokbok fall, are closed to tourists for June-August 2022 until further notice of the danger of flash floods by the La Niña that is being experienced. This proves that the local government unit of Tublay is mindful of the effects of La Nina and cautious of the safety of its tourists and locals. The study further showed that tourism practices properly manage natural areas (3.78); properly using natural resources means leaving the place with less or no trace of trash. The use of biodegradable materials is being practiced. The use of polystyrene, plastic bags, or styrofoam is prohibited. In food establishments in Tublay, paper cups are used instead of plastic cups; no styrofoam is used in their operation, and no plastic straws or single-use plastics are used. The local government unit of Tublay and the tourism office frequently conduct programs that promote sustainable tourism, which speaks highly of the municipality's commitment to taking care of the environment. Tourism depends on the condition of the environment, both natural and created by humans. The relationship between tourism and the environment is complicated. Many of the activities involved can harm the environment. The construction of resorts, hotels, restaurants, shops, golf courses, and marinas, as well as basic infrastructure projects like roads and airports, are associated with many detrimental effects. The depletion of the environment's resources by tourism development could occur over time. Although in Tublay, few infrastructures are still built, which is a positive attribute. It is encouraged that development should be paired with proper planning so as not to overlook environmental sustainability. The significant relationship between the perception of the tourism suppliers about the identified ecotourism sustainability indicator

The Significant Difference of the Perception of the Tourism Suppliers About the Identified Ecotourism Sustainability Indicator

The second objective of this paper is to determine the significant difference among the three variables; sociocultural, economic, and environmental. As seen in Table 4, the *f*-ratio value is 4.85818. The *p*-value is 0.023621. The result is significant at *p* < .05. This indicates that the difference among the average is worthy of attention. Although the interpretation of the averages plays around moderately sustainable and highly sustainable, it still reflects room for improvement. As important as the matter of sustainability, improvement is always welcome, primarily because it benefits not only the current community but also the future generation.

The post hoc Tukey HSD shows explicitly which among the variable has a significant difference. In this case, the pairwise comparison, as seen in Table 5, showed T1, which is the sociocultural dimension, and T3, the environmental dimension, reflects a significant difference.

Table 4: Result Details for ANOVA Statistical Analysis

| Source | SS | Df | MS | |
|--------------------|---------|----|--------|-------------|
| Between treatments | 0.3447 | 2 | 0.1724 | F = 4.85818 |
| Within treatments | 0.5322 | 15 | 0.0355 | |
| Total | 0.87629 | 17 | | |

The *f*-ratio is 4.85818. The *p*-value is 0.023621. The result is significant at *p* < .05.

This means that the sociocultural dimension of sustainability can be much more improved to the level of the environmental dimension. Based on observation, it is true that ecotourism generates revenue for the locals, who are further the tourism supplier. However, improvement in the environmental dimension is in a different area. For instance, the environmental dimension includes improvement in research related to sustainability; this aspect may be considered in an early stage of development compared to locals gaining revenue.

Table 5: Post Hoc Tukey HSD (beta)

| Pairwise Comparisons | | HSD.05 = 0.2852 HSD.01 = 0.3754 | Q.05 = 3.6734 Q.01 = 4.8359 |
|----------------------|------------------------|------------------------------------|--------------------------------|
| T1:T2 | M1 = 3.41 M2 = 3.67 | 0.26 | Q = 3.36 (p=.07529) |
| T1:T3 | M1 = 3.41 M3 = 3.71 | 0.31 | Q = 3.95 (p=.03460) |
| T2:T3 | M2 = 3.67 M3 = 3.71 | 0.05 | Q = 0.58 (p=.91096) |

Information Pamphlet on the Improvement of Sustainability of Ecotourism Destinations in Tublay, Benguet

The third objective of this research is to create an information pamphlet on improving the sustainability of ecotourism destinations in Tublay, Benguet. Based on this research paper's result, the researcher focused on improving tourist respect for the local community, which reflected one of the lowest averages (3.22) in the entire survey. Further, since the improvement of this aspect relies on increased tourist awareness, an information pamphlet would be beneficial. Figure 1 shows the pamphlet on what the tourist needs to know before visiting Tublay.

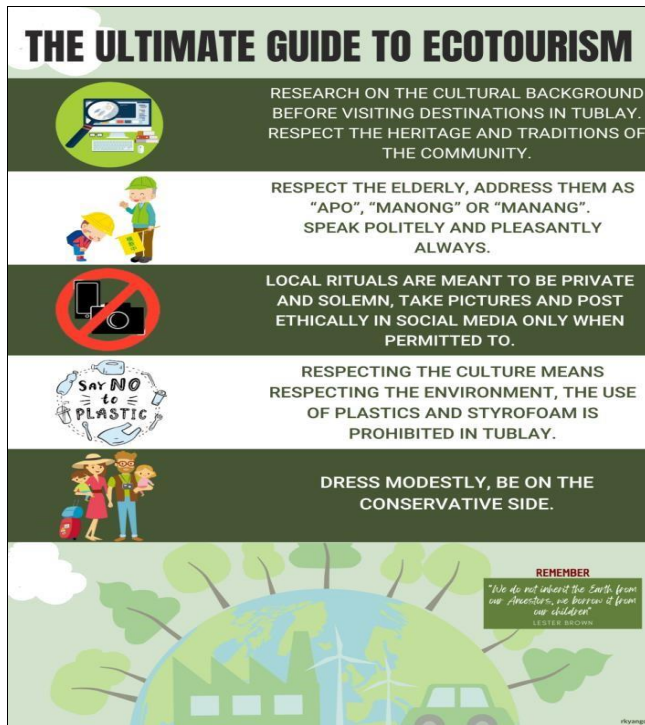


Fig 1: Information pamphlet. What tourist needs to know before visiting Tublay.

Applying the knowledge gained from the MBA Program subjects, specifically in Marketing Management, where students were required to make a marketing plan and proposal, as seen in Figure 1, the information pamphlet's design is simple and understandable. The font text, size, and style complement each other. The information is in accordance with objective number 3.

Conclusion

In light of the findings from the study, the following conclusions were deduced: The ecotourism destinations in Tublay, Benguet protect and sustain the place's natural and cultural resources while ensuring that tourism activities meet their potential as a tool to support local economies. The ecotourism destinations in Tublay, Benguet, make optimal use of environmental resources, respect the socio-cultural authenticity of the host communities, and ensure economic benefits to the locals of the community. The ecotourism destinations in Tublay, Benguet provides opportunities for positive changes: building culturally vibrant and environmentally sound communities that attract visitors and residents.

It is further concluded that the respondents perceive more growth in terms of improvement in earning revenue than in the sustainability of the environment. It is deduced that improvement in handling the sustainability of the environment is necessitated. This is important, especially in the early stages of tourism development, so the natural environment would be considered a priority during tourism planning.

Recommendations

After a careful review of the findings and analysis of data, these recommendations are presented:

1. The ecotourism destinations in Tublay, Benguet, were perceived beneficial by the community; thus, its promotion should further include the protection and sustenance of the place's cultural assets while ensuring that tourism activities meet their maximum potential as a tool for the community's sociocultural, economic and environmental welfare.
2. The ecotourism destinations in Tublay, Benguet, maximize the use of environmental resources, respect the socio-cultural authenticity of its community, and ensure economic benefits to the community's locals.
3. The local government officials/units of Tublay should sustain the promotion of the ecotourism destinations in Tublay, Benguet, as a tourist destination because of the sociocultural, economic, and environmental welfare it brings to the locals and tourists of Tublay.
4. The local government of Tublay, Benguet, to promote and support the continuing cultural awareness and education of tourists and locals.
5. The ecotourism destinations in Tublay, Benguet maximizes the use of environmental resources, respects the socio-cultural authenticity of its community, and ensures economic benefits to the locals of the community.
6. The local government officials/units of Tublay should sustain the promotion of the ecotourism destinations in Tublay, Benguet as a tourist destination because of the sociocultural, economic and environmental welfare it brings to the locals and tourists of Tublay.
7. The local government of Tublay, Benguet to promote and support the continuing cultural awareness and education of tourists and locals.

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