

## **SUSTAINABLE TOURISM PRACTICES OF LOCAL TOURISM ESTABLISHMENTS OF NUEVA VIZCAYA**

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### **ABSTRACT**

Tourism demand, if not controlled properly, can have serious consequences for local communities, the economy, and the environment. This has become the difficulty of tourism's sustainable development. Tourism is predicted to play a significant role in the Philippines' economic growth. However, there are severe environmental and social consequences connected with tourism expansion, and both our tourist markets and the Philippine tourism sector have become increasingly aware of these. The study's goal is to support the Global Code of Ethics for Tourism Article III: Tourism as a factor of sustainable development by determining whether tourism establishments in Nueva Vizcaya are aware of sustainable tourism practices and whether they are practiced and implemented in the operation of their businesses. The survey included 42 participants from local tourism establishments in Bayombong and Solano, 18 from the food and beverage industry and 24 from the hotel sector. In this study, a descriptive research strategy was used, with a survey questionnaire used in conjunction with the convenience and purposive sample techniques to collect data. The data were statistically treated using the frequency distribution and weighted mean to get the respondent's demographic profile. Pearson r was used to determine the strength of the relationship between the level of awareness and the extent to which sustainable tourism practices were implemented, while ANOVA was used to test the difference between the level of awareness and the extent to which sustainable tourism practices were implemented. The data demonstrated that the level of respondent awareness and level of implementation of sustainable tourism practices resulted in Much Aware and Much Implemented, respectively. The majority of the respondents are neophytes when it comes to tourism practices, according to the data. It was suggested that the Provincial Tourism Office, in collaboration with PLGUs and LGUs, review and revisit the National Tourism Development Plan, National Ecotourism Strategy, and Sustainable Development Goals, and develop a set of policies and guidelines for the sustainable operation of tourism businesses, as well as continue to raise employee awareness of sustainable tourism practices and implement them. As a result, a program of intervention was proposed.

### **INTRODUCTION**

Tourism is a primary kind of global change that is also influenced by other global change forces (Wall, 2014). It is most likely the only complicated economic activity that involves many other societal sectors, levels, and interests. The tourism sector is based on a fragile natural and cultural environment. Without proper environmental quality, present tourism and its future

development, as well as tourist organizations, tourists, and receiving communities, may be jeopardized (Cater, 1995, Larraga, Rivera, Vega, 2018). On the one hand, it benefits socioeconomic and cultural development, but it also causes environmental damage and the loss of local identity (Beni, 1999, Carranza, 2002, Capacci, 2003, Larraga, Rivera, Vega, 2018). Tourism demand can have a significant influence on the environment. Tourism demand, if not controlled properly, can have serious consequences for local communities, the economy, and the environment. This has become the difficulty of tourism's sustainable development. Tourism is predicted to play a significant role in the Philippines' economic growth. However, there are severe environmental and social consequences connected with tourism expansion, and both our tourist markets and the Philippine tourism sector have become increasingly aware of these. As a result, the government has begun to recognize the need for innovative development approaches to manufacture ecologically sustainable and commercially successful tourism items (Recullo, n.d). Despite the tourist industry's expanding importance as one of the largest producers of foreign cash to the economies of most countries, it nonetheless has a number of environmental effects. Tourism, like many other economic practices, has severe environmental consequences, making economic expansion and environmental security difficult to reconcile. In response to these issues, the tourism sector has adopted the concept of sustainable tourism, which encourages environmental preservation (Bramwell & Path, 2011; Seeker, 1997; WTO, 1993). Meanwhile, tourism's inherent relationships with the natural environment support the concept of environmental protection rather than short-term benefit maximization (WTTC, 2011). In the recent decade, consumers have become increasingly ecologically sensitive. Customers are looking for more ecologically friendly hotels that will safeguard their health and boost their enjoyment at the same time. Because of growing awareness about environmental conservation, a new industry known as the green market has formed. Customers like to stay in environmentally friendly hotels. They also like to associate with green hotels and are willing to pay a premium for a more ecologically friendly lifestyle (Perera and Pushpanathan, 2015).

The increasing expansion of tourism has created issues in the locations. It has a visible impact on society, the economy, culture, and the environment (Cruz, 2015). Locals' favorite amenities, such as restaurants and parks, have been encroached upon by a high number of visitors. Heirlooms and traditional and cultural artifacts have become tourist attractions and have been commoditized. Some tourism initiatives have social consequences that lead to confrontations between communities and commercial operators. The activities of tourists and tourism establishments also contribute to water, air, land, and noise pollution (Libosada, 2010). Tourism is a significant economic development engine for the country, but it has the potential to be even more so if properly improved in a sustainable manner. Unrestrained tourist development, in the absence of a defined plan for long-term sustainability, can harm both societies and the environment. With these premises in mind, the proponent, a tourism instructor, was inspired to conduct a study on the sustainable practices of local tourism enterprises in Nueva Vizcaya.

This research topic was developed by the study's proponent to support the notion of the Global Code of Ethics for Tourism Article III: Tourism as an element of sustainable development. Section 1 of this code of ethics states that all stakeholders must protect the natural environment in order to achieve long-term economic prosperity. It is thus necessary to ascertain whether tourism establishments in Nueva Vizcaya are aware of sustainable tourism principles and whether they are practiced and implemented in the operation of their businesses.

Specifically, this study sought answers to the following questions:

1. What is the profile of the respondents in terms of age, gender, length of service, educational attainment and service sector?
2. What is the level of awareness of the respondents regarding sustainable tourism practices?
3. What is the extent of implementation of sustainable tourism practices by the respondents?
4. How does the level of awareness of sustainable tourism practices among the respondents differ when grouped according to profile variables?
5. How does the extent of implementation of sustainable tourism practices among the respondents differ when grouped according to profile variables?
6. Is there a significant relationship between the level of awareness and extent of implementation of sustainable tourism practices of selected local tourism establishments in Nueva Vizcaya?
7. What is the perceived significance of sustainable tourism practices in the tourism industry?
8. What are the recommendations or suggestions of the respondents to enhance awareness and implementation of sustainable tourism practices in Nueva Vizcaya?

In general, the purpose of this research was to assess the level of awareness and extent of application of sustainable tourism practices among Nueva Vizcaya's tourism establishments. Although there are no uniform sustainable tourism practices that must be followed in the tourism sector, green or sustainable practices are those that do not contribute to the degradation and depletion of natural and cultural resources.

It is critical to raise awareness of such practices, particularly among tourism establishments. Furthermore, such practices must be put into action. The degree of awareness or knowledge about these practices will be classified as very much aware, much aware, slightly aware, and not aware. Knowledge of the awareness of sustainable tourism practices and the extent to which they are applied could give the required information to lead to recommended intervention programs and policy creation to improve awareness and implementation in the province of Nueva Vizcaya. This study can assist offer data for future studies on sustainable tourism in the province of Nueva Vizcaya, as well as raise awareness among tourist stakeholders about their roles in responsible and sustainable tourism.

## METHODS

In this study, a descriptive research design was used. The research design is carried out with the express goal of gathering information and data on the awareness and implementation of sustainable tourism practices in Nueva Vizcaya's local tourism establishments. As a result of using convenience and purposive sampling, the researcher is able to retain the accuracy and validity of the findings. A questionnaire was utilized for the survey analysis, which is the most often used instrument for many studies in quantitative outcome research. Surveys can be used to collect information from a large number of people using a variety of methods, including online surveys, paper questionnaires, web-intercept surveys, and even face-to-face interviews. Every

organization, large or small, needs to know what its consumers think about its services. The researcher may ask several survey questions, gather data from a group of respondents, and discuss the findings in order to create numerical results by doing this survey research questionnaire.

To gather enough information for this study, preliminary data was gathered through research conducted in various libraries, reading materials, online sources, and books. The Provincial Tourism Office compiles a list of registered accommodation and food and beverage facilities in Nueva Vizcaya. The obtained data is processed, evaluated, and validated, and a suggestion for the proposed Sustainable Tourism Development Plan for the province of Nueva Vizcaya is provided. Expert consultation, such as that of the Provincial Supervising Tourism Officer, Tourism Professors, and the LGU, is thought to provide prior information on the suggested plan. The research was carried out in Bayombong and Solano, Nueva Vizcaya. 18 of the 42 employees from local tourism enterprises in Bayombong and Solano while 24 are from the accommodation sector. The data were statistically treated using the frequency distribution and weighted mean to get the respondent's demographic profile. Pearson r was used to determine the strength of the relationship between the level of awareness and the extent to which sustainable tourism practices were implemented, while ANOVA was used to test the difference between the level of awareness and the extent to which sustainable tourism practices were implemented.

## RESULTS AND DISCUSSIONS

***Problem 1. What is the profile of the respondents in terms of age, gender, length of service, educational attainment and service sector?***

**Table 1** *Profile of the Respondents (N=37)*

	Profile of the Respondents	Frequency	Percentage
<b>Age</b>	23 years old and below	10	27.03
	24-26 years old	9	24.32
	27-29 years old	9	24.32
	30 years old and above	9	24.32
<b>Sex</b>	Female	24	64.86
	Male	13	35.14
<b>Length of Service</b>	1-4 years	28	75.68
	5 years and above	9	24.32
<b>Educational Attainment</b>	High School	12	32.43
	College	22	59.46
	Tech/Voc	3	8.11
<b>Service Sector</b>	Food and Beverage	16	43.2
	Accommodation	21	56.8

According to the table, the study's respondents were 64.86 percent females and 35.14 percent men, with an average age of 28 and a 3-year average duration of service. In terms of educational achievement, the majority of respondents are college graduates or have attended tertiary level, with the fewest being technical or vocational graduates. According to the data, the majority of respondents are currently employed in the lodging services industry.

***Problem 2. What is the level of awareness of the respondents regarding sustainable tourism practices?***

**Table 2** *Level of Awareness of the Sustainable Tourism Practices (N=37)*

	Mean	Std. Deviation	Qualitative Interpretation
<b>Level of Awareness on Training and Evaluation for Employees and Clients</b>	3.18	0.63	Much Aware
<b>Level of Awareness on Water and Energy Consumption and Conservation</b>	3.15	0.58	Much Aware
<b>Level of Awareness on Solid Waste Management</b>	3.11	0.59	Much Aware
<b>Level of Awareness on Purchase</b>	3.27	0.64	Very Much Aware

As shown in the table, the general degree of understanding of sustainable tourism practices among chosen participants working on lodging and food and beverage enterprises in Nueva Vizcaya is much aware. Looking at its various dimensions, such as the level of awareness on training and evaluation for employees and clients ( $M=3.18$ ;  $SD=0.63$ ), the level of awareness on water consumption and conservation ( $M=3.15$ ;  $SD=0.58$ ), and the level of awareness on solid waste management ( $M=3.11$ ;  $SD=0.59$ ), it is discovered that the respondents are much aware of or informed about the aforementioned policies. On the other side, when it comes to buy awareness, respondents were found to be very much aware ( $M=3.27$ ;  $SD=0.64$ ).

This is consistent with the findings of Balmaceda (2008) and Pardo (2012), who found that there is a high degree of awareness across all environmental themes, and that this awareness has an impact on good environmental practice..

***Problem 3. What is the extent of implementation of sustainable tourism practices by the respondents?***

**Table 3** *Extent of Implementation of Sustainable Tourism Practices by the Respondents (N=37)*

	Mean	Std. Deviation	Qualitative Interpretation
<b>Extent of Implementation on Training and Evaluation for Employees and Clients</b>	3.07	0.77	Much implemented
<b>Extent of Implementation on Water and Energy Consumption and Conservation</b>	3.09	0.58	Much implemented

Extent of Implementation on Solid Waste Management	3.01	0.56	Much implemented
Extent of Implementation on Purchase	3.23	0.64	Much implemented

According to the table, the amount of application of sustainable tourism practices by respondents across the four categories is much implemented. This comprises the implementation of several sustainable tourism practices in Nueva Vizcaya's designated lodging and food and beverage enterprises.

Although these tourism establishments are generally sellers or suppliers of tourism products, they are also consumers because they buy and consume raw materials for their products and services. As a result, the results indicated in the table above accord with the findings of the study conducted by Divyapriyadharshini (2019) and Purohit (2019). (2011). These tourism establishments, as customers, are environmentally sensitive and want to buy green items. They are willing to compensate for product quality in order to assist the environment. The decision to buy green is heavily impacted by knowledge and awareness of green products (Divyapriyadharshini, 2019).

This finding is also consistent with the findings of Tibon (2012), Sloan et al. According to et al. (2013) and Rowe (2018), the restaurant and hotel industries are paying attention to environmental concerns and, as a result, implementing more sustainable practices into their operations.

On the contrary, the reported conclusion contradicts the findings of Zorpas et al. (2014); Shamshiry et al (2011). Based on the research of Zorpas et al. and Shamshiry, et al. environmental awareness initiatives are neither provided nor made available to staff of the study's non-certified hotels. As a result, their staffs do not receive instruction or training on environmental issues such as solid waste management, recycling, and waste reduction methods. Furthermore, trash collection and disposal systems are inefficient and unsustainable. However, the study's findings revealed that training and education of personnel and customers, as well as solid waste management, are heavily adopted by the lodging and food and beverage companies studied. The results also do not correspond to the study of Iankovia, et.al (2019) that restaurant managers have poorly adopted and implemented the model of sustainable development.

***Problem 4. How does the level of awareness of sustainable tourism practices among the respondents differ when grouped according to profile variables?***

**Table 4** *Level of awareness of sustainable tourism practices among the respondents when grouped according to age (N=37)*

	Mean	Qualitative Description	SD	F	Sig
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<b>Level of Awareness on Training and Evaluation for Employees and Clients</b>	23 years old and below	3.45	Very Much Aware	0.58	1.83	0.161
	24-26 years old	2.97	Much Aware	0.74		
	27-29 years old	3.36	Very Much Aware	0.35		
	30 years old and above	2.91	Much Aware	0.71		
<b>Level of Awareness on Water and Energy Consumption and Conservation</b>	23 years old and below	3.20	Much Aware	0.61	0.62	0.608
	24-26 years old	2.93	Much Aware	0.61		
	27-29 years old	3.30	Very Much Aware	0.44		
	30 years old and above	3.17	Much Aware	0.68		
<b>Level of Awareness on Solid Waste Management</b>	23 years old and below	3.22	Much Aware	0.61	0.24	0.870
	24-26 years old	2.99	Much Aware	0.51		
	27-29 years old	3.11	Much Aware	0.58		
	30 years old and above	3.09	Much Aware	0.70		
<b>Level of Awareness on Purchase</b>	23 years old and below	3.47	Very Much Aware	0.77	0.76	0.523
	24-26 years old	3.15	Much Aware	0.65		
	27-29 years old	3.37	Very Much Aware	0.43		
	30 years old and above	3.07	Much Aware	0.67		

When the data was merged, it demonstrated the level of awareness of sustainable tourism practices among the respondents when they were categorized by age. When respondents were asked about their level of awareness on staff and client training and assessment, as well as level of awareness on purchase, the groups of 24-26 years old and 30 years old and above were found to be much aware, indicating that they are well-informed. Meanwhile, the groups of 27-29 years old and 23 years old and younger were found to be very much aware, indicating that they are well informed.

When the data was merged, it demonstrated the level of awareness of sustainable tourism practices among the respondents when they were categorized by age. When respondents were asked about their level of awareness on staff and client training and assessment, as well as level of awareness on purchase, the groups of 24-26 years old and 30 years old and above were found to be much aware, indicating that they are well-informed. Meanwhile, the groups of 27-29 years old and 23 years old and younger were found to be quite alert, indicating that they are well informed.

Apparently, further analysis using One-way ANOVA failed to confirm a significant difference on the level of awareness of sustainable tourism practices among the respondents when grouped according to age.

**Table 5** *Level of awareness of sustainable tourism practices among the respondents when grouped according to sex (N=37)*

		Mean	Qualitative Description	SD	t	Sig
<b>Level of Awareness on Training and Evaluation for Employees and Clients</b>	Female	3.31	Very Much Aware	0.51	1.80	0.080
	Male	2.93	Much Aware	0.78		
<b>Level of Awareness on Water and Energy Consumption and Conservation</b>	Female	3.20	Much Aware	0.55	0.74	0.462
	Male	3.05	Much Aware	0.66		
<b>Level of Awareness on Solid Waste Management</b>	Female	3.09	Much Aware	0.55	-0.23	0.819
	Male	3.14	Much Aware	0.66		
<b>Level of Awareness on Purchase</b>	Female	3.33	Very Much Aware	0.60	0.20	0.841
	Male	3.15	Much Aware	0.72		

When the data was merged, it demonstrated the level of awareness of sustainable tourism practices among the respondents when they were divided by sex. An independent sample t-test analysis reveals that respondents' levels of awareness in all categories of sustainable tourism practices are not statistically significant.

**Table 6** *Level of awareness of sustainable tourism practices among the respondents when grouped according to the length of service (N=37)*

		Mean	Qualitative Description	SD	t	Sig
<b>Level of Awareness on Training and Evaluation for Employees and Clients</b>	1-4 years	3.26	Very Much Aware	0.54	1.48	0.149
	5 years & above	2.91	Much Aware	0.85		
<b>Level of Awareness on Water and Energy Consumption and Conservation</b>	1-4 years	3.13	Much Aware	0.55	-0.41	0.681
	5 years & above	3.22	Much Aware	0.70		
<b>Level of Awareness on Solid Waste Management</b>	1-4 years	3.16	Much Aware	0.60	0.89	0.380
	5 years & above	2.95	Much Aware	0.54		
<b>Level of Awareness on Purchase</b>	1-4 years	3.32	Very Much Aware	0.64	0.75	0.456
	5 years & above	3.13	Much Aware	0.64		

A close examination of the data reveals the level of awareness of sustainable tourism practices among respondents when categorized by length of service. It was discovered that

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respondents with 1-4 years of service are much more aware than those with more than 5 years of service in terms of the degree of awareness on training and assessment for employees and clients, as well as the level of awareness on purchasing. Despite the fact that the 1-4 year old age group is much aware of the two dimensions of sustainable tourism practices, the Independent sample t-test failed to demonstrate significant differences. Meanwhile, both sets of respondents are well informed on the other two dimensions of sustainable tourism practices, such as water and energy usage and conservation, as well as solid waste management.

**Table 7** *Level of awareness of sustainable tourism practices among the respondents when grouped according to Educational Attainment (N=37)*

		Mean	Qualitative Description	SD	F	Sig
<b>Level of Awareness on Training and Evaluation for Employees and Clients</b>	High School	3.13	Much Aware	0.78	1.83	0.161
	College	3.21	Much Aware	0.58		
	Tech/Voc	3.13	Much Aware	0.55		
<b>Level of Awareness on Water and Energy Consumption and Conservation</b>	High School	3.05	Much Aware	0.72	0.62	0.608
	College	3.21	Much Aware	0.55		
	Tech/Voc	3.13	Much Aware	0.31		
<b>Level of Awareness on Solid Waste Management</b>	High School	3.15	Much Aware	0.72	0.24	0.870
	College	3.05	Much Aware	0.54		
	Tech/Voc	3.33	Very Much Aware	0.46		
<b>Level of Awareness on Purchase</b>	High School	3.24	Much Aware	0.78	0.76	0.523
	College	3.26	Very Much Aware	0.61		
	Tech/Voc	3.50	Very Much Aware	0.17		

A close examination of the table reveals the level of awareness of sustainable tourism practices among respondents when they are classified according to educational attainment. When respondents were classified according to educational attainment, there was no significant difference in their level of awareness of sustainable tourism practices. This implies that the level of awareness is not determined by educational attainment.

This contradicts the findings of Sucuolu et al. al. (2017) found that those who studied tourism had a higher understanding of sustainable tourism than those who did not study tourism, demonstrating that educational attainment does not impact the level of awareness of sustainable tourism practices.

**Table 8** *Level of awareness of sustainable tourism practices among the respondents when grouped according to Service Sector (N=37)*

		Mean	Qualitative Description	SD	t	Sig
<b>Level of Awareness on Training and Evaluation for Employees and Clients</b>	Food and Beverage	2.89	Much Aware	0.76	-2.63	0.013*
	Accommodation	3.40	Very Much Aware	0.42		
<b>Level of Awareness on Water and Energy Consumption and Conservation</b>	Food and Beverage	3.10	Much Aware	0.78	-0.46	0.647
	Accommodation	3.19	Much Aware	0.39		
<b>Level of Awareness on Solid Waste Management</b>	Food and Beverage	3.13	Much Aware	0.73	0.18	0.855
	Accommodation	3.09	Much Aware	0.47		
<b>Level of Awareness on Purchase</b>	Food and Beverage	3.17	Much Aware	0.83	-0.86	0.398
	Accommodation	3.35	Very Much Aware	0.45		

The table shows that there is no significant difference in the level of awareness of sustainable tourism practices, particularly water and energy consumption and conservation, solid waste management, and purchase, among respondents when grouped by service sector. Furthermore, further analysis revealed that respondents working in the accommodation sector were found to have a higher level of awareness in terms of training and evaluation for employees and clients as one of the components in sustainable tourism practices than those working in the food and beverage sector [ $t(35) = -2.23, p = .013$ ].

**Problem 5.** *How does the extent of implementation of sustainable tourism practices among the respondents differ when grouped according to profile variables?*

**Table 9** *Extent of implementation of sustainable tourism practices among the respondents when grouped according to age (N=37)*

		Mean	Qualitative Description	SD	F	Sig
Extent of Implementation on Training and Evaluation for Employees and Clients	23 years old and below	3.24	Much implemented	0.76	1.22	0.317
	24-26 years old	2.81	Much implemented	0.89		
	27-29 years old	3.37	Very Much Implemented	0.48		
	30 years old and above	2.86	Much implemented	0.85		

Extent of Implementation on Water and Energy Consumption and Conservation	23 years old and below	3.04	Much implemented	0.67	0.63	0.603
	24-26 years old	2.91	Much implemented	0.58		
	27-29 years old	3.17	Much implemented	0.44		
	30 years old and above	3.26	Very Much Implemented	0.62		
Extent of Implementation on Solid Waste Management	23 years old and below	3.12	Much implemented	0.60	0.29	0.834
	24-26 years old	2.93	Much implemented	0.56		
	27-29 years old	2.91	Much implemented	0.37		
	30 years old and above	3.06	Much implemented	0.71		
Extent of Implementation on Purchase	23 years old and below	3.33	Very Much Implemented	0.78	0.51	0.681
	24-26 years old	3.07	Much implemented	0.64		
	27-29 years old	3.39	Very Much Implemented	0.40		
	30 years old and above	3.13	Much implemented	0.70		

When the respondents were categorized according to age, an examination of the combined data revealed the extent to which they implemented sustainable tourism practices. When respondents were asked about the amount to which they implemented training and assessment for employees and clients, as well as the level to which they implemented purchasing, the group of 27-29 year olds was found to fully execute such indicators.

In terms of the extent to which water and energy consumption and conservation policies are being implemented, the majority of respondents are doing so. On the other hand, the group of people aged 30 and up found it exceedingly difficult to adopt such a policy. Surprisingly, all groups of respondents claimed to be implementing solid waste management policies as one of the components of sustainable tourism practices.

Apparently, further analysis using One-way ANOVA failed to confirm a significant difference on the extent of implementation of sustainable tourism practices among the respondents when grouped according to age.

**Table 10** *Extent of implementation of sustainable tourism practices among the respondents when grouped according to sex (N=37)*

		Mean	Qualitative Description	SD	t	Sig
Extent of Implementation on Training and	Female	3.21	Much implemented	0.68	1.47	0.150

Evaluation for Employees and Clients	Male	2.83	Much implemented	0.88		
Extent of Implementation on Water and Energy Consumption and Conservation	Female	3.09	Much implemented	0.50	-.062	0.951
	Male	3.10	Much implemented	0.72		
Extent of Implementation on Solid Waste Management	Female	2.96	Much implemented	0.49	-.675	0.504
	Male	3.09	Much implemented	0.68		
Extent of Implementation on Purchase	Female	3.25	Much implemented	0.60	.202	0.841
	Male	3.21	Much implemented	0.72		

When the respondents were divided into two groups based on gender, the combined data revealed the extent to which they were implementing sustainable tourism practices. According to an independent sample t-test analysis, the respondents' level of implementation in all categories of sustainable tourism activities is not statistically significant.

**Table 11** *Extent of implementation of sustainable tourism practices among the respondents when grouped according to the length of service (N=37)*

		Mean	Qualitative Description	SD	t	Sig
Extent of Implementation on Training and Evaluation for Employees and Clients	1-4 years	3.07	Much implemented	0.74	-0.08	0.940
	5 years and above	3.09	Much implemented	0.90		
Extent of Implementation on Water and Energy Consumption and Conservation	1-4 years	3.04	Much implemented	0.55	-0.90	0.377
	5 years and above	3.24	Much implemented	0.65		
Extent of Implementation on Solid Waste Management	1-4 years	3.03	Much implemented	0.53	0.46	0.647
	5 years and above	2.93	Much implemented	0.65		
Extent of Implementation on Purchase	1-4 years	3.27	Very Much Implemented	0.66	0.66	0.513
	5 years and above	3.11	Much implemented	0.59		

A close examination of the table reveals the extent to which respondents have implemented sustainable tourism practices when categorized according to length of service. It is discovered that, while all groups of respondents are implementing policies in all indicators, those with 1-4 years of service are far more likely to be implementing policies on sustainable purchasing than those with more than 5 years of service.

**Table 12** *Extent of implementation of sustainable tourism practices among the respondents when grouped according to the length of educational attainment (N=37)*

		Mean	Qualitative Description	SD	F	Sig
Extent of Implementation on Training and Evaluation for Employees and Clients	High School	2.73	Much implemented	1.06	1.90	0.166
	College	3.24	Much implemented	0.57		
	Tech/Voc	3.27	Very Much Implemented	0.24		
Extent of Implementation on Water and Energy Consumption and Conservation	High School	2.78	Much implemented	0.70	2.95	0.066
	College	3.23	Much implemented	0.48		
	Tech/Voc	3.35	Very Much Implemented	0.10		
Extent of Implementation on Solid Waste Management	High School	2.90	Much implemented	0.69	0.73	0.490
	College	3.03	Much implemented	0.51		
	Tech/Voc	3.32	Much implemented	0.13		
Extent of Implementation on Purchase	High School	3.17	Much implemented	0.83	0.11	0.894
	College	3.26	Very Much Implemented	0.54		
	Tech/Voc	3.33	Very Much Implemented	0.60		

A detailed scrutiny of the table reveals the extent to which respondents use sustainable tourism activities when classified according to educational attainment. When respondents were categorized according to educational degree, there was no significant difference in the extent to which they implemented sustainable tourism practices. This also means that educational attainment has no bearing on the amount of implementation.

**Table 13** *Extent of implementation of sustainable tourism practices among the respondents when grouped according to the service sector (N=37)*

		Mean	Qualitative Description	SD	t	Sig
Extent of Implementation on Training and Evaluation for Employees and Clients	Food and Beverage	2.64	Much implemented	0.95	-3.45	0.001**
	Accommodation	3.41	Very Much Implemented	0.34		
Extent of Implementation on Water and Energy Consumption and Conservation	Food and Beverage	2.98	Much implemented	0.75	-1.07	0.290
	Accommodation	3.18	Much implemented	0.39		
Extent of Implementation on Solid Waste Management	Food and Beverage	2.89	Much implemented	0.69	-1.16	0.255
	Accommodation	3.10	Much implemented	0.42		
Extent of	Food and Beverage	3.11	Much implemented	0.85	-1.00	0.326

Implementation on Purchase	Accommodation	3.33	Very Much Implemented	0.42
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The table above shows the assessed extent of implementation of sustainable tourism practices among respondents when divided by service sector. The extent of implementation on water and energy usage and conservation, as well as solid waste management, was discovered to be much implemented. This also indicates that sustainable tourism practices are being used in the establishment, including in the food and beverage and accommodation sectors. In terms of the implementation of training and training and evaluation for employees and clients, as well as purchase implementation, it was discovered that respondents from the accommodation sector perceived it to be very much implemented, whereas those from the food and beverage sector perceived it to be very much implemented.

According to the results of a subsequent study using the Independent sample t-test, only the extent of implementation on training and assessment for employees and clients was statistically significant when categorized according to service sector [ $t(35) = -2.23, p = .013$ ]. As a result, individuals in the hotel service sector tend to have a more complete execution in terms of employee and client training and assessment when compared to those in the beverage service sector.

**Problem 6. Is there a significant relationship between the level of awareness and extent of implementation of sustainable tourism practices of selected local tourism establishments in Nueva Vizcaya?**

**Table 14** Relationship between the level of awareness and extent of implementation of sustainable tourism practices of selected local tourism establishments in Nueva Vizcaya (N=37)

		Extent of Implementation on Training and Evaluation for Employees and Clients	Extent of Implementation on Water and Energy Consumption and Conservation	Extent of Implementation on Solid Waste Management	Extent of Implementation on Purchase
Level of Awareness on Training and Evaluation for Employees and Clients	R	.736**			
	Sig.	.001			
Level of Awareness on Water and Energy Consumption & Conservation	R		.853**		
	Sig.		.001		
Level of Awareness on Solid Waste Management	R			.827**	
	Sig.			.001	
Level of Awareness on Purchase	R				.886**



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Sig.	.001
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\*\* Correlation is significant at the 0.01 level (2-tailed).

A detailed scrutiny of the table shows a link between the amount of awareness and the extent to which chosen local tourism establishments in Nueva Vizcaya use sustainable practices. Looking at the many characteristics of awareness and implementation, the conclusion demonstrates that the association is positive, extremely strong, and statistically significant.

This finding was consistent with the findings of Pardo (2012), who discovered that the success of identifying the issues governing the environment is dependent on how well people understand and perceive the environment and its complex processes; a high level of environmental awareness has an impact on good environmental practice.

***Problem 7. What is the perceived significance of sustainable tourism practices in the tourism industry?***

This question was asked by the researcher and the following are the randomly selected answers:

- *Makes us **responsible** citizens*
- *Helps create a **cleaner environment***
- *It will benefit the industry **financially** and boost the image of tourism in the province.*
- *Create **quality staff** and provide additional skills and knowledge*
- *It will make the industry sustainable and have **less pollution and less energy consumption***
- *It can make the industry **better***
- *It **educates** people, aids in economic development*
- *It benefits the environment, will **help** local communities and can have economic advantages*

The respondents clearly see that sustainable tourism practices would not just benefit the environment but the industry and the people working in the industry as well.

***Problem 8. What are the recommendations or suggestions of the respondents to enhance awareness and implementation of sustainable tourism practices in Nueva Vizcaya?***

The following answers are randomly selected:

- *The PLGU of Nueva Vizcaya shall conduct seminars and trainings on tourism practices on all tourism establishments and those who will not participate or violate the terms to be provided by the PLGU will face consequences.*
- *Strict implementation of guidelines*
- *There should be clear policies on the implementation of sustainable tourism practices*

- *A set of sustainable tourism practices should be laid out and made available*
- *Regular monitoring and evaluation of tourism establishment business operations*

The majority of respondents' responses focus on the necessity for trainings and seminars to become aware of the effects of tourism and how to effectively adopt sustainable tourism practices. Furthermore, it was suggested that there should be a set of principles that should be properly followed, as well as a set of clear policies and a list of sustainable practices. Respondents also felt that continuous monitoring and evaluation of tourism establishments was important.

## CONCLUSION

In the light of the findings of the study, the following conclusions are drawn:

1. Generally, the respondents are aware of various sustainable tourism practices. However, the respondents are more aware on sustainable tourism practices concerning the purchase of their materials and equipment for their business operations. The results also present that the level of awareness of the respondents does not significantly differ when grouped according to age, sex, length of service, educational attainment, and service sector.
2. The local tourism establishments under study are implementing sustainable tourism practices across all indicators. The extent of their implementation does not significantly when grouped according to age, sex, length of service, educational attainment, and service sector.
3. Educational attainment is not an indicator of the respondents' awareness and implementation of sustainable tourism practices.
4. It was generally perceived that the adherence to sustainable tourism practices is beneficial to the environment, the industry, and people working in the industry, thus a contributory factor to the balance in triple bottom line concept.
5. Despite the awareness and implementation of sustainable tourism practices among tourism establishments in Nueva Vizcaya, there is still a need for setting guidelines and strict implementation of policies pertaining to sustainable tourism, as well as trainings and seminars and regular monitoring and evaluation of business operations.

## RECOMMENDATION

After having fully considered the findings of this study, the researcher recommends the following:

1. Tourism establishments should continue to strengthen its employees' awareness of sustainable tourism practices and continue to implement sustainable tourism practices.
2. Tourism establishments should undergo certification on sustainable business operations.
3. The Provincial Tourism Office with the PLGUs and LGUs should review and revisit the National Tourism Development Plan, National Ecotourism Strategy and the



- Sustainable Development Goals and come up with a set of policies and guidelines concerning the sustainable operation of tourism businesses.
4. There should be a well-laid out sustainable tourism development plan for the province of Nueva Vizcaya that would encompass the achievement of the province's goals and objectives towards sustainable tourism development.
  5. Future researchers could replicate this study on a wider scale with the inclusion of more relevant and timely variables.

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