

PUBLIC GOVERNANCE IN RURAL ECOTOURISM: THE CASE OF DEVELOPING ECONOMY

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Abstract

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Over the past decade, global studies on ecotourism provide an illuminating hope for economic development (Sangpakil, 2017; Kim, Xie, & Cirella, 2019; Wahono, Poernomo, & Kusumah, 2019). However, fewer of these studies work on rural ecotourism. With hopes on the potentiality of rural ecotourism in Quirino Province, this research delved into the management bearings of rural ecotourism. Primarily, it trails the various management practices of ecotourism attractions and significant differences in the responses thereof including problems encountered in this management journey. Anent to, employed descriptive approach. Data were obtained from a survey questionnaire and were statistically analyzed through SPSS. Revealed thereof, management responsibilities on ecotourism sites are most practiced. Interestingly, among these practices training for tourist personnel, facilities, services and infrastructures, cultural heritage, and marketing seemed to be substantial and need attention. Also, problems, such as few numbers of tourist arrival noted, lack of equipment for recreational activities in ecotourism sites, and lack of parking areas were the factors that require attention. With these aforementioned revelations, a proposed sustainable development plan was moulded.

Keywords: Rural Ecotourism, Economic Development, Economic Landscape, Quirino Province, Ecotourism

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1. INTRODUCTION

Ecotourism, tourism with a low environmental impact, contributes to local proceeds (Anup, Ghimire, & Dhakal, 2020; Renkert, 2019; Snyman & Bricker, 2019; Juma & Khademi-Vidra, 2019), the decision-

making process of the regulatory governance (Zacarias & Layola, 2017; Blumstein, Geffroy, Samia, & Bessa, 2017), and economic diversification (Amoamo, Ruckstuhl, & Ruwhiu, 2018). Over the past decade, this concept is globally conferred for its direct and indirect effect on the economic landscape.

The pivotal role of ecotourism can accrue economic opportunities for the local community. One tangible proof is the Camøno walking trail was conceived as an alternative, bottom-up initiative to leverage the economy in Southern Denmark (Gyimóthy & Meged, 2018). In New Zealand, Maori ecotourism presents the contribution to economic generation through investment in and supports the building of capacity and enterprises (Amoamo et al., 2018; Prasetyo, Carr, & Filep, 2020). It is inclined with Ethiopia, ecotourism as a means of satisfying the funding requirement for effective management of protected areas (Admasu, 2020). The continued expansion of ecotourism has created opportunities for income generation and employment, at both the national and local levels in Costa Rica (Schultis, 2018; Jones & Spadafora, 2016). Ecotourism, in Nepal, has contributed significantly to the alleviation of rural poverty and remedying gender inequalities (Anup, 2016).

As a springboard on managing synergy of the local community and government, ecotourism guides the government for the formulation and implementation of further policies and development. Stronza, Hunt, and Fitzgerald (2019) state it utilized the government as a tool for advancing traditional or undeveloped societies and allows market integration thereof (as cited in Mowforth & Munt, 2016). The development of sustainable ecotourism, through its practical forms, reconciles antagonistic interests and objectives, fostering partnership and cooperation among decision-makers, operators, and consumers and promoting long-term general interest (Sofronov, 2017; Sangpakil, 2017).

Aside from the environmental degradation that increases local income, ecotourism presents an opportunity to stimulate the national economy as an alternative extractive industry by cutting the pattern of production and consumption. Taxes from direct payments such as fees, income, and royalties obtained locally serves as an addition directly to the national income (Moswete & Thapa, 2015; Wondirad, 2017, 2020). Other forms are associated with the implementation of development interventions in the peripheral areas of endangered ecosystem that redirects labor, and capital away from activities that have potential ecosystem degradation or encourages commercial activities that supply ecosystem services as joint products to take Africa's Serengeti and Masai Mara ecotourism projects as an example (von May et al., 2019; Kilungu, Leemans, Munishi, & Amelung, 2017).

With this illuminating importance of ecotourism, a deep understanding of its impact in the local setting is a great addition to this conceptual tangibility. Moreover, less effort has been paid to examine the contribution of ecotourism in rural areas. The article agenda is to create evidence-based ecotourism research that supports the economic development in Quirino Province without extracting conservation therein.

Anent to, the notion that a conflict between what is economically good that may emerge from ecotourism is more-or-less expected given the desire to both reduce impacts on nature while benefiting people and promoting conservation. With a dedication to providing a substantial venture in promoting and enhancing the competitive advantage of ecotourism prior to better recognition of potential community-

based sustainable ecotourism to the governing tourism management and hope to improve quality of life of the locals in the province is considered by the researcher. Specifically, this study delved into determining the various 1) management practices of the ecotourism attractions, 2) problems encountered related with, and 3) varying responses on these management practices.

In particular, the findings may help related parties (government and tourism sectors) to plan and support the ecotourism actors such as trade for sustainable tourism development of the Philippines. Importantly, the authentic ecotourism experience may be regarded as a quality product, targeting tourist groups who appreciate the uncontaminated natural and local experience, thereby bringing greater income to the local economy. It is in the foregoing that this study was conducted.

In addition, take out and comprehend the essential matters of this study, the remainder is structured as follows. Section 2 reviews the relevant literature related to ecotourism sustainability and development. Section 3 evaluates and analyses the methodology that has been used to conduct the study. Section 4 presents the results. Section 5 discusses the findings, while Section 6 provides a conclusion to the study.

2. LITERATURE REVIEW

2.1. Rural ecotourism

Ecotourism is an embodiment movement related to natural destinations, that emphasizes the conservation and protection of nature and respecting local cultures and lifestyles (Wallace, 2019). Sustainable tourism has aggrandized by various stakeholders related to tourism to generate revenue, create jobs opportunities, fortify the biosphere resources and intensify socio-anthropological apprehension (Masud, Aldakhil, Nassani, & Azam, 2017; Hunt, Durham, Driscoll, & Honey, 2015; Pforr, 2001; Wondirad, 2017; Mayaka, Croy, & Cox, 2018).

Ecotourism has been defined as the idyllic kind of tourism, as it purposes to preserve the natural, cultural and other tourist funds for constant use for upcoming generations at the same time as still bringing aids to the present civilizations. Theoretically, it sounds so auspicious and attractive, but when it comes to its real application, important limits bar the way to success. Different nations state that tried to adapt sustainable development in their communities, either partially completed their objectives or their application totally failed. These fruitless hard works obviously reflect the enormous interval that still occurs between the theory and practice of ecotourism in the local areas-rural ecotourism (Dimitriou, 2017, p. 1).

Rural ecotourism, the tertiary industry in economic development (Lei & Kehui, 2017), is a new type of tourism produced for people to experience rural scenery (Shang, Sun, & Xu, 2020). The Philippines, with a vast territory, has more rural areas than urban areas. The rural tourism industry can greatly stimulate the economic development of rural areas and has been rapidly developed with the support of the government through local economic development (LED) (Auriacombe & Van der Walddt, 2020; Van der Walddt, 2017; Anup, 2016). However,

the lack of management level and awareness of environmental protection of operators and tourists also makes rural tourism destroy the ecological environment, which ultimately leads to its unsustainable development. Therefore, it is necessary to combine ecology with rural ecotourism for rational planning (Adil Siswanto, 2015; Black & Cobbinah, 2018; Liang, Liu, & Liu, 2017).

Quirino Province, one of these rural areas, is bounded by Isabela on the North, Aurora on the East/Southeast, Sierra Madre mountain ranges on Eastern and Southern borders, and Mamparang ranges on Western borders. Constituted into a regular province on September 10, 1971. The Prime Agro-Industrial and Eco-Tourism Destination in the North.

The province laid hold of egotism. It was acknowledged by Regional Development Council for sustainable ecotourism development that the province has thrilling topography with inherited wonders and a landlocked haven of ecotourism destinations. Tourism in the province is a dynamic and increasing sector that can provide opportunities to socio-economic development opportunities despite the fact conservation and protection in environmental and natural resource is strenuously implemented.

2.2. Ecotourism theory

Chai-Arayalert and Pulido-Fernández (2020) concluded that efficient, responsible, and sustainable use of existing natural resources in the destination is a must in ecotourism. This can be pursued by enhancing the existing resources of the destination with suitable activities, improving ecotourism involvement, and proper ethical manner. To enhance the ecotourism capabilities, it is vital to innovate tools and approaches called smart ecotourism.

Information and communication technology is notable in cultivating entrepreneurs related to tourism. It enhances the methods of commercialization, navigates economic growth, aid in cost efficiency, and guarantees proliferation growth while upholding the competitiveness of the business in the target market (Buhalis & Amaranggana, 2013; Jovicic, 2019; Walker & Moscardo, 2014). By means of gaining the data of tourists, creating bookings, and augmenting the use of interactive program technology to facts and improvement of supple education together with the learning of natural environment undesirable end result. This can be used as one of the significant logistics in teaching and creating the knowledge of individuals in ecotourism destinations by using media technology and replicating destinations that are not being exposed and difficult to access on the computer-generated platform this can replace some tourism undertakings result in the destruction of natural resources in the location.

Information and communication technology play an important role in smart tourism result in active and advanced from electronic tourism and traditional tourism to create a thought like smart experience, smart tourist destinations, and smart entrepreneurship. According to Gretzel, Sigala, Xiang, and Koo (2015) and Xiang, Schwartz, Gerdes, and Uysal (2015), the tourist can provide a reachable communiqué and intensify the travelers' involvements, such as personalization, context-awareness, and real-time monitoring in the tourism

destination and it will also serve as an aiding tool for the stakeholders in enhancing their management characteristic through the incorporation of smart tourism, the advanced information and communication technology and the innovation of different facilities and physical infrastructures. In addition, smart tourism develops managerial capabilities specifically by planning, organizing, implementing, evaluating, synthesizing, and barter information in the various localities, both local and foreign tourist and tourist destinations.

2.3. Competitive advantage in tourist destinations

According to Cobbinah, Erdiaw-Kwasie, and Amoateng (2015), Masud, Aldakhil, Nassani, and Azam (2017), Mayaka et al. (2018), Palmer and Chuamuangpah (2018), Lee and Jan (2017), Thapa and Lee (2017), and Bricker (2017), confirmed interpretations that ecotourism may result in extensive enhancement of economy, environment and social-cultural essentials to travelers' attraction if it is rightly managed and well-planned and it will also aid in ensuring the protection and as a medium of responsibility in the natural resources of the tourist destination.

According to Cater and Cater (2015), Castellanos-Verdugo, Vega-Vázquez, Oviedo-García, and Orgaz-Agüera (2016), and Walters, Wallin, and Hartley (2019), composition views ecotourism as a fragment of sustainable tourism. It should be continuously preserved as a vital subject in the educational request for information or studies for development purposes. In addition, according to Wardle, Buckley, Shakeela, and Castley (2018), a systematic review that ecotourism influence in preserving the exposed natural resources in the tourism destination beside from other successful concerns on the different sector of the worldwide, on the greater scales, nevertheless the ecotourism ecologically intangible effect still reliable and consistent.

Properly and ethically managed eco-tourism promote sustainable destination development and provide extensive environmental, socio-cultural, and economic paybacks to a tourist attraction (Cobbinah, Black, & Thwaites, 2015; Doan, 2000; Masud et al., 2017; Mayaka et al., 2018; Palmer & Chuamuangphan, 2018; Stronza, 2007). Calderwood and Soshkin (2019) highlighted that Travel & Tourism Competitiveness Report is a main creation of the platform in modelling the upcoming movement, can enable the world figurehead to safeguard accessibility and travel schemes encounter in the demand of 21st century. The rapid production of new modes of motion and disruptive business models produce us with the opportunity to innovate mobility systems by means of policy and technological modernizations to convey social, economic, and environmental hazards.

2.4. Tourism development plan

The National Tourism Development Plan 2016-2022 envisions evolving a global environmental and competitive viable tourism industry that is concentrated on making comprehensive development was taken on to produce the long-standing application background reliable by means of the proclamation of guiding principle set into view

in the Tourism Act of 2009. The moral principles that govern a person's behavior are called ethics. Research ethics is an action that is legally and morally righteous in the study. It is actually natural in distinguishing acceptable and unacceptable behavior and right and wrong (Parveen & Showkat, 2017, p. 3).

To systematically measure the potentiality of the tourism sites, several methods are indicators were identified with a survey support of strength, weaknesses, opportunities, and threats (SWOT) analysis. The most common and solid identified indicators (Martinez, 2015) are 1) trainings for tourist personnel, 2) responsibilities on ecotourism sites, 3) facilities, 4) services and infrastructures, 5) conservation, 6) local communities, 7) cultural heritage, 8) monitoring and marketing.

3. RESEARCH METHODOLOGY

3.1. Research design

This study used a descriptive method of research. The design seemed appropriate since the purpose of this inquiry was to describe and analyze the competitive advantage of the Province of Quirino in its eco-tourism programs.

According to Sapon-White (2011), the apprehensions that show the prevailing conditions, current practices and situations, modern events, features of modern individuals, their behavioral patterns and attitudes or opinions are called descriptive research. Since the design deals with what is happening, data becomes easy. Data collected through this research method may result in a proposed program or in the development of an instrument in research.

Both techniques from qualitative and quantitative studies utilized for this study to ensure that the issue is not explored through one lens but rather a variety of lenses which allows for multiple facets of the phenomenon to be revealed and understood (Baxter & Jack, 2008, p. 544). Using an interview guide, this qualitative study was conducted to gather the opinion of the manpower in the tourist attractions that were visited in the study, along with a survey questionnaire which then was used to gather data, tabulated, and computed to come up with a quantitative analysis of the results collected from the respondents.

3.2. Respondents of the study

The study was conducted at the ecotourism attractions in the Province of Quirino. Tourism office personnel at the provincial and municipal levels are the respondents of the study, manpower in the actual tourists' attractions was also included to get first-hand knowledge on what is happening in the ecotourism sites of the province. Domestic and foreign tourists' arrivals were also included so as to get their feedbacks and suggestions regarding the different tourists' attractions in the province.

The study used purposive sampling order to define the target populace in which the researchers reached out efforts to identify respondents. Through this method, the researcher purposely selected the participants to understand the main concern (Tashakkori & Creswell, 2008).

3.3. Instrument

The researchers used a survey questionnaire which was developed by the researcher base from Martinez (2015) made in the subject matter in collecting the needed data in the specific problems of the study. The said instrument is composed of four parts: profile of ecotourism in Quirino Province, practices and programs of the provincial government to foster competitive advantage, problems of ecotourism within the province, and development programs proposals.

The first part evaluates the effectiveness of the practices and programs being implemented by the provincial government in relation to foster competitive advantage in the tourism industry of the province. The second part discusses the problems being encountered in the ecotourism industry within the province, and lastly, the proposal or suggestions by the respondents for the development of the ecotourism industry within the Province of Quirino.

The researchers used Cronbach's alpha to measure internal consistency on how closely related a set of items is as a group and to measure scale reliability. The measure of unidimensional did not imply "high value". In addition, in measuring internal consistency, it is necessary to create evidence that the scale in question is unidimensional which can require additional analyses. This instrument is a coefficient of reliability (or consistency) and is not a statistical test.

3.4. Data gathering procedures

Questionnaire. A checklist questionnaire was presented to the research adviser for comments and suggestions before it was produced to a final form. It was adopted from the study of Martinez (2015). The modified questionnaire served as the primary tool in gathering relevant data.

Try-out of the questionnaire. This was done to determine if the items presented on the questionnaire are fully understood before the actual distribution to the target respondents.

Unstructured interview. It is utilized to validate responses and personal experiences such as the challenges that they encountered to the respondents and ensure their validity thereof.

3.5. Data analysis

For data analysis, the needed data were encoded, tallied, and examined by means of various statistical tools like descriptive statistics to utilized the basic attribute of the statistics in a study, for the samples and measures to be simple summaries. To provide a foundation of nigh on every data quantitative analysis, like frequency distribution, to sort out and recapitulate the gathered data in a tabular format, simple visual aid analysis was used. Identified outliers (extreme values) in the survey data were set and taken for the mean. Weighted mean considered some data values to be more significant than other values and contributed to the final "average".

While inferential statistics were taken as sample data from a small number of people, to know

if the data can forecast whether the treatment will work in individuals and to compare example data to other samples or to the previous study.

Independent sample t-test to differentiate the means of two independent groups to know if there is a statistical indication that the related inhabitants' means are significantly poles apart and analysis of variance (ANOVA).

Scheffé's method to investigate instrument that is being used in statistics that ruptures a distinguish collective variability originate inside a data set into two parts: random and systematic factors and to differentiate the mean of various groups on the foundation of interesting differences that occurred after the data had been collected, called Scheffé test.

Based on the objectives of the study, the above-mentioned test was utilized. To interpret the result of the study, all data were treated via statistical software known as SPSS version 26.

As to evaluate the level of understanding of the respondents on their knowledge on fostering competitive advantage in ecotourism, problems in their sectors and development programs initiated and their perception was subject to the Likert scale. This scale is used to measure the gauged attitudes, values, and opinions in a short psychological measurement device. By the use of accomplished questionnaires, which call for them to indicate the extent if they agree or disagree in a series of statements.

The points, range and descriptive (qualitative) interpretation used in this study were as follows:

Table 1. Qualitative interpretation

<i>Numerical rating</i>	<i>Range</i>	<i>Qualitative equivalent</i>
4	3.25-4.00	Highly practiced
3	2.50-3.24	Practiced
2	1.75-2.49	Less practiced
1	1.00-1.74	Not practiced

3.6. Ethical considerations

The study may even be doomed to failure if this part is missing. This thought can be considered as one of the most significant portions of the study.

According to Arifin (2018), Parveen and Showkat (2017), the safety of human focuses through the implementation of proper ethical ideologies is significant in all research studies. The contemplation of ethical concerns is vital throughout all stages of study to have a sense of balance between the probable risks of research and the likely positive results of the research. It is essential to develop deliberations of each of the following points to at least one paragraph to address this considerations characteristic of the study in an efficient/effective means.

There is a significant result in the non-mandatory contribution of respondents in the research. Furthermore, one characteristic of respondents to take out from the study at any phase if they want like civil rights, the foundation of the learning agreement was taken part in the respondents.

The value of learning agreement in researchers provided the necessary data and guarantees about taking part to permit entities to know the consequences of involvement and to grasp a fully learned, well-thought-out and without restrictions assumed decision whether not to performed or performed, absences of the practice of any burden or intimidation, usage of aggressive, biased, or other undesirable communication necessities were evaded in the devising of interview/focus/questionnaire assembly interrogations.

The top priority is the confidentiality and secrecy of respondents. According to the research handbook, in any part of the study, it is vital to use the Harvard/APA/Vancouver referencing system to acknowledge the works of other authors, analyses throughout the research, keeping of the utmost level of objectivity in deliberations and adherence to Republic Act 10173 — Data Privacy Act of 2012.

4. RESULTS

The empirical findings from the survey results are based on questionnaires and interviews, as discussed previously. To suit the needs of this study, the results are presented in a tabular manner and crafted into 1) management practices of rural ecotourism attractions, wherein governance is under the Local Government Unit tourism sectors, 2) the problems encountered in the rural ecotourism, and 3) displays the comparison of responses on the management practices of ecotourism attractions when grouped according to category using the aforementioned statistical tools.

The composite means of management practices of ecotourism attractions was 3.38 indicates that it is practiced (Table 2.9). Responsibilities on ecotourism sites obtained the highest mean score of 3.56 and it was highly practiced (Table 2.2). It was followed by Local Communities with a mean value of 3.50 highly practiced (Table 2.5). Other items were assessed as practiced and arranged according to mean value such as training for tourist personnel at 3.49 (Table 2.1), conservation at 3.40 (Table 2.4), facilities, services, and infrastructures at 3.39 (Table 2.3), monitoring at 3.25 (Table 2.7), marketing at 3.23 (Table 2.8) and cultural heritage got the lowest mean of 3.22 (Table 2.6).

Table 2.1. Management practices of ecotourism attractions in terms of training for tourist personnel

<i>Tourist/Tourism personnel underwent...</i>	<i>Weighted mean</i>	<i>Verbal interpretation</i>	<i>Rank</i>
1. Tour guide training	3.53	Highly practiced	4
2. Kayak training	3.31	Practiced	7
3. White water rafting training	3.54	Highly practiced	2.5
4. Cave exploration training	3.54	Highly practiced	2.5
5. Nature conservation training	3.56	Highly practiced	1
6. Nature survival training	3.46	Practiced	6
7. First aid training	3.48	Practiced	5
Composite mean	3.49	Practiced	

Note: Legend: 3.50-4.00 = Highly practiced; 2.50-3.49 = Practiced; 1.50-2.49 = Less practiced; 1.00-1.49 = Not practiced.

Table 2.2. Management practices of ecotourism attractions in terms of responsibilities on ecotourism sites

<i>Tourist/Tourist personnel...</i>	<i>Weighted mean</i>	<i>Verbal interpretation</i>	<i>Rank</i>
1. Properly maintained equipment	3.46	Practiced	5
2. Monitoring cleanliness of sites	3.62	Highly practiced	2
3. Knowledge of safety measures	3.64	Highly practiced	1
4. Knowing the capacity of tourist arrivals	3.57	Highly practiced	3
5. Informing guidelines for guest	3.51	Highly practiced	4
Composite mean	3.56	Highly practiced	

Note: Legend: 3.50–4.00 = Highly practiced; 2.50–3.49 = Practiced; 1.50–2.49 = Less practiced; 1.00–1.49 = Not practiced.

Table 2.3. Management practices of ecotourism attractions in terms of facilities, services, and infrastructures

<i>There is a presence of...</i>	<i>Weighted mean</i>	<i>Verbal interpretation</i>	<i>Rank</i>
1. Picnic huts	3.24	Practiced	8
2. Relaxation areas	3.39	Practiced	5
3. Campsites areas	3.24	Practiced	9
4. Access roads	3.56	Highly practiced	1
5. Waiting sheds	3.55	Highly practiced	2
6. Souvenir shops	3.38	Practiced	6
7. Food outlets	3.45	Practiced	3
8. Comfort rooms	3.41	Practiced	4
9. Parking lots	3.25	Practiced	7
Composite mean	3.39	Practiced	

Note: Legend: 3.50–4.00 = Highly practiced; 2.50–3.49 = Practiced; 1.50–2.49 = Less practiced; 1.00–1.49 = Not practiced.

Table 2.4. Management practices of ecotourism attractions in terms of conservation

<i>Indicators</i>	<i>Weighted mean</i>	<i>Verbal interpretation</i>	<i>Rank</i>
1. Conservation programs are being implemented	3.32	Practiced	2
2. Cooperation with other government agencies regarding conservation programs are being done	3.48	Practiced	1
Composite mean	3.40	Practiced	

Note: Legend: 3.50–4.00 = Highly practiced; 2.50–3.49 = Practiced; 1.50–2.49 = Less practiced; 1.00–1.49 = Not practiced.

Table 2.5. Management practices of ecotourism attractions in terms of local communities

<i>Indicators</i>	<i>Weighted mean</i>	<i>Verbal interpretation</i>	<i>Rank</i>
1. Communication with local communities within the ecotourism sites is being done	3.46	Practiced	2
2. Coordination with programs implemented for local communities is always conducted	3.59	Highly practiced	1
3. Contact persons in the communities where ecotourism sites are located are identified and are present	3.45	Practiced	3
Composite mean	3.50	Highly practiced	

Note: Legend: 3.50–4.00 = Highly practiced; 2.50–3.49 = Practiced; 1.50–2.49 = Less practiced; 1.00–1.49 = Not practiced.

Table 2.6. Management practices of ecotourism attractions in terms of cultural heritage

<i>Indicators</i>	<i>Weighted mean</i>	<i>Verbal interpretation</i>	<i>Rank</i>
1. Cultural programs for tourists are available	3.08	Practiced	3
2. Cultural exhibits are available	3.29	Practiced	1.5
3. Existing shops for cultural products are available	3.29	Practiced	1.5
Composite mean	3.22	Practiced	

Note: Legend: 3.50–4.00 = Highly practiced; 2.50–3.49 = Practiced; 1.50–2.49 = Less practiced; 1.00–1.49 = Not practiced.

Table 2.7. Management practices of ecotourism attractions in terms of monitoring

<i>Indicators</i>	<i>Weighted mean</i>	<i>Verbal interpretation</i>	<i>Rank</i>
1. Available facilities for monitoring of ecotourism sites are present	3.21	Practiced	2.5
2. Regular logging of visitor arrivals is conducted	3.21	Practiced	2.5
3. Reports on the influx of tourist in sites are done regularly	3.33	Practiced	1
Composite mean	3.25	Practiced	

Note: Legend: 3.50–4.00 = Highly practiced; 2.50–3.49 = Practiced; 1.50–2.49 = Less practiced; 1.00–1.49 = Not practiced.

Table 2.8. Management practices of ecotourism attractions in terms of marketing

<i>Indicators</i>	<i>Weighted mean</i>	<i>Verbal interpretation</i>	<i>Rank</i>
1. Brochure and leaflets are distributed	3.08	Practiced	4
2. Radio and TV advertisements have budget allocations	3.13	Practiced	3
3. Social media advertisement platform is present	3.36	Practiced	1
4. Website for ecotourism spots is developed	3.35	Practiced	2
Composite mean	3.23	Practiced	

Note: Legend: 3.50–4.00 = Highly practiced; 2.50–3.49 = Practiced; 1.50–2.49 = Less practiced; 1.00–1.49 = Not practiced.

Table 2.9. Summary table on management practices of ecotourism attractions

<i>Indicators</i>	<i>Weighted mean</i>	<i>Verbal interpretation</i>	<i>Rank</i>
1. Training for tourist personnel	3.49	Practiced	3
2. Responsibilities on ecotourism sites	3.56	Highly practiced	1
3. Facilities, services and infrastructures	3.39	Practiced	5
4. Conservation	3.40	Practiced	4
5. Local communities	3.50	Highly practiced	2
6. Cultural heritage	3.22	Practiced	8
7. Monitoring	3.25	Practiced	6
8. Marketing	3.23	Practiced	7
Composite mean	3.38	Practiced	

Note: Legend: 3.50-4.00 = Highly practiced; 2.50-3.49 = Practiced; 1.50-2.49 = Less practiced; 1.00-1.49 = Not practiced.

Significant difference. The below table showcased that half of the categories have a p-value lower than the 0.05 level of significance. Hence, it is noted that there is a significant difference in training for tourist personnel with a p-value

of 0.025, facilities, services, and infrastructures with a p-value of 0.005, cultural heritage having a p-value of 0.004, and marketing with a p-value of 0.006. Since the result exemplifies a lower p-value at a 0.05 alpha level this means that the result is significant.

Table 3. Difference of responses on the management practices of ecotourism attractions when grouped according to category

<i>Management practices</i>	<i>F-value</i>	<i>P-value</i>	<i>Interpretation</i>
Training for tourist personnel	3.770	0.025	Significant
Responsibilities on ecotourism sites	1.610	0.203	Not significant
Facilities, services, and infrastructures	5.446	0.005	Significant
Conservation	1.786	0.171	Not significant
Local communities	0.655	0.521	Not significant
Cultural heritage	5.687	0.004	Significant
Monitoring	0.978	0.378	Not significant
Marketing	5.350	0.006	Significant

Note: Legend: Significant at p-value < 0.05.

Problems encountered. The succeeding table shows that the most observable problem was the few numbers of tourist arrival with a mean of 5.88. Seconded by lack of equipment for recreational activities in ecotourism sites and lack of parking areas. Lack of equipment for recreational activities in ecotourism sites and lack of parking areas ranked

next at 6.10. Stimulatingly, lack of qualified tour guides at 6.26, lack of equipment for search and rescue at 6.43, lack of rest area for the tourist, and lack of maintenance in ecotourism sites rank mean of 6.50 followed. Among these, lack of access in ecotourism sites rank with the mean of 6.64 was the least problem.

Table 4. Encountered problems observed in the ecotourism of Quirino Province

<i>Indicators</i>	<i>Mean rank</i>	<i>Over-all rank</i>
1. Few numbers of tourist arrival	5.88	1
2. Lack of cleanliness on the sites	6.88	9
3. Lack of rest area for tourists	6.50	6.5
4. Lack of qualified tour guides	6.26	4
5. Lack of equipment for search and rescue	6.43	5
6. Lack of equipment for recreational activities in ecotourism sites	6.10	2.5
7. Lack of parking areas	6.10	2.5
8. Lack maintenance of ecotourism sites	6.50	6.5
9. Lack of access to ecotourism sites	6.64	8
10. Lack of waste disposal facilities	7.68	10

5. DISCUSSION

5.1. Governing practices on Quirino ecotourism sites

The governing practices were measured as to the aforementioned indicators. This part discusses the significant worth of the inferred result presented in a perspective view.

Training of tourist personnel. Tourist personnel in the province are regularly sent to these kinds of training so that they become proficient in nature preservation training (Department of Tourism, 2017). In its most general sense, a preservation goal is the specification of the total target for the species and/or habitat types for which a location is designated in order for it to subsidize to preserving or attaining desired preservation state (EC, 2012),

produce substitute income opportunities and educate local societies (Conservation International Philippines, 2021) and socio-economic development chances while environmental and natural resource preservation and fortification is strongly chased (Laudencia, 2017). Also, they submerge the personnel, especially that on-the-spot personnel for ensuring the protection and comfort of the travelers while exploiting the destination that enables them in shielding the unconscious through the proof of identity of any hazards within the environment, endorsement of the appropriateness of any form of retort, and valuation of the airway. A virtuous tourism safety program scrutinizes the corporal surroundings and ties it with the type of travelers who practice it (Brondoni, 2016).

On traveler's view, one of the domestic tourists remarkably commended a certain tour guide for being a keen observer, lively explanation of the do's and don'ts in the tourist attraction and intuitive-honest protective points although out there the exploitation on Siitan River at Madella Town and Diamond cave at Nagtipunan. This knowledge of tourist personnel on safety measures in relevance to activities like cliff diving, river rafting, trekking, and caving which may help in the live situation as such allows motion of air are measures that must be undertaken to shield the unconscious (American Academy of CPR & First Aid, Inc., 2019). In addition, the Department of Tourism (DOT) imparted the appropriate and ethical existence training through the "Trabaho at Oportunidad (TAO)" program in May 2019 with an objective to lift the standards of living of Filipinos by imparting training, job and enterprise chances (Manila Standard, 2019).

Moreover, during the interview with the DOT Provincial Office personnel, the researcher witnessed the ongoing seminar related to tourist attractions in the province adapting to the new normal while maximizing the tourist arrival in a healthy and safe way.

Responsibilities on ecotourism sites. Tourism personnel and other individuals working for and in the ecotourism, attractions are expected to develop and promote ecotourism in order to draw interest among tourists. These people are expected to perform various responsibilities depending on the site or destination. This indicates that the Department of Tourism in the province onsite personnel need to practice proper maintenance of equipment to make quality service, easier and save time.

The Department of Tourism officials and personnel tied up with the LGU of the six municipalities in the province and private institutions, in progress, dimensionally (Department of Tourism, 2017) in imparting informative facts in various means. According to Manila Standard (2019), the governor of the province, the TAO program was launched to boost goals to convey individuals to the entrepreneurship segment and ecotourism as an alternative that will aid the province companions to add opportunities. The Provincial Department of Tourism was commended on implementing this practice effectively because the tangible proof was seen by the clientele.

Moreover, the voluntary cooperation of the residence is a plus in promoting cleanliness to sustain the aesthetic of the tourist attraction in the province. A local group of people with robust apprehension to protect the area from plastic wastes, recently formed a movement called "Quirino: Malinis at Luntiang Paraiso" with the definitive objective to make a culture of zero waste society by firming the spirit of volunteerism among the Quirinians in taking the protection of the surroundings. Spearheaded by the Provincial Natural Resources and Environment Office, the program participated by students, professionals, government workforces from the local and national government and non-government offices who will be called "Clean and Green Heroes", an environmental preservation association. Equipped with their clean purpose to avoid the province from uncritical

discarding of single-use plastic, these heroes are decided on creating a variance for a Zero Plastic-Waste Quirino Province by spearheading several clean-ups drives and IEC campaigns in all barangay (Bicarme, 2021). Therefore, the Province of Quirino has naturalistic, self-disciplined, and responsible residents to care for its own beauty and preserve it in the new generation.

Based on the interview with the Department of Tourism officials and personnel, they strictly implemented these practices to lessen the stress of tourist attraction in the province and be able to forecast and manage tourist arrivals. Just like overpopulation to the tourist destination, observing the actions of tourists in the attraction and restraining the dimensions of travelers to be directed by the personnel in charge onsite following the ecotourism policy and environmental act. "tourism carrying capacity" is well-defined by the World Tourism Organization as "The all-out number of individuals that may appointment a tourist attraction at the same time, without causing devastation of the physical, economic, socio-cultural environment and an undesirable decline in the value of travelers fulfillment" (UNWTO et al., 2018). Whereas Hawkins and Middleton (1998) outline it as "the level of human activity the destination can serve without the area failing, the occupant society being unpleasantly affected or the quality of travelers involvement decreasing" what both these characterizations pick up on is carrying capacity is the point at which an attraction starts experiencing opposing as a result of the number of travelers.

As to researchers' actual experience on the uninformed current visit to these eco-tourism sites, a readily assigned tour guides on-sites discussing the important guideline, addressing promptly the tourist concerned and distributing brochures and pamphlets. Responsible Tourism Guidelines formed with very mutual but very productive tips that can educate more groups of individuals, especially tourists who can educate more about cultural and environmental responsiveness. Ecotourism personnel and officials are looking forward to taking proper maintenance of the equipment and maintain cleanliness of the attraction and how can they decrease unoptimistic effects in the region they are traveling and how they can make optimistic effects while they are traveling (ILO, 2017).

These practices are actively absorbed by the onsite personnel as it was the result and their inclusive organizations passionately delved into their responsibility to capacitate themselves about guest arrivals, be aware on safety measures and to emphasize rules and regulation to travelers. Is a common system that many entrepreneurs, companies, and associations use to schedule particular care responsibilities that support assets, machinery, and other paraphernalia stay in good working state? Responsibilities are usually scheduled based on period or equipment usage (Upkeep Maintenance Management, 2021).

Facilities, services, and infrastructures. Ecotourism attraction is economically insignificant without access roads, and service accessories including infrastructure. Anent to, the Department of Tourism together with the provincial government

are in process of developing public infrastructures for tourist accessibility. Department of Public Works and Highways, District Engineer Marifel Andes, affirmed this through the accomplished 10 tourist destinations access roads in the six towns under the district's Convergence and Special Support Program. These road developments access the different tourist destinations in the province, such as in the Aglipay town (Aglipay Caves, Napipiwongan, Mabo, Dibiwen Falls, and Pensal Falls); in Diffun town (Ganano Falls); in Maddela town (Governor's Rapids and Maddela Eco-Park); in Nagtipunan town (Siitan Nature Park and Diamond Cave); Zamora-San Marcos-Ricarte Sur, Diffun and Zamora, NRJ Gundaway-Susong Dalaga, Cabarroguis and the access road leading to Quirino Tourism Complex (Ebreo, 2018).

In addition, fixtures specifically shed and/or huts serve as an area for people waiting for a ride it is mostly built alongside roads and small buildings. Loyola, Rogando, and Sastine (2012) confirmed that the whole thing has a purpose in its own way. Perceptibly, its primary function to produce a destination for passengers to wait for public transportation, comfort the travelers after the rides, and exploiting the ecotourism of the province established available waiting sheds in every tourist destination, and asocial gathering area regardless of the various reasons. Along with these, it accommodates ads for events, job offerings, and other promotional means. Usually, it is placed near bus and jeep terminals, pedestrian lanes, parking areas, and other places where it is essential.

Extension services such as food, relaxation, and comfort areas, souvenir shops, campsites, and parking lots that play a role in achieving quality of service are available in the ecotourism sites. Food outlets could be a way to draw interest for individuals who come and eat and return for the tourist to try and experience the native culture and modern delicacies in the tourist attraction which provide livelihood also to the local communities in the ecotourism destinations. The National Technical Assistance Center, a division of the National Association for State Mental Health Program Directors (NASMHPD) endorses the use of sensory and comfort rooms as part of trauma-sensitive care which calms an individual from the feeling (NETI, 2003), not just for customers but for staff. Relaxation areas, aid to lessen stress-related concern including fatigue, pleasure and different health concern (The Guardian, 2016) and works as a smart workplace stratagem that distinguishes work time from break time, and so improving efficiency and routine.

Kong and Chang (2016), Hu and Yu (2007) added that souvenir stores serve as a source of fulfillment and aid to shape travelers' experiences and an alternative source of income to the locals. Car-parking guidelines are important in inducing transport and offer an effective means to lessen car use, particularly to work, but also on ease and shopping excursions, although there is a case for parking expenditure in order to intensify motion (Christiansen, Engebretsen, Fearnley, & Hanssen, 2017). Existing studies and movements, such as camping and picnic have been exposed to have an optimistic effect on formative years growth (Chawla, 2015) and supplementary dynamic to their development and happiness (Todt, 2006). Campsites

and picnic huts in tourist attraction areas can be a means of exhibiting local culture and may serve as an add-on to the attractions and livelihood of the community.

Conservation. The province, linking with other agencies and cooperating with various entities along with the conservation and preservation of ecotourism attractions in the province, is relayed to help in protecting these attractions from various possible distractions both natural and man-made. According to Kyper (2013), ecotourism should be considered as being more than tourism with nature and should be regarded as tourism in a collaborating fashion by means of combining the objectives of maneuver preservation and local improvement. This suggested that protection should undergo to assure those goals of tourism improvement do not violate the goals of shielding natural attraction and multifariousness.

The province is developing a conservation program and it will be planned and implemented responsively with the cooperation of other agencies. The provincial Project Management Team (PMT) is unceasingly leading activities to reinforce the province's Forest Protection Program (FPP) that goals to rescue and shield the existing forest cover, natural resources, and the different plant life and wildlife of the province (Bicarme, 2018). Workshops on the preparation of Barangay Development Plan (BDP), Land Use Plan (LUP), and Conservation Agreement (CA) were also pursued with the aim of making priority agendas and developments that will not find the middle ground of the location (Bicarme, 2018). The CA is the arrangement between the barangays and the provincial government for the fortification of the forestry by discontinuing the Kaingin doings and cutting of naturally grown trees. *Bantay-Gubat* or "forest protectors" were employed to further aid in the project enactment (Bicarme, 2018).

Local communities. Community involvement in tourism improvement and World Heritage Site (WHS) preservation administration is vital for the maintainable development of WHS attraction (Rasoolimanesh, Roldán, Jaafar, & Ramayah, 2017). In relevance, the Department of Tourism officials and personnel compellingly specified their collaborative consultation with the local community regularly under the comprehensive approach in the implementation of relevant and accessible projects/activities/services vital for the community's advancement and progress through networking of various sectoral programs (CARAVAN) program.

With the supervision by the provincial government and LGU, this program aims to improve life for all the individuals in the province to enhance the socio-monetary state of people and aimed to bring maintainable developments, actions, and services of the Province ("I Love Quirino", 2013). Local tourism personnel is monitored and assessed the status of the community in the tourism destination on a monthly basis which serves as a guide in further implementation of related programs. Contact persons in the communities where ecotourism sites are located are identified and are present. Ecotourism management must augment the implementation of contact persons in the communities and even the tourist in the tourist attraction for the survey, planning, monitoring, and evaluation purposes.

Cultural heritage. The governing bodies allotted cultural programs that extend cultural exhibitions and products. According to Carpenter (2013), Kelly and Frevsinger (2000), how individuals in a self-governing social order select to devote their optional period has been of awareness to regeneration specialists and arts administrators whose occupations are to enhance and provide arts and cultural platforms. Therefore, it is significant to understand the predictable aids that individuals appreciate during leisure involvement. Thus, scheming a program for the cultured goods and services that exist in ecotourism sites is an advantage for the local people which elevates visitor experiences. Also, the arts enhance enthusiasm and happiness to life expectancy, and arts-related involvements can generate a thoughtful and thankfulness of the arts throughout one's natural life (Orend, 1989).

Further, the exhibition of cultural heritage objects and existing shops is a practice and available in the ecotourism sites and to the market where the collected cultured objects are put on display to the public. The objects are sensibly chosen and placed together to offer edifying worth and every so often to tell a story to develop economic, social, and environmental factors of the province. Many sites of cultural history and heritage are preferably suitable to turn into tourist attractions for they include the inimitable identity of a destination that imitates its olden times, existence, or environment (McKercher, 2002). These destinations also endorse the rich tapestry of a destination's ethnicities, cultural circumstances, and sceneries (Copley & Robson, 1996).

Moreover, the empirical essentials of tourism, with emotional state, ambiances, and customer views, are documented as a significant subject for study, as tourism involvements overall have gone from being just a worth adding feature of further tangible properties and services, to respected merchandises in and of themselves (O'Dell, 2005, p. 13). According to Staiton (2020), tourism produces boundless chances to acquire about the way other individuals live, about the social order, and their ethnicities. This drives large entrepreneurs to pursue business by means of the solitary purpose of taking a "cultural" involvement that as a deviation of their journey through experiencing culture in the tourist destination.

Monitoring. Among the items enumerated, reports on the influx of tourists in sites are done regularly. This implies that monitoring is constantly performed to enable personnel to review ecotourism performance and devise measures to boost its potential. In interviews conducted, the Department of Tourism expressed and shows their data in monitoring the tourist arrival in the tourist attraction and tourist accommodation establishment monthly for the completion of every annual report in order to control and implement a program for the goodness of the hospitality and tourism status of the province. Forecasting or monitoring of data that happens in past, current, and future analyzed the result of tourism at the regional and national levels. This helps governments and DMC's to enhance the management capabilities in the tourist destination. Anent this, by the proper application of monitoring, aids to intensify the cultural heritage and natural value of tourist attraction to maintain its value for future generations (ESA Space Solutions, 2018).

Other items were assessed as practiced, such as available facilities for monitoring of ecotourism sites are present and regular logging of visitor arrivals is conducted. Trained personnel in monitoring can perform better and increase the capabilities with the facilities, tools and equipment are available in the tourism departments to produce informative monitoring and evaluation in the ecotourism destinations. Hocking (2000) stated that, in terms of management decision-making, it requires wide-range experiences with methodical monitoring to create informative data. The condition of subjective impressions is not enough in the demands of individuals to show the information before making decisions it is necessary to ensure that they were composed in a systematically consistent. The manager or top management weren't able to address the public concerns resulting in not fulfilling their responsibilities and failure to attain the organizational goals and objectives in the absence of monitored data.

Marketing. Aside from personal promotion, the governing bodies opted for social media advertisement platform, the fastest growing marketing trend in the business industry and vigorously trending, in advertising ecotourism sites, which are known for their efficiency. To supply informative data and provide more concrete information, a website for ecotourism spots was created by the management (see quirino.gov.ph.com). According to the RedAlkemi (2019), advertising via the internet enables to highlight the features of businesses worldwide. It is not necessary to advertise or promote your business directly to customers. Through this, your business can save time, efforts, and monetary. The local radio station of the province, is available other than that, the budget is allocated for an advertisement to other radio stations and even TV networks of the attractions. According to Juneja and Anand (2015), it is confirmed that persuading consumers about the benefits of the product is called broadcast advertisement and it is well-thought-out as an effective tool of promoting products and services.

Printed advertising such as brochures, leaflets, tarpaulins, and pamphlets are readily available and distributed to the provincial and local offices, onsite tourists, and to the residents of the province. Based on the gathered data of tourist arrival 2019 in the Department of Tourism provincial office, the domestic tourist has the highest number of arrivals. According to Molina and Esteban (2006), it is stated that the value will depend on reaching consumers and satisfying their needs and wants. Promotional material, websites, tour guides, and tourism workplace are practical and exposed areas of delivering data of tourist destination to the traveler.

According to Tran, Hwang, Yu, and Yoo (2018), there is a global competition in the various countries in terms of the hospitality and tourism industry. On the other hand, these firm competitions may result in the destruction of natural resources, environment, society, economy and can harm the health and naturalistic features of the tourist destination such as over augmentation and overexploitation. It may require continuous research and study in the tourism concerns and issues to make these threats and negative impacts into opportunities result for a life-long benefit in the future generations.

Generally, the respondents expressed their satisfaction in the public governance of the management, which greatly focuses on preserving the local community atmosphere of the tourist attractions in their area through the massive support they have undertaken and provided. They also see that the government exerts effort in maintaining beauty and protecting the attractions from distractions. Therefore, tourism management is doing its best extent in the local communities of the province. According to Nagarjuna (2015), one of the major essentials in ecotourism is the presence of local individuals and community in tourism undertakings. The local features, such as food, culture, festivities, goods, and services can create tourist authentic experiences. Moreover, the local community knowledge and practices will also aid the preservation of local culture and environment. It is necessary for the businesses or investors in the wildlife resorts to take the overall responsibility for the development and sustainability of local culture and natural resources in the tourist destination.

5.2. Significant differences

Based on the post hoc test conducted, it was found out that Department of Tourism officials and Officer observed positively the management practices of ecotourism attractions compared to the local and foreign tourists. Training for tourist personnel, facilities, services and infrastructures, cultural heritage, and marketing are significant. In principle, a statistically significant result (usually a difference) is a result that's not attributed to chance.

More technically, it means that if the *null hypothesis* is true (which means there really is no difference), there's a low probability of getting a result that large or large. The answer on that area varies hence rejecting the null hypothesis. This should be an opportunity for taking up new questions that future researchers can investigate and explore. Discussion can include potential reasons why your results defied expectations. Anent this, ecotourism officials and personnel practices need to enhance and consider for urge implementation, such as training in the tourist personnel should be instigated mandatory to ensure quality service in terms of securing and entertaining the tourist in the destination.

Facilities, services, and infrastructures must be built onsite depending on the site not to dominate the attraction. The International Organization for Standardization (ISO) describes that the management in facilities as the "organizational function which integrates people, place, and process within the built environment with the purpose of improving the quality of life of people and the productivity of the core business".

Picard and Robinson (2006) highlight that the relaxation and satisfaction of the tourist depend on the quality services and valuing and appreciating the local culture this will also produce solutions for reconciliation and conflict prevention in the tourism destination.

Cultural heritage in the management practices helps teach the tourist and organization to value and appreciate local culture in the tourist destination, such as values, expectations, and

cultural diversity that significantly influence the hospitality and tourism business from punctuality and tone to contract terms and management. Thus, culture is a key advantage when it comes to attracting talent and outperforming the competition. According to Haynes (2018), it is alleged that when it comes to cultural heritage when it is being managed in a proper manner there is broad rage result in terms of augmentation and preservation of tangible and intangible features of a tourist destination for the life-long purpose by the next generation.

Lastly, the Department of Tourism management in the Province should augment the marketing strategy of tourism by having keen monitoring and research to consider both local and international tourist satisfaction, additional revenue, more job opportunities, and resilience to the globalization in the tourist destination.

Other items were assessed as not significant in the management practices liked: responsibilities on ecotourism sites, conservation, local communities, and monitoring. This must be sustained and observed by the management to reduce/lessen the obnoxious effect of tourism on the environment and develop the local individual cultural integrity.

5.3. Problems encountered

Inclusive with the development of Quirino ecotourism, problems are encountered. As shown in the result (Table 4), one of the problems identified in ecotourism verbally interviewed was the limited training on tour guiding. It is said that sending manpower and personnel to training is not prioritized which lessens the quality of services offered in tour guiding. It is important, according to them, that ecotourism attractions accommodate trained tourist guides to provide efficient tour guiding. When training needs of personnel and other individuals working for ecotourism are not addressed, then potential may be sacrificed. According to Choi and Dickson (2009), the success of the hospitality and tourism industry is through customer service. Therefore, it is necessary for the management of stakeholders to rigidly select the competent employee and leaders and required them to undergo training and development as they are the essentials and valuable asset in bringing quality service to the customers and innovation to the organization.

The wealth of the province and the country itself is often tied up in natural resources like forests, minerals, and land that could be used for agriculture. The Department of Tourism in the province and cooperation with the other government agencies are challenged to conserve the ecotourism attraction for the implementation of programs in the local communities. According to Stronza et al. (2019), it is quantified that sustainable tourism is the innovation and reinforcing conservation and preservation of tourist destinations.

Rest areas are not present in the ecotourism attractions and public investors are encouraged then to participate in this endeavor. To attain the provincial goals and objectives of tourism, these tangible and intangible services are given to offer satisfaction and fulfillment to the tourist.

A serious problem is reflected in the responses of respondents and has to be taken seriously by the

ecotourism officials and personnel in the province. The decline in tourist arrivals could be a reflection of problems along with management practices and other things which should be looked into by concerned individuals. For this reason, the few numbers of tourist arrival can be attributed to the promotion of the tourist destinations as well as access to information on the different tourist spots on social media. Verbatim response during the interview by the local respondents in few

numbers of tourist arrival, "The ecotourism is aesthetic and have the potentials in the province but it needs to develop those necessities of the tourist" like the problems cited in Table 4.

To note, the management is doing their urge extent of responsibilities to enhance those problems encountered in the ecotourism sites while preserving its own advantage. Thus, the researcher anticipated a strategic plan to attain sustainability of rural ecotourism.

Table 5. Proposed sustainable development plan

<i>Key result area</i>	<i>SMART plan</i>	<i>Outcomes</i>
Training and development	Training programs should be mandatory and regularly done among the tourist personnel. Moreover, they should be consulted on what trainings they would like to receive so as to make them better and responsible tour guides. The training can focus also on safety precautionary measures and rescue whenever tourists meet an accident along the trails.	Becoming an effective tour guide could be one of the strengths that could be their strengths.
Improvement on facilities, service, and infrastructures	As part of the tourism development in a developing province, the facilities, services, and infrastructures should be properly assessed by the concerned agency thus, providing convenience and access among the tourist. This area can be determined solely by means of putting suggestion boxes in each tourist spot for suggestions on the improvements of the available facilities, services, and infrastructures. As part of the development plan, a master plan, as well as a budget plan, may be considered by the local leaders thus allocating the budget in the next years. Above all is the concreting of the roads heading their tourist spots for easy access. Hence, a faster implementation of infrastructure, additional equipment needed for search and rescue and recreational activities in the ecotourism sites and development programs by the government to ensure that the ecotourism industry within the Province of Quirino will be able to keep up with the increase of tourist arrivals.	The development of infrastructure facilitates can enhance the easy access to the movement of individuals and properties; offers energy when and where required; eliminate inhospitable surroundings; allows swift public services; and generally, supports economy and value of life expectancy.
Emphasis on cultural heritage	As part of the tourism attraction, the different tourist spots in the province may add a touch of culture like giving simple facts placed on tarpaulins or in a creative means. The emphasis on cultural heritage can be done by means of the tour guides to tell something about the place as it relates to the culture in that certain locality. Integration of cultural heritage can be incorporated in flyers.	To generate awareness and knowledge on cultural heritage to the tourist personnel as well as to the domestic and international tourist.
Marketing or promotion of the tourist destinations	Also, a marketing plan and more programs promoting the cultural heritage of local communities within the sites should be initiated not only by the provincial and local government but also by individuals within these communities. The initiative and the availability of social media can be an avenue to promote or market tourist attractions. Each municipality represented by their lovely Ambassadors or Title Holders of Beauty pageants can be tapped to be their ambassador in promoting their local tourist spots. Hence, the marketing strategies can be done either via vlog, Facebook post, tarpaulins, and other means of social media platforms focusing on what the tourist spots can offer, how can they reach the place, how long will it take for them to travel, and among others.	It allows to map out the step-by-step process in promotion of tourist destination and update to the strategy changes.

Supplementarily, the ecotourism management and officials should a lot a budget for the addition and construction of entertainment and relaxation facilities in line with the ecotourism area and secured and wide parking are for the vehicles of the tourist. According to Reeder and Brown (2005), is identified that the positive impact of tourism and recreational undertakings is to enhance business and profit-oriented this will create job opportunities for the individuals, and possibly this will aid to uplift their quality of life in terms of employment.

Ecotourism officials and personnel should monitor the performance of the tour guides assigned in the different tourist destination to impose human resource enhancement training and program for a better output performance to be imparted in the tourist both local, national and international. Rbotić (2010) it is recognized that there is a significant and multidimensional role in the modern tourism in terms of tourist guiding through providing a quality and safe experiences during the tour in the respective tourist destination this may include travel scheme that tell apart the aforementioned by its probable to compose and be able to traveler involvements, improve the features

of tourist attraction and apply the objectives of the responsibility of tourism.

The ecotourism officials and personnel should observe the needs and not available tools and equipment in the tourist destination. One of the vital and significant characteristics of successful tourism in providing quality service is the assurance of safety and security in the tourism destination (UNWTO, 1996). Also, they should oversee the condition of each tourist attraction to build the prescribed facilities for the comfort and relaxation of the tourist. Moreover, the maintenance of ecotourism attraction should observe keenly to avoid violating the law and regulation of ecotourism Republic Act No. 9593.

Department of Tourism officials and personnel should manage the accessibility in order to avoid the burden of the tourist, to attract more tourist arrival and a safe trip of the tourist upon reaching the desired tourist destination. Rebstock (2017) concluded that by augmenting the accessibility of the tourist destination in such area may result in a pervasive optimistic result in terms of generating economic revenue. Basically, it is very significant to the tourists/travelers, so as to reach the tourist

attraction efficiently and effectively. Expectedly, there is a direct positive impact in intensifying accessible tourism market.

Provincial regulatory bodies and the residents helping each other to maintain the cleanliness and making this as a livelihood purpose by recycling those waste in a signature and meaningful products some results are the souvenirs. It is implied that from this response alone, waste segregation and disposal in the ecotourism sites is less serious problem. Proper waste disposal should be implemented to maintain the beauty and cleanliness of the attraction. One way to realize this is to provide a continuous improvement of waste disposal facilities. Just like the lyrics of the song, "not all heroes wear capes", the newly born heroes of Quirino do not wear capes, do not use guns to fight criminals but they are armed with a mission to free the province from single-use plastics and every time we need them, they are our supermen. Quirino Province has a rich culture so this could be interspersed with ecotourism that we could have in the province.

6. CONCLUSION

This paper examined the management bearings of rural ecotourism. Through questionnaire and unstructured interviews, the results of the study yield in depth information and better understanding of the rural ecotourism management practices. The result revealed that responsibilities on ecotourism sites is most practiced because the Department of Tourism management in the province are doing their responsibilities in promoting and preserving ecotourism and cultural heritage is the least practiced that it is in need to be highlighted to create the ecotourism more meaningful. Department of Tourism officials and officer further observed positively the management practices of ecotourism attractions compared to the local and foreign tourists. Among these practices training for tourist personnel, facilities, services and infrastructures,

cultural heritage, and marketing seemed to be substantial and need an attention with.

However, in spite of this innocuous result, some problems encountered in terms of the numbers of tourist arrival, it is most observable problems in the ecotourism of the province. One of the reasons is not established identity that is in need to be augmented. Moreover, the result also explicates that a few numbers of tourist arrival are noted as an encountered problem as affected by the weather condition, time or season. Hence, in this time of pandemic the number of tourists were expected to decline due to different protocols implemented by the Inter-Agency Task Force or IATF and the Department of Health. Conclusively, it is presumptive that ecotourism sites in Quirino Province is likely of great potential for development and exploitation. Thus, the proposed action plan is suggested (Table 5).

Though this paper pin one's hopes on limited synopsis of public governance in ecotourism for the economic development of Quirino province, it serves as an inducement and reference material as baseline data to the researcher if their researches are also conducted along the line of the subject matter of this study. In spite this significant contribution, this paper qualified in the limitation in that it relied on the management practices, problems encountered and latent possibilities plan on ecotourism in the Province of Quirino.

Hence, the need for an empirical quantitative in-depth study to document similar cases that may have not been documented in the public sphere. It is hoped and expected that the conclusions and discoveries of this paper will have important implications for future policy formulation and practice especially in the hospitality and tourism sectors. This is in light of eradicating barriers and threats turn into opportunities in both stakeholders and communities while protecting and sustaining the ecotourism destination in the study towards globalization.

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APPENDIX. CONSENT LETTER AND QUESTIONNAIRE**Potentiality of ecotourism sites in Quirino Province: Basis for ecotourism development plan****SURVEY QUESTIONNAIRE**

TO THE TOURISM OFFICERS,

Please answer this questionnaire by filling the blanks or placing a checkmark [/] on the space provided as the case may be. It will be a great help not to leave any questions unanswered. Please be assured that your answers shall be held in strict confidence. Thank you.

Sincerely,
The Researcher

Part I: Management practices of ecotourism attractions

DIRECTION: Use the scale of 1-4 to indicate your response to the following statements which are indicative of your preferences.

- 4** **Highly practiced**
3 **Practiced**
2 **Less practiced**
1 **Not practiced**

<i>Tourist/Tourism personnel underwent...</i>	4	3	2	1
1. Tour guide training				
2. Kayak training				
3. White water rafting training				
4. Cave exploration training				
5. Nature conservation training				
6. Nature survival training				
7. First aid training				
<i>Tourist/Tourist personnel...</i>	4	3	2	1
1. Properly maintained equipment				
2. Monitoring cleanliness of sites				
3. Knowledge on safety measures				
4. Knowing capacity on tourist arrivals				
5. Informing guidelines for guest				
<i>There is a presence of...</i>	4	3	2	1
1. Picnic huts				
2. Relaxation areas				
3. Campsite's areas				
4. Access roads				
5. Waiting Sheds				
6. Souvenir shops				
7. Food outlets				
8. Comfort rooms				
9. Parking lots				
<i>Conservation</i>	4	3	2	1
1. Conservation programs are being implemented				
2. Cooperation with other government agencies regarding conservation programs are being done				
<i>Local communities</i>	4	3	2	1
1. Communication with local communities within the ecotourism sites is being done				
2. Coordination with programs implemented for local communities is always conducted				
3. Contact persons in the communities where ecotourism sites are located are identified and are present				
<i>Cultural heritage</i>	4	3	2	1
1. Cultural programs for tourists are available				
2. Cultural exhibits are available				
3. Existing shops for cultural products are available				
<i>Monitoring</i>	4	3	2	1
1. Available facilities for monitoring of ecotourism sites are present				
2. Regular logging of visitor arrivals is conducted				
3. Reports on the influx of tourist in sites are done regularly				
<i>Marketing</i>	4	3	2	1
1. Brochure and leaflets are distributed				
2. Radio and TV advertisements have budget allocations				
3. Social Media advertisement platform is present				
4. Website for ecotourism spots is developed				

Part II: Encountered problems observed in the ecotourism of Quirino Province with 1 being the most serious and 10 the least serious

<i>Problem</i>	<i>Ranking</i>
1. Few numbers of tourist arrival	
2. Lack of cleanliness on the sites	
3. Lack of rest area for tourists	
4. Lack of qualified tour guides	
5. Lack of equipment for search and rescue	
6. Lack of equipment for recreational activities in ecotourism sites	
7. Lack of parking areas	
8. Lack maintenance of ecotourism sites	
9. Lack of access to ecotourism sites	
10. Lack of waste disposal facilities	

Reflect on the problems encountered in the ecotourism of the Province of Quirino and from these reflections please provide suggestions and recommendations for the improvement of the ecotourism industry in the province:

1. _____

2. _____

3. _____

4. _____

5. _____
