

Potentials of a community-initiated ecotourism project: Experiences of Binonoan Producers Cooperative (BIPCO) in Binonoan, Infanta, Quezon, Philippines

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ABSTRACT. Ecotourism faces challenges in its implementation despite its potential to contribute to a locality's environmental, social, and economic welfare. This paper discusses the inherent qualities and concerns in establishing an ecotourism project in Binonoan, Infanta, Quezon, which is managed by the Binonoan Producers Cooperative (BIPCO). The collection of both primary and secondary data was conducted to determine the most related and frequently mentioned concepts in the study of ecotourism. Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis was used to assess the potentials of the ecotourism project of BIPCO. Results from the study showed that the main strength of the local ecotourism project is the unique natural attraction that it could offer its visitors. Historical data also revealed that there is an increasing trend of tourist arrivals since 2013, and based on the projection, the community is expected to welcome about 305,994 tourists in 2033, indicating the strong demand for ecotourism. Results also show that while different opportunities are available to strengthen the establishment of the ecotourism project, the internal conflict and participation of the cooperative's members remain to be the biggest challenge in the management of natural resources. These arise from issues of transparency that limit the public interest in receiving the support system needed to sustain the ecotourism project in the area. Thus, results of the study can serve as bases for improvement in the management of a community-initiated project in Binonoan.

Keywords: cooperative, ecotourism, Infanta, SWOT analysis

INTRODUCTION

Beyond being a rural livelihood strategy, ecotourism has been widely promoted as an effective approach to natural resource conservation (Jalani 2012), as it advocates the sustainable use of natural resources (Libosada Jr. 2009). In the Philippines, De Leon & Kim (2017) mentioned that the country's environmental agency encourages the development of ecotourism in key areas in the country to protect important wildlife species. Notably, the local people likewise prefer the establishment of an ecotourism project within their community over other development projects due to its lesser environmental consequences (De Leon & Kim 2017). Through experience-based learning, ecotourism creates opportunities for people to be more informed about the current

status of the local environment. Ecotourism can also inform people about the various issues that affect the environment. Most importantly, ecotourism inculcates moral obligations.

Aside from its latent role in natural resource conservation and management, ecotourism supports national and local economic development (Jalani 2012; Libosada Jr. 2009). Globally, ecotourism is considered to be one of the most economically significant industries due to its contribution to the national income and its provision of livelihood opportunities (Sariisik *et al.* 2011; Torres 2003). In developing economies, particularly those that are endowed with vast natural resources, national

governments often offer ecotourism as a sustainable income source (Fabinyi 2010). In the case of the Philippines, the income generated from ecotourism activities was estimated to be Php 157 B (1 USD = Php 50.00) in 2016 alone (National Ecotourism Steering Committee and Ecotourism Technical Working Group 2014). With its current economic contributions, the promotion of ecotourism is seen as an integral part of the country's development agenda (National Ecotourism Development Council 2002; Aguila & Ragot 2014).

The Philippines is regarded as a prime ecotourism destination for international tourists (Cadiz & Calumpong 2000). Included in the country's ecotourism destinations are its beaches, mountains, forests, and cultural heritage (e.g. Banaue Rice Terraces). These natural endowments, along with past and current innovations, have sustained the competitiveness of the Philippine tourism industry, especially its ecotourism subsector (Alampay & Libosada 2005; Roxas & Chadee 2013). Aguila & Ragot (2014) further emphasized that these economic contributions have established the importance of ecotourism in attaining national development.

Given these important roles in both economic development and natural resource conservation, national government agencies and private sectors continue to initiate the development of more ecotourism destinations across the country. Among these include the ecotourism project in Binonoan – a community-led ecotourism initiative. This study mainly aims to explore the potentials and challenges of ecotourism development in Binonoan through qualitative Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis. The application of SWOT analysis in the development of a tourism project, such as the case of the ecotourism project in Binonoan, plays an important role in determining strategies to further ensure its growth and sustainability (Goranczewski & Puciatto 2010; Reihanian *et al.* 2012). The study, specifically, addresses the identification of the available natural and physical resources in the area, the review of the current and potential tourism visitation, and the characterization of the existing institutional arrangements in relation to local ecotourism development. Although the study is highly exploratory and descriptive in nature, it provides important insights into the current situation and future directions of the ecotourism development in Binonoan.

METHODOLOGY

Site description

The municipality of Infanta is among the coastal municipalities of Quezon province. Its geographic coordinates are 14°44'33" N and 121°38'58" E. It is bounded in the northwest and southwest by the municipalities of General Nakar, and Real, respectively. Infanta is surrounded by Polillo Strait in its eastern and southern side (Figure 1). The municipality has 36 barangays, which covers about 19,934.72 ha (Municipal Government of Infanta 2018a).

The BIPCO ecotourism project is situated in Barangay Binonoan, a rural barangay of Infanta, with an area of 214.92 ha. As of 2016, the barangay was recorded to have a population of 1,885. Approximately 29.76% of the working population, or 283 of 951, are working in the agricultural and fisheries sector (Municipal Government of Infanta 2018b). Barangay Binonoan

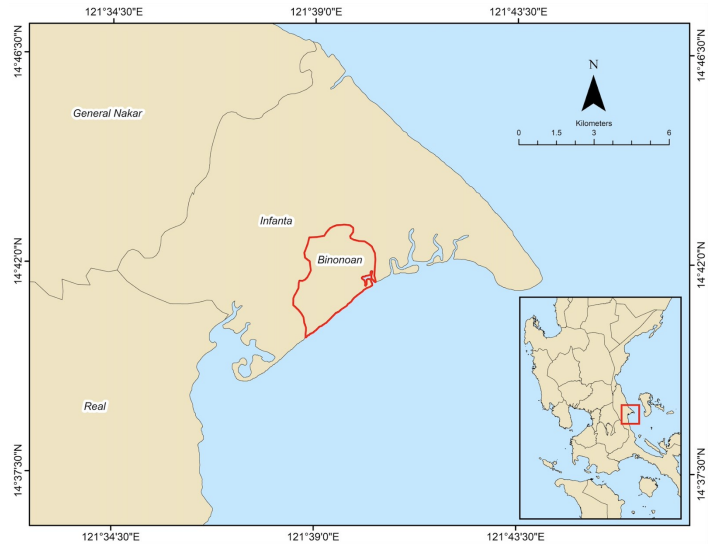


Figure 1. Location map of Barangay Binonoan, Infanta, Quezon, Philippines.

is also noted for its vast mangrove forests that are part of reforestation projects of the government, including the community-based forest management (CBFM) and the National Greening Program (NGP). With various natural resources in the *barangay*, numerous livelihood opportunities are available to the local people. Aside from *palay* production, local spirits such as the *lambanog*, are also produced in the area. *Lambanog* is made by distilling nipa or *Nypa fruticans* Wurmb, a common mangrove species. Livestock (hogs) and fisheries production are also common sources of livelihood in the community.

Data collection

Primary and secondary data collection were done to gather information needed for analysis. Primary data was collected through a series of key informant interviews (KII), focus group discussions (FGD), and site observations. Key informants included the Municipal Planning and Development Officer (MPDO), the Municipal Environment and Natural Resources Officer (MENRO), representatives from the Municipal Tourism Office (MTO), the Office of the Municipal Agriculturist, and local community leaders. Members of the cooperative served as FGD participants.

Secondary data sources consisted of the Comprehensive Land Use Plan (CLUP), the ecological profile of Infanta, cooperative profile, annual reports, copy of constitution and by-laws of BIPCO, local tourism statistics, and different national policies. These documents were gathered from various local government offices, such as MENRO, MTO, BIPCO, and official websites of various government agencies.

Situational analysis

This analysis is an initial step in assessing the community in terms of its potential as an ecotourism destination. Situational analysis, as defined by Lake (2019), is “an analysis of the internal and external factors of a business” (par. 2). In this study, the ecotourism project was considered as a business enterprise since it was initiated by BIPCO as a community livelihood opportunity. Doing the situational analysis elicits important insights into the current conditions of Binonoan and

characterization of the community in terms of: (1) availability of natural and physical resources; (2) projected future ecotourism demand; and (3) existing institutional arrangements relevant to the ecotourism project.

Availability of natural and physical resources. The potential of an ecotourism destination primarily depends upon its ability to offer natural attractions to visitors. The presence of natural and physical resources was identified using information gleaned from interviews and existing data provided by the local government agencies. The availability of these resources can potentially drive ecotourism at the *barangay* and municipal levels.

Potential tourism visitation. Identifying the potential tourist visitation can be a basis for the expected tourism demand. It is essential to pursue efforts in improving and investing more in resources that have ecotourism potential. In this study, the ecotourism demand was determined based on the data gathered by MTO from 2013 to 2018. The projection of the tourists in Infanta was calculated by using the formula below:

$$growth\ rate = \frac{\sum \frac{(T_2 - T_1)}{T_1}}{n} \quad \text{Equation 1}$$

Where,

T_2 – succeeding year

T_1 – preceding year

n – number of years

Existing institutional arrangements. This refers to the “delegation, distribution, or sharing of power related to growth management, decision-making, and implementation authority” (United Nations Statistics Division 2017 par. 5). For this study, it refers to the dynamics of different organizations relevant to the establishment and management of the ecotourism project in Binonoan. The relevance of looking into these dynamics creates opportunities to determine the significance of the roles being played by both public and private sectors in the development and sustainability of the ecotourism project.

SWOT analysis

Results of the situational analysis were used as input in the SWOT analysis – a tool used to analyze and position the strategic planning of an organization's resources and environment based on its strengths, weaknesses, opportunities, and threats (Phadermrod *et al.* 2016). In SWOT analysis, internal factors (strengths and weaknesses) and external factors (opportunities and threats) are gathered (Phadermrod *et al.* 2016; Rocha & Caldiera-Pires 2019). For this study, it was done by dissecting the primary and secondary data to determine the respective strengths, weaknesses, threats, and opportunities. Although SWOT analysis is generally used in quantitative studies (see Reihanian *et al.* 2012), the approach used in the study was exploratory and qualitative. Rather than calculating the weights of each parameter, the study focused on establishing that these realities and conditions exist within the proposed ecotourism project in Binonoan. The SWOT analysis was used to provide an overview of the potential of the ecotourism project and as basis for the design and implementation of various policies and programs.

RESULTS AND DISCUSSION

Availability of tourism resources and the Binonoan ecotourism industry

The Municipality of Infanta identified various sites that can potentially attract tourists. **Table 1** shows that these natural, cultural, and industrial attractions were spatially distributed in the different *barangays*. These resources provide opportunities for the municipality to establish its local ecotourism industry.

Table 1. Tourist attractions in the Municipality of Infanta.

Type of Attraction	Name of Attraction	Barangay
Nature	Pinlac Falls	Magsaysay
	View Deck (Putol na Gulod)	Magsaysay
	Mangrove Forest	Binulasan, Binonoan, Alitas
	Agos River	Banugao
	Sabangan	Pinaglapatan
	Mt. Taronton with Wishing Well	Magsaysay
	Coastal Area	Pinaglapatan, Dinahican
	Deru	Alitas
	Munting Sabang	Dinahican
Cultural	Infanta Mythical Origin	Infanta
	20 de Julio St. History	Pob. 1, 38, 29
	Dugsungan ng Awit	Infanta
	Mayohan/ Tapusan	Infanta
	St. Marks Cathedral	Infanta
Industrial	Dinahican Fish Port	Dinahican
	Wine Distillery	Binonoan
	Nipa Sugar Production (SLSU)	Tongohin

Source: Municipal Tourism Office, 2019

Aside from these resources, other recreational facilities are available in the area such as the Infanta social center and public-school quadrangles. In addition, access to basic tourism support amenities within the municipality, such as food and accommodation are needed. In a recent data provided by the MTO, there were more than 30 registered food establishments (*i.e.* small cafeterias to restaurants) and over 20 registered resorts in Infanta. In Barangay Binonoan, an ecotourism project was initiated by BIPCO. Although efforts have been done in the past, the ecotourism project being managed by the cooperative was officially opened in the earlier months of 2019. This ecotourism project is among the primary tourism destinations being promoted by the municipality and is grounded on the availability of different natural attractions within the locality. As mentioned by the key informants, these natural attractions include the mangrove forest (**Figure 2**) and the wine distilleries. In addition, a large population of fruit bats (*Cynopterus brachyotic* var. *luzoniensis*) can also be seen in the area. The presence of these fruit bats in the mangrove forest, under the stewardship of BIPCO, offers a novel tourism experience.

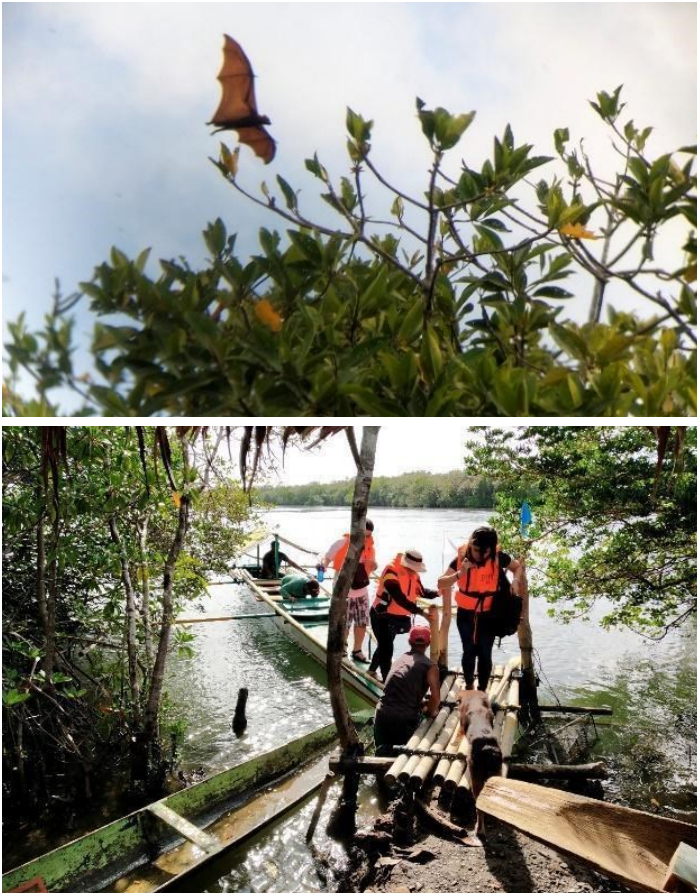


Figure 2. Fruit bats (top) and mangrove forest (bottom) in Binonoan.

The FGD participants also enumerated several other physical resources in the area that can support the local ecotourism industry. These are the mangrove boardwalk, the bat sanctuary watchtower (**Figure 3**), floating cottages, floating classroom, receiving area, and wine distillery. Some of these physical resources are illustrated in Figure 3. The current local tourism activities provide direct economic benefits to the local people, especially to members of the cooperative. For example, some members are assigned to work as boat operators, tour guides, food preparers, and storytellers. Furthermore, the sale of different local souvenirs is also a source of direct economic benefits to the local community residents involved in the ecotourism project.

Indirect benefits can also be incurred through the development of ecotourism (Stem *et al.* 2003). The growth of ecotourism can encourage infrastructure development (*e.g.* roads and bridges), which can cater to the local agriculture industry. More importantly, ecotourism can be a mechanism to improve the welfare of the members of the local community (Bansil *et al.* 2015). In the case of Binonoan, ecotourism activity resulted in local people empowerment. This manifested in the local people's capability to lead and manage various ecotourism activities. They can decide and stir the direction of development in their community rather than being mere recipients of government interventions.



Figure 3. Mangrove boardwalk (left) and watchtower (right) located in Binonoan.

Potential tourism visitation

The tourism industry in Infanta has improved in recent years. As shown in **Table 2**, the total number of tourists increased by about 6,681.71% from 2013 to 2018. Although there was a 25.35% decline of tourist visitation from 2017 to 2018, the number of tourists (131,162) remains high to support tourism. Among the possible reasons for this growth is the emergence of new attractions in the municipality. Key informants mentioned that fruit bats have started coming to Binonoan in 2015 and became a primary tourist attraction. Various efforts were initiated by BIPCO along with government offices and private groups to ensure the sustained presence of fruit bats as an attraction.

Table 2. Tourist arrival in the municipality of Infanta (2013–2018).

Year	Total Number of Tourists
2013	1,963
2014	6,207
2015	6,512
2016	24,621
2017	175,702
2018	131,162

Source: Municipal Tourism Office, 2019

In 2019, the ecotourism project in Binonoan was officially opened by BIPCO to the public. The aim was to promote and further boost the local ecotourism industry, not just in Binonoan, but in the municipality as well. To further illustrate a conservative growth in the visitor flow in the municipality, projections were calculated. Using Equation 1, it showed that the average growth rate of tourist arrivals based on the data from 2013 to 2016 and 2018 was 118.46%. The growth rate from 2016 to 2017 was not included in the data since the increase was considered an outlier and could result in unrealistic projection. With this average growth rate, it implies that the tourist arrival in Infanta is projected to increase over time. **Table 3** shows the projected number of tourists from 2019 to 2023. It reveals that in 2023, the municipality is expected to welcome 305,944 tourists. This

Table 3. Projection of tourist demand (2019-2023).

Year	Projected number of tourists
2019	155,377
2020	184,064
2021	218,047
2022	258,305
2023	305,944

projected increase in visitor flow could serve as an indication that the local tourism in Binonoan should be further monitored and properly managed.

Local institutional arrangements in Binonoan

The development and current management of ecotourism in Binonoan have been primarily an initiative of BIPCO. Historically, BIPCO is a re-organized local cooperative, previously known as the Binonoan Development Cooperative (BIDECO). BIPCO is a producers' cooperative—where members manufacture a product (or line of products) from raw materials, either agricultural or industrial (Republic Act 9520, Article 20c). In the case of BIPCO, the production of “*lambanog*” from nipa sap, which is referred to in English as local distilled wine, is one of their primary activities. Apart from being a producers' cooperative, BIPCO also plays a significant role in mangrove conservation in the *barangay*, as well as in establishment of mangrove ecotourism in the province. As a local organization, the cooperative serves as a focal point for different resource conservation projects of the government. It has been designated as mangrove conservation sites by the government under two different programs: the CBFM and the most recent national reforestation program, the NGP. The success of these programs at the local level was influenced by the degree of support provided by the local cooperative. In terms of ecotourism project, the cooperative provides basic hospitality services (food, orientation, and tour) to the visitors. Members of the cooperative also ensure the cleanliness of the site. Most importantly, they provide area security against illegal poachers of mangroves and well as fruit bats.

While it is widely acknowledged that tourism development is attributed to the efforts and initiatives of the local cooperative, it should also be recognized that there are numerous organizations, both from private and public sectors, that provided support. As with other industries, the establishment and further improvement of local tourism “cannot be done by a single entity” (Libosada Jr. 2009). The local government unit (LGU) of Infanta is among these entities that continually support the ecotourism project in Binonoan. LGU support is grounded on the provisions of Republic Act 7160 or the Local Government Code of 1991. Basic services needed by community members, such as agricultural extension services, are part of the LGU's mandate (Republic Act 7160, Chap. 2, Sect. 17). Beyond this, the key informants mentioned that the LGU has been very supportive of their project through provision of financial support. The Office of the Mayor has appropriated funds for the improvement of tourism infrastructures in Binonoan. For instance, in recent years, the LGU provided Php 1 M to BIPCO for construction of

different facilities in the area. The MTO, together with the Tourism Development Council of Infanta, conducted regular monitoring of the ecotourism project and identified the different resources needed by the local stakeholders and community.

Another important set of governing bodies in the area are the different national government agencies (NGA). The Cooperative Development Authority (CDA) is the primary agency mandated to regulate and monitor cooperatives in the country. It designs policies for the registration and development of the cooperatives in the country (Republic Act 9520 or the Philippine Cooperative Code of 2008). As part of its mandate, CDA provided several capacity-building training to the members of BIPCO, especially its leaders. These capacity-building trainings include bookkeeping and cooperative management, designed to ensure more efficient processes in the cooperative. Recently, CDA also urged the cooperative to change its head/chairman to ensure that it can also develop other leaders from its members. By increasing the capacity of the cooperative members, it is believed that they will manage and facilitate various ecotourism projects more effectively and sustainably.

Another NGA that has been very supportive of BIPCO's ecotourism project is the Department of Environment and Natural Resources (DENR). It awarded BIPCO the right to rehabilitate and manage mangrove sites under the CBFM and NGP programs. To ensure the success of mangrove forest management in the area, the Ecosystems Research and Development Bureau (ERDB), an attached agency of DENR, allocated PhP 3.1 M (1 USD = PhP 50.00).

To make the cooperative a more effective conservation partner, the DENR also provided technical training to its members such as capacity-building workshops on mangrove forest management. The agency also helped cooperative members establish additional livelihood. In partnership with the Bureau of Fisheries and Aquatic Resources (BFAR) of the Department of Agriculture (DA), DENR provided the cooperative an aquasilviculture livelihood project, where they produced crab, milkfish, and *samaral*. The livelihood project was in recognition of the efforts of the cooperative as a conservation partner of the government.

The Philippine Rice Research Institute (PhilRice) under DA, provided livelihood technology as well as technical assistance on using rice hulls as fuel alternative for wine distilleries in the area. Lastly, some private organizations such as the Infanta Integrated Community Development Assistance (ICDA) also supported the cooperative, especially during its initial years. According to a key informant, ICDA was the first organization that created awareness among the local community on the importance of protecting and conserving natural resources, particularly the mangrove forest.

All the aforementioned organizations, private and public alike, are important in the development of a local ecotourism industry. These organizations also play an important role in the conservation of natural resources in Binonoan. Hence, all these organizations must be represented in the ecotourism project planning process. The inclusion of these organizations could serve as a response to the old forms of conservation programs that are unresponsive to the local social dynamics (Haque *et al.* 2009).

Issues confronting the development of local ecotourism

In any development project, different issues and challenges will still surface despite the necessary resources such as the case of the implementation of ecotourism project in Binonoan. Therefore, these issues must be identified and recognized in the planning process to be able to design and implement appropriate strategies. From its initial phase up to the present, the cooperative had faced several issues while the study identified some more. These include the local people of Binonoan, local policies, members of the cooperative, leadership and cooperative processes, as well as ecotourism-related materials and equipment.

Skepticism of the local people of Binonoan. One of the issues affecting the cooperative, as well as its ecotourism project are the local people not affiliated with the cooperative. Like any community-based development project, acceptance of the local people is necessary for success. As described by a key informant, the local people were skeptics and referred to as '*contrarios*', which means that they always oppose the projects initiated by the cooperative. Among the reasons for this opposition was the negative perception of the local people on the effects of the ecotourism project on livelihood. Traditionally, the local people use mangroves as fuelwood in the wine distillation process. But with the ecotourism and nature conservation projects in place, they are prohibited to use mangrove as fuel woods. Although rice hulls were introduced as an alternative, some local people prefer mangroves as fuel woods. So even when decreasing in rate, illegal cutting of mangroves in the area is still a major issue. Poaching of fruit bats is also a major problem and current concern.

Absence of local policies. The previous and current LGUs have been very supportive of the local ecotourism industry in Binonoan. Financial support has been continually provided for the construction and improvement of various ecotourism facilities in the locality. However, based on the database of the Municipal Council of Infanta, and as stated by different representatives of the local government offices, no local ordinance has yet been implemented. The presence of a local ordinance could establish the institutional support provided by the LGU in terms of development of the ecotourism industry and mangrove conservation. It would aid in ensuring that funds and necessary personnel would be dedicated to these local endeavors.

Inactive members of the cooperative. Participation of members is crucial in ensuring the success of any organization such as a cooperative, which is owned and controlled by its members. Currently, BIPCO is having problems with member participation. A key informant shared that only a few members are actively participating in the organization's functions and activities. These are mostly officers and committee members. Hence, as the key informant suggested, a sense of ownership and "cooperativism" should both be further instilled in all members.

Transparency in the cooperative management. It is known that the founding chairman of the cooperative was instrumental to its success, particularly, in the implementation of the ecotourism project. However, during the FGD, an issue about the transparency on financial decisions made by the cooperative

administration, especially the founding chairman, was raised. According to FGD participants, there was no proper recording in the cooperative's wine distillery thus, sales from wine production remains difficult to account for.

Limited facilities and tools. Another issue identified during the conduct of the study was related to the availability of tourism facilities. These facilities include those that are directly needed in the tourism activities and those that indirectly support it, such as boats used to transport visitors from different areas within the mangrove forest. Currently, the two boats used by the cooperative are owned by the manager, which raises another issue on how much the cooperative should benefit from its operations. In addition, equipment for the wine distillery is lacking; prompting other members to process produce in other wine distilleries.

SWOT analysis: Potentials of the Binonoan ecotourism development

Table 4 presents an overview of the results of the SWOT analysis with the potential of establishing an ecotourism project in Binonoan. Although the SWOT analysis in the study was qualitative and exploratory in nature, its results still provide important insights into the current condition of the community vis-a-vis the establishment of the ecotourism project.

Table 4. SWOT qualitative matrix of BIPCO's ecotourism project in Binonoan.

	Strengths		Weaknesses	
Internal factors	S1. Natural resource availability		W1. Inadequate facility	
	S2. The uniqueness of ecotourism project		W2. Organizational conflicts	
	S3. Increasing ecotourism demand		W3. Cooperative processes	
			W4. Presence of " <i>contrarios</i> "	
	Opportunities		Threats	
External factors	O1. Natural resource conservation		T1. Absence or weak implementation of relevant local ordinances	
	O2. Livelihood development		T2. Community security	
	O3. Government and private groups' support			

Strengths. Among its strengths were the availability of natural and physical resources in the area. These included the different natural attractions such as the mangrove forest and bat sanctuary. Within the REINA area (Real, Infanta, and General Nakar), these attractions, particularly the fruit bats, provide a unique experience to visitors. Hence, rather than competing with its neighboring municipalities, this uniqueness could further strengthen the current partnership of these municipalities in terms of ecotourism development and marketing. In addition, various ecotourism-relevant physical resources are available in Binonoan such as a watchtower, floating cottages, and wine distilleries. More importantly, the community leaders maximized these natural and physical resources to better improve the local

ecotourism activities. The projected increase of tourist arrivals also promises great potential to the locality's ecotourism.

Weaknesses. Both internal conflict and inactive members were among the weaknesses of the cooperative, and consequently of the ecotourism project. As emphasized earlier, the role of members is crucial as main actors in project implementation. Furthermore, the presence of the '*contrarios*' was a significant weakness as they could influence other local people in Binonoan to withdraw their support from the ecotourism project. Finally, transparency of managing the cooperative and its financial resources is also a major factor as it may affect the internal dynamics of the cooperative, and participation of members in its various activities.

Opportunities. Different opportunities were also available relevant to the ecotourism project. First, LGU and NGAs expressed their support by providing the cooperative with funding and capacity-building training. The latter could allow the members to be more effective partners of the government in ecotourism development. The strong commitment from both the public and private sectors to establish and promote the ecotourism project serves as a solid foundation for local ecotourism growth and development. In addition, natural resource conservation and livelihood developments are also among the inherent opportunities for development of ecotourism projects. Ultimately, these opportunities may translate to improvement of social and economic welfare of the local stakeholders.

Threats. Various threats could also affect the growth of the local ecotourism industry. This includes absence of local ordinances aimed at institutionalizing support from the LGU to development of the local ecotourism industry. Local policies that explicitly prohibit poaching in the area are also lacking. Finally, with increase in visitation flow and absence of necessary policies, the establishment of the ecotourism project could pose a threat to the safety and security of the local community, as well as the natural resources in the area.

CONCLUSIONS AND RECOMMENDATIONS

Ecotourism is seen as an important catalyst of local economic growth, especially in areas with vast natural resources. This importance has established the rationale of developing various ecotourism projects in the Philippines. In this study, the potentials of the ecotourism project in Binonoan was explored, and done through qualitative SWOT analysis. Despite the exploratory and qualitative approach employed in this study, it dissected the positive and negative factors affecting ecotourism project management. This helps local stakeholders to respond to relevant issues and improve its potentials. The results of the study demonstrate that the main strength of the ecotourism in Binonoan is the availability of natural resources, considered to be unique within the region. On the other hand, its weaknesses mainly include issues within BIPCO as the primary administrator of the project. These issues include transparency of current cooperative leaders and lack of participation of some of its members. While there are threats such as absence of local policies, opportunities could also result from sustainable management of local ecotourism, including natural resource

conservation, livelihood development, and government support. These opportunities possibly outweigh the identified threats as it could bring forth social, economic, and environmental improvements within the community. Furthermore, although local ordinances relevant to ecotourism development are absent, the LGU and other government and non-government organizations have been heavily supporting the ecotourism project and the cooperative.

With these identified strengths, weaknesses, threats, and opportunities, it can be concluded that the local ecotourism in Binonoan has the potentials to be further developed. This is especially true when the strengths are enhanced through different institutional support, and the opportunities, particularly those coming from the government, are institutionalized. To further ensure the growth of the ecotourism industry in Binonoan, this paper recommends the following measures: (1) additional support be given to the local cooperative in securing the area against local poachers; (2) adequate training be conducted, both internally and externally initiated, to instill leadership capabilities among members; (3) additional facilities be provided to better accommodate visitors; (4) increase marketing activities to promote ecotourism; (5) transparency and regular monthly reporting of financial records be done; (6) sustainable financing mechanism be created by the cooperative together with the LGU and NGA, which is aimed at allocating a portion of the ecotourism income as a contingency fund in case unfortunate events occur; (7) create more livelihood opportunities for members (*i.e.* beyond being mere laborers but as real partners) to increase participation in various functions of the cooperative; (8) enact local ordinances to enhance conservation of natural resources and ensure the continued support of the LGU to ecotourism in Binonoan; and (9) visitors should be properly managed and educated to create awareness on the importance of natural resource conservation within and outside Binonoan.

As a future academic pursuit, the study also recommends conducting a financial assessment to check the actual revenues and expenses of the ecotourism project. The assessment can present the income generation potentials of the project. Also, an evaluation of the improvement of the mangrove ecosystem due to the management program employed by BIPCO must also be done to ensure that the practices of its managers are sustainable and conforms with the pursuit to conserve the mangrove forest. Finally, although the study recognizes that the ecotourism principles espouse economic, social, and environmental benefits, the study was not able to elaborate on the social benefits due to the livelihood perspective of the community towards the project. Hence, it is also recommended that future studies investigate the potential social benefits of the ecotourism project to have a better understanding of how it could improve the social welfare of the local community.

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