

Ecotourism in the Time of COVID-19 Pandemic: Impact, Lessons Learned, and Ways to Go Forward in Ten Ecotourism Sites in the Philippines

Abstract

This paper examines the impact of COVID-19 pandemic on ecotourism in the Philippines at a time when unprecedented global travel restrictions and stay-at-home orders caused tourism to largely cease in March 2020 and resulted to the most severe disruption of the global economy since World War II. Ten ecotourism sites from the different regions in the Philippines were included in this study which made use of a COVID-19 impact assessment tool based on the eight building blocks of ecotourism and two focus group discussions with tourism officers and ecotourism management officials. The study found out that the ecotourism sites were closed starting on the middle of March 2020 until the time they were placed under modified GCQ when some of the sites re-opened but only for local tourists or residents within their town, province, or region. The closure of the sites for several months resulted to tremendous losses in income and means of livelihood. Positive aspects included show of resilience of the ecotourism workers in finding other means of livelihood, the improvement of bioecology and rehabilitation and protection of the environment with community participation, and the continued protection of culture and indigenous knowledge. The study concludes that most of the sites lacked a contingency plan for epidemics and that their major concerns are having financial assistance and livelihood projects for the laid off staff and sustaining support for their partner communities. Furthermore, re-booting tourism would involve planning for and re-starting tourism with sustainability in mind while balancing health and the tourism industry.

Keywords: ecotourism, Covid-19 pandemic, impact assessment, sustainability, bioecology, local benefits, management and operation, community participation, environment, contingency plan

INTRODUCTION: ECOTOURISM IN THE PHILIPPINES BEFORE AND DURING COVID-19 PANDEMIC

Before COVID-19, the tourism industry was a very vibrant global industry with international tourist receipts reaching up to billions of dollars annually. It has provided millions of jobs and has helped gain income for poverty-stricken communities. Tourism in Asia and the Pacific showed the strongest results at 7% growth while the number of international tourist arrivals worldwide is expected to increase by an average of 3.3% annually from 2010 to 2030, based on the UNWTO's long-term projection. This 3.3% represents an additional 43 million international tourist arrivals every year, reaching a total of 1.8 billion arrivals by 2030 (1).

Tourism has provided employment to millions of people in every country, has lifted communities from poverty, and has provided leisure and relaxation to people from their monotonous and stressful jobs.

According to UNWTO's statistics, travel for leisure, recreation, and holidays in which ecotourism was lumped, accounted over half of all international tourist arrivals (51% or 505 million) in 2011, a trend which has been seen in the succeeding years. Ecotourism is among the sectors expected to grow most quickly over the next two decades. As cited by the Convention on Biological Diversity, ecotourism has grown 20% to 34% per year since the 1990s and in 2004, ecotourism grew three times faster than the tourism industry as a whole and is among the sectors expected to grow most quickly over the next two decades (2).

With the coming of COVID-19 and the long lockdowns imposed by governments in their own countries all over the world, unprecedented global travel restrictions and stay-at-home orders are causing the most severe disruption of the global economy since World War II (3). Tourism largely ceased in March 2020 with international travel bans affecting over 90% of the world population and wide-spread restrictions on public gatherings and community mobility, travel restrictions and quarantine protocols that each country, city, town, or province has decreed to contain the spread of the new coronavirus. In the Philippines, this cessation of tourism went on till some provinces and cities were placed under the modified General Community Quarantine category during which time certain ecotourism sites opened itself to locals within their provinces or regions.

The International Labor Organization (4) estimates, for 14 countries with available data which include the Philippines, that the jobs and livelihoods of at least 15.3 million workers – 6.4 million women and 8.9 million men – in the tourism sector are at risk as a result of the COVID-19 pandemic. This means that the staff of airlines, hotels, travel agencies and transport companies across the region are being asked to take paid or unpaid leave, accept reduced wages, or worse, are simply let go. The ILO report further says that in many Asia and Pacific countries, more than three in four workers in the tourism sector are in informal jobs which are characterized by a lack of basic protection, leaving them especially vulnerable to the negative impacts of the COVID-19 crisis.

PWC (Price Waterhouse Cooper) Philippines (5), a private auditing company, conducted a survey in May 2020, together with the Department of Tourism (DOT), of 247 decision makers across different business subsectors, 44% of whom are from the tourism industry while 30% of whom are from the accommodation industry. PWC and DOT found out that 97% of the decision makers say that COVID-19 has the potential for significant impact on their business operations, and is causing great concern. Their top concerns are 1) financial and operational impact (86%); 2) decline in tourism demand (76%); 3) decrease in tourism confidence (70%); 4) lengthened travel restrictions globally (63%); 5) effects on workforce and productivity (58%); 6) potential global recession (56%); 7) funding difficulties (53%); 8) lack of emergency preparedness (26%); 9) supply chain issues (21%); and 10) potential currency depreciation (17%).

In the latter part of the year 2020 up to the present, the outlook for tourism economy recovery remains highly uncertain, as the coronavirus (COVID-19) pandemic continues to heavily hit the sector. As of October 2020, the Organization for Economic Development and Cooperation (6) projected that the outcome for 2020 is expected to be a decrease in international tourism economy by around 80% (downside of previous estimates), with domestic tourism driving the short-term recovery.

Significance of the Study

Since ecotourism, a type of alternative tourism, has provided employment to hundreds of thousands of people in our country and has lifted communities from poverty while enabling the protection and preservation of the environment and bioecology, this study is significant for government officials in the national and local governments and government agencies involved in economic planning, in tourism

and trade, and in environmental and natural resources management so they can draft the needed policies to uplift the ecotourism industries. This study is particularly significant for the Department of Tourism, for the National Economic and Development Authority, the Interagency Task Force for COVID-19, and the local government units as they are the ones directly involved in drafting the policies that affect the ecotourism industries.

It is significant also for the ecotourism industries themselves so they will know where they are now, where are the others now, where they want to go, what do they need to do, and how will they be able to take the necessary steps towards recovery. The study is significant as well to the ordinary people who are interested in ecotourism so they will understand the plight of the ecotourism industries and thus, continue their support for them.

Research Questions

In the context of the unexpected, unprecedented COVID-19 pandemic, this study sought to answer the following questions: How did our ecotourism industries fare with the onslaught of COVID-19? What is the impact of COVID-19 on the management and operation of the ecotourism industries in different parts of the Philippines? How did COVID-19 impact the ecotourism industries in terms of the following aspects/principles of ecotourism, namely: local benefits, financing/enterprise building, ecotourism services and products, environment and the bioecology, protection and management of culture and indigenous knowledge, and responsible marketing? What were the worst things that the ecotourism industries suffered from and were there any positive things that happened? What are the concerns, lessons learned, and prospects or ways to go of the ecotourism industries at present and in the near future?

Objectives of the Study

General Objective: To conduct a rapid assessment of the impact of COVID-19 on 10 ecotourism sites found in the different regions in the Philippines from Luzon to Mindanao.

- 1) To determine the impact of COVID-19 on the management and operations of the ecotourism programs and how they were able to cope during the lockdowns
- 2) To assess the impact of COVID-19 pandemic on the following aspects of ecotourism: local benefits, financing/enterprise building, community participation, ecotourism products and services and education, environment and the bioecology, and the protection of culture and indigenous knowledge.
- 3) To find out the lessons learned, concerns, and prospects or ways to go of the ecotourism programs in the context of the crisis brought by COVID-19

THEORETICAL AND CONCEPTUAL FRAMEWORK

The study is anchored on the theory of sustainable development with its three mutually affecting aspects, namely: the society, economy, and the environment, and having the overall goal of the long-term stability of the economy and environment “through the integration and acknowledgement of economic, environmental, and social concerns throughout the decision-making process” (6). The definition and principles of ecotourism emanate from this theory of sustainability. Ecotourism is now defined as “responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education” (7). Education is meant to be inclusive of both staff and guests.

The following are the ecotourism principles as identified by The International Ecotourism Society:

Minimize physical, social, behavioral, and psychological impacts.
Build environmental and cultural awareness and respect.
Provide positive experiences for both visitors and hosts.
Provide direct financial benefits for conservation.
Generate financial benefits for both local people and private industry.
Deliver memorable interpretative experiences to visitors that help raise sensitivity to host countries' political, environmental, and social climates.
Design, construct and operate low-impact facilities.
Recognize the rights and spiritual beliefs of the Indigenous People in your community and work in partnership with them to create empowerment.

From the principles listed above, we can glean the essential building blocks of ecotourism. First and foremost, it should consist of management and operation that are guided by these principles. The other building blocks are community participation, local benefits, financial benefits, wholesome ecotourism services and products, protection and management of culture and indigenous knowledge, education, and the conservation of the bioecology and the environment. Figure 1 below shows the essential building blocks of an ecotourism site while Figure 2 below shows the mutually affecting aspects of sustainable tourism.

Figure 1. *Essential building blocks of an ecotourism site*

Figure 2. *Mutually affecting aspects of ecotourism*

METHODS AND PROCEDURES

This research project is a case study of 10 ecotourism sites selected through purposive and available sampling methods. Purposive sampling was done with the use of the following criteria for selecting the sites: 1) must be among the 16 ecotourism sites included in our previous study entitled "Best Practices and Policy Recommendations: A Rapid Assessment of Sixteen Ecotourism Sites in the Philippines" so as to have a follow up of what happened to them during the pandemic; and 2) sites must come from different regions and main islands in the Philippines. Available sampling was done when sites became part of the study depending on the willingness of the key informants to answer the research questionnaire/assessment tool we sent them and to participate in the focus group discussions.

The ten ecotourism sites included in this study are the following: 1) Costales Nature Farms, Majayjay, Laguna; 2) Ilagan Sanctuary, Ilagan, Isabela; 3) Masungi Georeserve, Baras, Rizal; 4) Pawikan Conservation Center, Morong, Bataan; 5) Donsol Whale Shark Tourism, Donsol, Sorsogon; 6) Taklong Island National Marine Reserve, Guimaras, Iloilo; 7) Danao Adventure Park, Danao, Bohol; 8) Lake Sebu,

Lake Sebu, South Cotabato; 9) Enchanted River, Hinatuan, Surigao del Sur; and 10) Philippine Eagle Center, Mati, Davao City.

The researchers made use of a COVID-19 Impact Assessment Tool which also served as the research questionnaire sent to tourism officers and ecotourism management officials and staff of the 10 ecotourism sites. Two FGDs with tourism officers and ecotourism management officials and staff were conducted to dig up more findings. One was conducted on September 23, 2020 with 8 participants. The second was conducted on October 7, 2020 with only two participants.

RESULTS AND DISCUSSION

Impact of COVID-19 on the Ecotourism Sites' Management and Operations

The different ecotourism sites all stopped accepting visitors by mid-March when it was placed under either enhanced community quarantine or general community quarantine. Tourism operations stopped during the community quarantine period until some sites re-opened lately during the MGCQ period. A key informant from the Philippine Eagle Center has this to say about the closing of their ecotourism facility in the following poignant words: "For the first time in 33 years, the PEF closed the Philippine Eagle Center (PEC) indefinitely as an immediate biosecurity measure and in compliance with the government's quarantine restrictions. The PEC closed on March 18, 2020 and remained closed until October 2020 (Salvacion, Carla. Personal Communication. 2020 October 6).

The lockdowns brought ecotourism operations to a grinding halt during the community quarantine period until some sites re-opened lately during the MGCQ period. The cessation led to the laying off of some staff, having reduced working hours or days, and having work-from-home arrangement and skeletal workforce reporting on specific working days. All the ecotourism sites were closed down due to the lockdown which started in Luzon but which were followed suit by the other regions in Visayas and Mindanao in pursuance of Proclamation No. 922 declaring a national public health emergency.

Judelyn Cajelo, Tourism Operations Officer of the municipality of Danao, Bohol, explained that their Municipal Mayor issued an Executive Order last March 16, 2020 stating the temporary closure of Danao Adventure Park due to the pandemic, which was in line with the provincial issuance Declaring Province of Bohol under Community Quarantine (Focus Group Discussion. 2020 September 23). Other sites commonly stopped operations due to their local IATF's recommendation to place their provinces or cities under community quarantine starting on the middle of March 2020. Lishly Boclaras explained this closure in the following words: "Tourism Industry in Lake Sebu was affected during the community quarantine period because during this time LGU IATF made an executive order based on EO of the province prohibiting the operation of all the tourism sites and destinations in Lake Sebu" (Focus Group Discussion. 2020 September 23).

The same thing happened with all the other sites. It was supposed to be the peak season for most of the sites as it was going into summer time from March to May. Tourists go out during summer time to different ecotourism sites. Taklong Island National Marine Reserve was supposed to celebrate their Mangahan Festival (Mango Festival) on May, while Donsol Whale Shark Tourism's peak season was from March to May as well.

Table 1 shows the types of community quarantine decided upon by the national IATF for each of the ten sites and that all the ten ecotourism sites stopped accepting visitors starting middle of March until the

time that they reopened to residents or local tourists at different times or months when placed under modified General Community Quarantine. Some reopened earlier under MGCQ while others reopened to local tourists or residents later under MGCQ. The common factor, however, was the fact that the sites reopened for residents or local tourists only, which makes the number of tourists far below the pre-COVID-19 times. Moreover, the sites re-opened with 25-50% capacity only following strict health and safety protocols, thus greatly reducing the income of the sites compared to the pre-COVID-19 times.

During the months when the sites stopped accepting visitors, more than half of the sites operated with skeletal staff while the others operated with full staff but with reduced working days. Enchanted River reported 10% percentage of staff and 70% were laid off after two months; Philippine Eagle Center operated at 25% of staff reporting physically as others worked from home; Ilagan Sanctuary reported 30% of staff who physically reported in the site; while Lake Sebu's staff was reduced to 50% as the others were job orders whose income depends on their daily work.

Table 1. *Types of Community Quarantine undergone, Operation during the Quarantine, and Percent of Staff during the Months of Closure*

Some Coping Strategies during the Lockdown

The community quarantine period which greatly restricted people's movements and going out of their houses also led to the closure of malls and high-end restaurants inside these malls. For Costales Nature Farms, this meant the loss of millions of pesos and the adjustments in the work set-ups of their staff. The good thing is that their organic farming continued as they were able to sell their products through social media advertising and door-to-door delivery. Josie Costales, chairperson of Costales Nature Farms, describes their loss and their adjustment of work settings in the following words:

So sarado si Italiani's, si Friday's, sarado si Ding Tai Fung, all of those clients are even—Solaire sarado sila so, lahat na nakaprogram naming for harvest for the month of March, April, and May were gone to the compost bin. So that's worth millions of pesos. Yes, so that was the effect on us. Now, sa tourism naman, we closed also, the operation: wala kaming day tour, wala kaming—no nothing in terms of tourism. Sarado lahat so what we did yung mga tao namin, since meron naman kaming production, yung tourism people naming na gustong mag work sa production, we absorbed them sa pagtanim sa paghahalaman, ganyan. Ano bang trabaho ng nagtanim? So meron kaming seedling department, postharvest department, since organic po kami, everything is done manually. Yung mga hindi naman kaya mag-indulge into agriculture, ang ginawa naming is pinagpahinga muna namin sila. (Josie Costales, 23 September 2020, FGD)

So Italiani's was closed, so was Friday's, Ding Tai Fung was closed, all of those clients are even – Solaire was also closed. So, all that we had programed for harvest for the months of March, April, and May were gone to the compost bin. So that's worth millions of pesos. Yes, so that was the effect on us. Now, with regard to tourism, we closed also, the operation: we had no day tour, none – no nothing in terms of tourism. All were closed so what we did with our staff, since we have production, the tourism people who wanted to work on production, we absorbed them in planting crops, like that. What is the work done in planting? So we have seedling department, postharvest department, since we are into organic, everything is done manually. Those who are not able to indulge into agriculture, what we did is we asked them to rest first.

With regard to their school for agriculture, Costales said they stopped the training, but eventually by April to May, they gradually conducted webinars on farming. Reden Costales, son of Josie Costales, started his vlog called “The Agrillennial Vlog” last August 2019, which enabled him to continue his father’s advocacy to conduct trainings on organic farming. Teaching, transferring of technology of organic agriculture and agripreneurship were continued to be done.

The ecotourism management of the different sites provided help and assistance to the staff and workers in different ways such as providing relief goods, financial aid, and emotional support. For Ilagan Sanctuary, their ecotourism employees continuously reported and received salary. Some of them benefited from the amelioration program of the government (Perez, Arvin. Personal Communication. 2020 September 20). In the case of Masungi Georeserve, its management has called for donations to help them assist their partner communities who were affected by the pandemic, specifically for their Dumagat community partners. The management posted their donation drive last March 26, 2020 and distributed financial aid to their partner communities in tranches (Dumaliang, Billi. Personal Communication. 2020 August 15).

The quarantine period became a time for improving the facilities, but some development plans were postponed like in the case of Danao Adventure Park. Operations were refocused on making COVID-19 responses as some of the sites’ accommodations were used as quarantine facilities for returning OFWs as in the case of Lake Sebu. A portion of the Ilagan Sanctuary was converted as a quarantine facility, while Danao Adventure Park’s staff cooked food for the frontliners in their town.

Re-opening the ecotourism sites when the sites’ locations were placed under a more relaxed community quarantine status, which is the modified general community quarantine, entailed following the 50% capacity of the destination and strict health protocols prescribed by the Inter-agency Task Force on Covid-19 and the Department of Tourism. The sites were reopened only to residents or local tourists, which resulted to a limited number of visitors to the sites as people were still afraid to go out of their homes due to the fear spread by the pandemic. Tourist confidence to travel even to local sites went down which is one negative consequence of the pandemic.

COVID 19 IMPACT ON OTHER ASPECTS OF THE ECOTOURISM SITES

Impact on Local Benefits

The once thriving and profitable ecotourism industries were suddenly stopped for several months starting from the middle of March 2020 up to the time that the ecotourism industries decided to re-open under the modified general community quarantine following strict health and safety protocols for the guests and the staff. The closure of the ecotourism industries to tourists for several months – some for three months, others for four to five months, still others as long as 8 months or longer - resulted to the cancellation of booked visits and the loss of tens of thousands to millions of pesos as income. In the case of Costales Nature Farms, it resulted to the cancellation of the scheduled trainings on farm tourism, organic agriculture, and entrepreneurship from March to April 2020 which were worth a million pesos.

It led to the cancellation of tours, seminars, group meetings, and field trips. The closure of the restaurants in the malls during the community quarantine period also resulted to their throwing of their organic vegetables and herbs for composting as these organic veggies were supposed to be delivered to the restaurants. The Chairperson of Costales Nature Farms describes what happened in the following words:

Pagdating ng March, we are expecting around 1 million worth of tour. So, field trips, mga group meetings, seminars. Lahat ng 'yon, gone. Nawala. Nacancel. Kasi we really have to abide by the rules of the IATF na wala munang group meeting so lahat ng meetings naming, we cancelled everything.....We should've had 3 trainings – 1 for farm tourism, 1 for organic agriculture and 1 for entrepreneurship. We have 3 scheduled trainings for March and April so, those were cancelled right away nung sinabi nilang lockdown, walang papasok, walang lalabas. (Josie Costales, FGD, September 23, 2020).

When March came, we are expecting around 1 million worth of tour. So, field trips, group meetings, seminars. All of those, gone. Lost. Cancelled. Because we really have to abide by the rules of the IATF that there should be no group meeting, so all of our meetings – we cancelled everything.....We should've had 3 trainings – 1 for farm tourism, 1 for organic agriculture and 1 for entrepreneurship. We have three scheduled trainings for March and April, so those were cancelled right away when they told us to be on lockdown, no entry, no exit. (Josie Costales, 23 September 2020, Focus Group Discussion)

The cancellation of the tours, field trips, seminars, and group meetings meant that the employees had no job to do. The lack of collection from tourists meant that the ecotourism sites had no income for some or for many months. The management of the ecotourism industries, particularly, of Taklong Island Natural Marine Reserve, Danao Adventure Park, Lake Sebu, Ilagan Sanctuary, and Costales Nature Farms, gave assistance to their staff in money and in kind. Some received SAP funds but not all. The assistance extended to the communities around them as in the case of Masungi Georeserve and Costales Nature Farms.

The closure of the ecotourism services to tourists during the ECQ, mECQ, and GCQ periods of the different sites resulted to the lesser number of days for work of the job order workers, and when there is no work, there is no pay for them. Cajelo describes this negative impact in the following words: *“Siguro yung pinaka-worst po is yun nga na lesser yung mga number of days ng mga trabahante kasi dito sa Danao Adventure Park, more than 90% of the employees po, job orders. Kasi managed by the local government ang Danao Adventure Park so mostly job orders.”* (Cajelo, Judelyn. Focus Group Discussion. 2020 September 23) (Maybe the worst is that the number of days of the workers was lessened here in Danao Adventure Park. More than 90% of the employees are job orders because Danao Adventure Park is managed by the local government, so mostly job orders.)

Costales also tried to respond to the COVID-19 pandemic after hearing the news of the death of a young doctor named Dr. Israel. She went around their farm to see what can be prepared for the frontliners, and that was their kale which she juiced and sent to the frontliners for free.

The lockdown period was used by the management of some ecotourism industries for renovation and improvement of the sites. Many planned programs and projects for developing the sites were however postponed or cancelled like in the case of the municipal plans of the Danao LGU for Danao Adventure Park, which is one of their good sources of income. The community quarantine time, however, opened a window for another activity which is catering food for the frontliners during the ten days of work for

the staff who will have no pay if they have no work. Their savings from the previous year were spent for this year of economic drought.

Table 2 shows the COVID-19 impact on management and operation and local benefits on the ten ecotourism sites.

Table 2. *COVID-19 Impact on Management and Operation and Local Benefits*

The Worst Things that Happened during the Lockdowns

When asked what was the worst thing that happened during the pandemic that led to months of community quarantine restrictions, the common answer of the key informants was the tremendous loss of income and the loss of livelihood of the ecotourism industry workers and those in tourism-related enterprises. Jhonnys Gange related that their people's organizations were heavily affected as they had no income during the months when accepting visitors stopped. Whereas before they were earning an average of 10,000 pesos a day, this income was no more during the months of closure.

Gange explained that had there been no pandemic, they would have had 20,000 to 30,000 visitors from March to May, the season for mangoes, during which time they hold their Mangahan Festival. Gange described this loss of income for their people's organizations as the most painful impact of the COVID-19 pandemic.

Similarly, Donsol Whale Shark Tourism was heavily affected with the loss of livelihood of those who were depending for a living on this ecotourism industry such as the Butanding Interaction Officers, the Boat Crew and the operators of the Boats for Butanding Interaction, the Souvenir Shop and Fin and Mask Rental owners, the Firefly Guides, etc. The impact is poignantly recounted by Lianne Idjao, a Tourist Receptionist of Donsol Municipal Tourism Office, in the following words:

The community quarantine was declared in Luzon just in time for what was supposed to be the "peak season" of tourism in Donsol. We were expecting a good increase in our tourist arrivals as our promotion efforts were extensive the year prior but we inevitably had to close because of the CoVid threat. This heavily impacted the community - the Butanding Interaction Officers, the Boat Crew and the operators of the Boats for Butanding Interaction, the Souvenir Shop and Fin and Mask Rental owners, the Firefly Guides and Boat Crew and Operators etc. (Idjao, Lianne. Personal Communication. 2020 October 12)

Expectations of increased income for this year as compared to the previous year were dashed to the ground with WHO'S announcement of a global pandemic and governments' declaration of lockdowns or community quarantine in the cities and provinces of their countries. The announcement of lockdowns coincided with the peak season for whale shark sightings and interaction in the case of Donsol Whale Shark Tourism. This led to the loss of income and financial constraints experienced by the ecotourism workers and by the Donsol local government unit as well. For Danao Adventure Park, the management expected an increased income of 30 million pesos compared to the 20 million earnings last year. The increased income is due to the additional activities in the Park. Cajelo said that the start of March up to May was supposed to be their peak season as this is summertime in the Philippines. The same loss of income worth millions of pesos was experienced by Enchanted River ecotourism industry. For four

months, they did not have income until they re-opened to Hinatuanons by mid-July when Hinatuan was placed under modified GCQ. The expectation to gain millions of pesos from tourist collection, particularly from their peak season during the summer months, and from the whole year was dashed to the ground.

Lisly Boclaras, Tourism Operations Officer of Lake Sebu, affirmed that the loss of income of the ecotourism workers was the worst thing that happened due to the coming of COVID-19. She said that the worst affected were the workers in the resorts, in the destinations, the tour guides. She stressed the fact that government employees are fortunate since they continually receive salary even if they don't report physically to the site, but those in the informal sector are the worst affected because if they don't work, they have no pay (Focus Group Discussion. 2020 September 23). Cajelo of Danao Adventure Park expressed the same point when she said that more than 90% of their employees are job orders since the Park is managed by the Danao LGU. This means that if they don't work, they don't have pay, and their work was reduced to 10 days of work every month (Focus Group Discussion. 2020 September 23).

The province of Bohol was heavily hit as well. Being a province that is predominantly an ecotourism services and agricultural economy, the loss of income during the months of community quarantine restrictions was enormous. The employed individuals who lost their jobs numbered twenty to hundred thousand individuals or 42% of Bohol's workforce, according to the Labor Force Survey in July 2020. With the rounds of locally stranded individuals coming home with no work, the figure of unemployment was bound to increase (Cabarrus, Josephine. Focus Group Discussion. 2020 September 23).

Show of resilience during the closure of ecotourism services and family bonding: Positive things that happened during the lockdowns

When asked if the lockdowns brought any positive things or results, the key informants cited the recourse to urban and rural agriculture, the recourse to entrepreneurship, and the development of creativity in producing products that can be sold such as sewing masks and making creative plant pots. The researchers see this as a show of resilience of the Filipino people who have been pushed to the wall. Josephine Cabarrus, the Bohol Provincial Tourism Officer, sees the turn to agriculture as a good thing since that means food security. The planting, retailing, and selling of ornamental plants became a venue to earn a living as well. In Bohol, there was so much produce from agriculture that government intervention to link production with consumers should have been done, according to Cabarrus (Focus Group Discussion. 2020 September 23).

The loss of livelihood during the months when the ecotourism sites were closed enhanced entrepreneurship as the tourist workers who were affected like the tour guides went into selling, retailing, and got themselves trained in TESDA where they learned how to make chorizo and other things. They learned new skills in making products and learned the ropes of online selling. Creativity and innovativeness were also developed during the time that the ecotourism sites were closed. Cabarrus attributes these positive results to the resilience of the Filipinos in the following words:

Tour guides really suffered because they didn't have tours so they went into selling into retailing, they got themselves trained in TESDA and learn to make chorizo and all these things which is nice because they get better and more skills and they were able to make use of online selling so they get themselves skillful in the use of online service. There were also innovations in terms of coming up with very creative, for instance, pots for plants and all these things. In these times

where we are pressed into the wall, too much creative juices is being squeezed out of these people. They get into making pots for plants with very nice styles (designs). We also realized that the people also learned resiliency. We, in Bohol, have experienced the 7.2 (magnitude) earthquake and we have risen from it because of the resilience of the people and this is another test where the resiliency of Filipinos would also be tested and we know that in the near future, all of these would come to pass and still we'll be able to live it in the new normal and all of these would become our normal. (Focus Group Discussion. 2020 September 23)

The recourse to planting ornamental plants and selling them was done by the ecotourism workers of Danao Adventure Park in Bohol. Situated in a forested area where plants and flowers abound, Cajelo, Tourism Operations Officer of Danao Municipal Office, said that if they had nothing else to do, they planted flowering plants and other plants so that when they have no tourism operation, they would just sell the flowering plants which abound in the area where the Park is located.

The lockdowns became also a time for bonding of family members – something which several key informants noted during the focus group discussion. It was a time to reboot the family relationships so that members of the family came together again and ate together again. It was a time to see business opportunities because when a window is closed, a door opens, as Josie Costales noted (23 September 2020, FGD).

Impact on Ecotourism Services and Products coupled with Education during the COVID-19 Pandemic

Among the ten ecotourism sites, it was Costales Nature Farms that continued to offer their ecotourism products and services to the public through continued organic farming, online selling of their produce, and door-to-door delivery of organic vegetables and herbs. Josephine Cabarrus, the Bohol Provincial Tourism Officer, shared the same observation that those sites which are into agriculture were able to sell their vegetable produce, which became an alternative livelihood for them while those sites which are not into agriculture were very much affected that they had to lay off employees while the richer sites in Bohol made use of the time to make some renovations and enhancements of their places. She said that “those sites that were into agriculture and planting, like flowers and mushrooms, there were those that don't get visitors but they have alternative livelihood like selling their produce. They also get visits from locals”. (Cabarrus, Josephine. FGD. 2020 September 23)

Moreover, Costales Nature Farms conducted webinars on organic farming for free. Josie Costales described their continued delivery of ecotourism services and products in cooperation with the Department of Agriculture in the following words:

So we were one of the groups that assisted the Department of Agriculture dun sa “Plant plant” Movement nila, yung urbangardening. We also do some trainings on Urban Gardening, yung used bottles, used na drum, butas na planggana, pwedeng pagtamnan ng mga daily vegetables like kangkong and pechay. So via webinar via online trainings that's free, nagcoconduct po kami ng mga urban gardening sessions, kung pano rin gumawa ng mga homemade pesticides. Yeah so that's how resilient we are, Filipinos. (Costales, Josie. Focus Group Discussion. 2020 September 23)

So we were one of the groups that assisted the Department of Agriculture in their “Plant, Plant” Movement, which is about urban gardening. We also do some trainings on Urban Gardening – those used bottles, used drums, basins with holes, can be used for planting daily vegetables like Kangkong and pechay. So via webinar, via online trainings that’s free, we conduct urban gardening sessions, and how to make homemade pesticides. Yeah so that’s how resilient we are, Filipinos.

Aside from Costales Nature Farms, Philippine Eagle Center also made use of the internet and social media to continue to offer to the public their ecotourism services in the form of webinars on the Philippine eagles and indigenous knowledge and culture.

Danao Adventure Park was able to offer their services in the form of cooking for the frontliners instead of cooking for tourists. The other ecotourism sites’ accommodations such as in Lake Sebu were used to house returning OFWs, thus channeling their ecotourism services and products for emergency COVID-19 responses.

Many other ecotourism services and products were simply not availed, stopped, or cancelled during the lockdown period. Among these was the annual Mangahan Festival celebrated in Guimaras where Taklong Island National Marine Reserve is found, the whale shark sightings and interactions, the day tours and field trips, the adventures, nature sight-seeing, and others. These were offered again on a limited scale only to the residents or local tourists when some of the sites re-opened under the modified GCQ status.

Impact on Community Participation

Despite the lockdowns, the communities where the ecotourism sites are located were enjoined to help in protecting and preserving the environment. In the case of Taklong Island National Marine Reserve, the People’s Organizations (Pos) were asked to participate in official activities like the International Coastal Clean-up that was celebrated last September 19, 2020. The POs were allowed to the Protected Area on official travel to help in the coastal clean-up. This community participation in protecting the environment is best seen and most needed by Masungi Georeserve where their local rangers continued to be employed for maintenance and protection. Billie Dumaliang, the Advocacy Officer of the Georeserve, has this to say on the work that their local rangers did during the lockdown: “Our park rangers will continue to do much needed restoration work on the ground, including weeding and creating fire breaks that will protect our seedlings and trees against fires this dry season” (Dumaliang, Billie. Personal Communication. 2020 September 16).

Aside from being partners in protecting the environment, communities are partners in varied ways in the case of Philippine Eagle Center and Costales Nature Farms. The partner communities of the Philippine Eagle Foundation which manages the Philippine Eagle Center continued with their social enterprises as many were home-based and/or working in the community training centers the PEF helped put up. The products of the communities’ social prices are displayed at the Philippine Eagle Center Gift shop as souvenir plushies (Carla Salvacion, September 13, 2020, personal communication). For Costales Nature Farms, local farmers/producers and processors were considered their backliners during the pandemic. In their Facebook post last April 2020, one can read that CNF ensures quality produce and highlights the safety of their workers and customers by using PPEs in their Post-Harvest Department.

The lockdowns were a time for exploring prospective tourist spots in Hinatuan, Surigao del Sur as Ferdinand Barrios reported that other barangays took the opportunity to have their potential tourist spots be inspected by the Tourism Council for possible opening once the situation warrants” (Barrios, Ferdinand. Personal Communication. 2020 August 20).

Responding to COVID-19 pandemic was prioritized in some sites or was another venue for community participation as in the case of Masungi Georeserve, Ilagan Sanctuary a part of which was made into a quarantine facility, and in the case of Donsol Whale Shark Tourism which put on hold their ecotourism projects, programs, and activities to prioritize efforts to combat COVID-19, according to Lianne Idjao, a Tourist Receptionist of Donsol Municipal Tourism Office).

Impact on Protection and Management of Culture and Indigenous Knowledge during the Community Quarantine

Two ecotourism sites specifically protect and give value to indigenous people’s culture and their indigenous knowledge. These are the Philippine Eagle Center (PEC) and Lake Sebu. For PEC, the cultural aspect is very much valued and enhanced in that it is incorporated in the script of educational tour guides. The importance and recognition accorded to indigenous peoples by the PEC is expressed in the following words: “We believe the best people to protect the forests are the Indigenous Peoples’ Communities that live within the nesting sites of the Philippine Eagles. The spiels include ‘Saving Eagles’, ‘Protecting Forests’ and ‘Securing our Future’ as the three pillars of the PEF” (Carla Salvacion, 2020, personal communication) Aside from the scripts of the educational tour guides, webinars are conducted with the help of partner institutions that cater to indigenous knowledge and trainings on gender sensitivity were also conducted.

In Lake Sebu, the T’boli culture serves to be one of the main attractions in their site, if not the main attraction, according to Lishly Boclaras, Tourism Operations Officer of Lake Sebu. T’bolis continued to do beadworks, weave blouses, bags, and other cultural products for tourists but the absence of tourists for months meant that there was no one to buy their cultural products. The tinalak, T’boli handwoven cloth, is well-known and a T’boli weaver was awarded the GAMABA or Gawad Manlilikha ng Bayan, which gave Lake Sebu its name “Home of the Dream Weavers”. This awarded T’boli passed down her skills up to her grandchildren so that her talent is handed through generations. Boclaras claimed that their number one attraction is the T’boli culture since other sites may have more beautiful natural sights and offer adventure experiences.

Impact on the Bioecology and Environment

One positive thing that happened during the closure of the ecotourism industries for months was the rest from human disturbance it gave to the environment and the bioecology. Nature was able to recuperate and bioecology flourished without human disturbance. The water quality became improved while fauna and flora flourished. These conditions were vividly described by the FGD participants in the following words:

.....at yung positive na impact ng pandemic, yung enchanted river medjo nakare-cope siya and nag improve yung water quality yung crystal clear water, yung bluish na kulay niya is parang maganda nang tingnan talaga. Nag iimprove yung quality ng tubig. At saka, dumami yung isda kasi parang hindi sila nadisturb. (Barrios, Ferdinand. Focus Group Discussion. 2020 September 23)

.....and the positive impact of the pandemic – the enchanted river was able to re-cope and the water quality improved. The crystal-clear water, the bluish color seemed more beautiful to look at. The quality of the water is improving. Moreover, the fishes became more plenty because they seemed undisturbed.

Nature was able to rest from the whirring sounds of motorized boats in protected areas like Taklong Island National Marine Reserve. Birds, butterflies, bats, monkeys, and other animal species were able to dwell, reproduce, fly around, and roam around unafraid and undisturbed. These were especially the case in Taklong Island National Marine Reserve and Danao Adventure Park in Bohol as described in the following words:

In terms of disturbance, dahil nga walang tigil yung ikot ng mga motorized boats natin, nakakadisturb sa mga wildlife natin, so as of now, nakikita naming na talagang nanunumbalik na. Marami ka nang mga ibong nakikita kahit na magpapaddle boat ka lang papunta sa mangrove site naming, meron nang maraming ibon so dati, pagpasok pa lang ng kampo, yung iba talagang mabilis so hindi mo makikita yung mga ibon, masabi mo na magbird watching ka, may Makita kang malamang sampu siguro mahigit. Pero as of now, makikita mong ang dami talagang ibon na makikita mo sa loob. Yung species natin ng mga bats as of now, makikita mo na kahit nga magpapaddle boat ka lang kasi nga nagcoconduct kami ng bat count monitoring, talgang makikita mo as of now sa PA. Dahil nga undisturbed gawa nga ng walang bisitang pumapasok. (Ganges, Jhonnys. Focus Group Discussion. 2020 September 23)

In terms of disturbance, since our motorized boats used to go around without stopping, this disturbs our wildlife. So as of now, we see that there is a recuperation. We can see plenty of birds even if we are just paddling going to the mangrove site. There are plenty of birds. Before, when we enter the camp site, the birds flew so fast so we cannot see them. If you go on bird watching, you may see around 10 kinds of birds or maybe more. But as of now, you can really see many birds inside the marine reserve. You can also see the bat species even if you just paddle your boat as we conduct bat count monitoring. You can really see them as of now in the protected area because they are undisturbed, because there are no visitors entering the protected area.

Josephine Cabarrus, Bohol provincial tourism officer, commented that their environment has improved, their beaches in Bohol are getting back their color, and rightly observed that “everyone and everywhere in the country is also experiencing that” (Focus Group Discussion. 2020 September 23). In Danao Adventure Park, Judelyn Cajelo commented that there have been more butterflies that can be seen and more birds can be heard and seen in the location of the adventure park.

The FGD participants from Donsol Whale Shark Tourism and Oslob Whale Shark Tourism were able to comment on the fact that the months that the ecotourism industries were closed became a time for the sites to take a break from human activities. Lianne Idjao, Tourist Receptionist of Donsol Municipal Office, commented the following: “.....I think that, especially our whale sharks, would’ve appreciated the time that they were able to roam around the Donsol waters without human interruption so I think that’s one positive feedback....” (Focus Group Discussion. 2020 October 7).

The months of closure became a rehabilitation period for the ecotourism sites such that Cebu Provincial Tourism Office made it a point, during their reopening to residents of Cebu, to allot a one-day rest per ecotourism attraction which will also serve as the site’s disinfection time, cleaning time, and a breather. Lisly Boclaras, Tourism Operations Officer of Lake Sebu, noted that the environment was preserved with no tourists coming in. Government employees based in different areas are the ones who maintained the

environment in Lake Sebu. Ilagan Sanctuary was also kept and maintained by the staff during the months of community quarantine.

It is to be noted, though, that due to the community quarantine for several months, people who lost their livelihood encroach in the protected marine reserve area to gather shells and do fishing. In Masungi Georeserve, the ecotourism staff and their community patrollers had to guard the georeserve from illegal loggers to the point of making legal action against these encroachers.

The positive consequence of an undisturbed nature and bioecology and the realization to be more environment-friendly and that nature has been “overused” over the past few years are in keeping with the findings of a study by Rume and Didar-Ul Islam (9) entitled “Environmental Effects of COVID-19 pandemic and Potential Strategies for Sustainability”. This study indicates that the pandemic situation significantly improves air quality in different cities across the world, reduces GHGs emission, lessens water pollution and noise, and reduces the pressure on the tourist destinations, which may assist with the restoration of the ecological system. In addition, there are also some negative consequences of COVID-19, such as increase of medical waste, haphazard use and disposal of disinfectants, mask, and gloves; and burden of untreated wastes continuously endangering the environment. It seems that, economic activities will return soon after the pandemic, and the situation might change. Hence, this study also outlines possible ways to achieve long-term environmental benefits. It is expected that the proper implementation of the proposed strategies might be helpful for the global environmental sustainability. One of these proposed strategies is to allow periodic rest to ecotourism sites.

Lessons Learned from the Pandemic

One significant thing that most of the tourism officers realized is their lack of a contingency plan in unexpected crises such as a pandemic, which no one ever expected. Specifically, the contingency plan should include having alternative livelihood for the staff and other stakeholders when a global crisis like COVID-19 pandemic hits the tourism industry and all aspects of our lives.

As part of yung sa tourism po, as a tourism officer, it is lesson learned po na dapat po i-prepare po natin yung mga tao po natin sa mga tourist destination, yung sa mga tourism-related establishment. Let them learn kung paano sila magkaroon ng mga livelihood nila. Yung personal nila na livelihood because when worse comes to worst, ready na po sila. Lesson na po sa atin kasi nobody is expecting na mangyari poi to sa atin. Yung ineexpect po natin na natural calamity is typhoon, yung earthquake, yun po ang ineexpect natin. Never po na pumasok sa isip natin na magkaroon tayo ng COVID 19..... (Boclaras, Lishly. Focus Group Discussion. 2020 September 23)

...As part of tourism, as a tourism officer, it is lesson learned that we need to prepare our people in the tourist destination, those who are in tourism-related establishments. Let them learn how they can have their livelihood, their personal livelihood because when worse comes to worst, they will be ready. It serves as our lesson because nobody is expecting that this will happen to us. The natural calamity that we expect is typhoon, earthquake, that's what we expect. We never expected that we will have COVID 19.....

Boclaras realized that information and education campaigns ought to be conducted in the sites to make the people aware that they should have other resources or other means of living so that when crises like a pandemic comes which affected the whole of the municipality, they will be ready for it.

The key informants expressed the realization that there is a need to be more environment-friendly because people go back to natural resources for their needs in times of global crisis. Claressa Ann Oyangoren, in charge of Planning and Development Department of the Cebu Provincial Tourism Office, expressed this realization after months of the community quarantine during which time the ecotourism industries in Cebu were closed in the following words: “.....We should learn to save. Not only in terms of money and funds but also in our natural resources as well.....Maybe the biggest lesson *siguro* (perhaps) is to save not just our money but also our resources *kasi* (because) over the past few years, they have really been overused so, that’s it”.

Present Challenges and Ways to Go Forward

The major concerns or the present challenges facing the ecotourism management are having financial assistance and livelihood projects for the laid off staff, sustaining support for their partner communities, and the lack of back up plans and funds. Funds had been exhausted. The tourism-related establishments (TREs) were especially affected and there seemed to be no help in sight in the case of the TREs in Enchanted River as of the time of the focus group discussion conducted on September 23, 2020. Ferdinand Barrios expressed the seemingly lack of available financial help from the concerned government agencies for their TREs and affected staff in the following words:

Yung hinahanap lang naming ma’am, yung time na naglockdown hanggang ngayon, di naming marinig yung ano ng DOT eh. Parang wa silang ano eh..hindi ko masabi kasi halos lahat ng tourism-related establishments dito, patay na patay. Yung mga tao wala nang trabaho. Hindi nag operate yung mga TREs naming dito nung time ng GCQ at saka yung medyo nag enhance, hindi naming makita yung role ng DOT, yung tulong ng DOT para sa mga TREs. Yun yung hinahanap namin. Ngayon di namin makita ‘yon. Meron ngang sinasabi silang billion dyan, kailan ba yon? Para saan yon? Di namin alam..... (Barrios, Ferdinand. Focus Group Discussion. 2020 September 23)

What we were looking for, ma’am, during the time of the lockdown until now, we were not able to hear from the DOT, eh. It seemed that they had no what eh....I cannot say because almost all tourism-related establishments here in our place, were so dead. The people had no livelihood. The TREs stopped operating during the time of GCQ and when it became enhanced, we were not able to see the role of DOT, the help of DOT for our TREs. That was what we were looking for. Now we were not able to see that. They were saying they have a billion there – when will that be? For what is that? We don’t know....

On the other hand, Boclaras, the Tourism Operations Officer and acting Tourism Officer of Lake Sebu, said that in their tourism destination, many received except the tourism staff but the funds were just not enough. Boclaras asserts that it is different when one has a personal source of livelihood, even just cooking stuff that can be sold online. It appears, however, that the government funds coursed through the Department of Tourism did not reach all the ecotourism sites as what Enchanted River had experienced at the time of the data gathering for this study.

The uncertainty on the source of back-up funds is felt by almost all the ecotourism sites. Masungi Georeserve resorted to a donation fund drive for their partner communities, which include the Dumagat indigenous people and the volunteer patrollers in the Georeserve. Aside from sustaining the support of their partner communities, Masungi Georeserve is faced with the even greater challenge of warding off illegal and destructive activities that threaten the Georeserve such that they had to increase vigilance

and ask for help from the LGU to fight off the threat of illegal logging in the reserved area. Another ecotourism site, the Philippine Eagle Center, resorted as well to donation drives to be able to continue feeding the birds under their care. They did this well through their Facebook account and other social media accounts.

The Tourism Operations Officer of Danao Adventure Park, similar to Lake Sebu and the other ecotourism sites, expressed the lack of back-up plans for unprecedented crises like the COVID-19 pandemic in the following words: *".....wala kaming backup plan, wala kaming backup funds. Naubos yung pondo. So yun yung nagiging realization namin yung sana pagbalik, kasi babalik din naman. Hopefully, anytime soon, makabalik yung relation. Sana next year, bigyan ng pansin yung pag plano. Kung paano kung sakali may mga ganitong situation, ano yung pwedeng gawin?"* (Cajelo, Judelyn. Focus Group Discussion. 2020 September 23). (We don't have a back-up plan; we don't have back-up funds. Our funds had been exhausted. So that is becoming our realization, that hopefully, when we return, because we will really return, hopefully anytime soon, our relation will return. Hopefully next year, planning should be given attention on what to do in case there will be a situation like this. What can be done?"

Here are some of the ways to go forward that came from the key informants:

- 1) Prospects of travel bubble between municipalities that have less cases of COVID-19
- 2) Re-booting towards sustainable tourism which entails allowing the environment to rest periodically.
- 3) Re-opening even to locals only is encouraged following strict health and safety protocols for both staff and visitors. Reopening the site with lesser maximum capacity per day (50% capacity) and observance of health protocols is the common protocol towards tourism recovery.
- 4) Boost farm tourism and its destinations through effective marketing.

SUMMARY AND CONCLUSION

COVID-19 and the months of community quarantine that were enforced due to it tremendously affected the ten ecotourism sites, especially their management and operations and local benefits to the community. In terms of management and operation, the lockdowns resulted to the cessation of ecotourism operations for some months, resulting to a tremendous loss of income compared to the previous year. It also led to loss of livelihood, particularly for those who are job orders and those who work in tourism-related establishments. In terms of ecotourism services and products, Costales Nature Farms continued to offer and sell its farm produce through social media advertising and marketing and through door-to-door delivery. Philippine Eagle Center sold their souvenirs online. The rest were not able to offer their services and products throughout the months when they stopped accepting visitors. Masungi Georeserve and Philippine Eagle Center, both private ecotourism industries, conducted donation drives for their partner communities and to be able to feed the eagles and other birds under the care of the latter site.

Community participation continued in the form of participating in the protection and conservation of the environment. Protection and management of culture and indigenous knowledge was maintained particularly in Lake Sebu where the T'bolis continued to produce crafts and woven products even if there was hardly any sale during the months of lockdown. Philippine Eagle Center produced webinars

about the Philippine eagle and indigenous culture. Costales Nature Farms produced webinars on organic farming with the Agrillennial vlog of Reden Costales.

Most of the sites had no contingency plans for epidemic outbreaks except for Masungi Georeserve and Ilagan Sanctuary. Philippine Eagle Center had contingency plan to prevent avian flu. There was a show of resilience in the resort to urban and rural agriculture, planting of ornamental plants for sale, development of entrepreneurship, being creative in making saleable items, and learning other livelihood skills because of the pandemic. The most positive outcome was the rest for the environment and bioecology which flourished without human disturbance. However, there is a constant need for vigilance. The major concerns are having financial assistance and livelihood projects for the laid off staff and those running the TRES, sustaining support for their partner communities, and the lack of back up plans and funds which had been exhausted.

POLICY RECOMMENDATIONS AND TARGET BENEFICIARIES/RECIPIENTS

- 1) DOT's livelihood project and funds should be able to reach the farthest ecotourism sites in the country and lend assistance to TRES. Regional DOT offices can facilitate this dissemination of funds for alternative livelihood projects.
- 2) Regional DOT offices together with LGUs should help, guide, and require tourism industries all over the country in formulating contingency plans in case of epidemic outbreaks which should include plans for alternative livelihood projects and back up funds for crisis situations like COVID-19 pandemic. Tourism staff and those working in tourism-related establishments need to undergo TESDA training so that they will have alternative livelihood in normal and abnormal times.
- 3) Re-booting tourism would mean re-starting tourism with sustainability in mind while balancing health and the tourism industry. There should be periodic or regular rest for the ecotourism sites to allow the environment to recover and bioecology to flourish.
- 4) To regain tourist confidence in traveling, LGUs should encourage local tourism while following health and safety protocols. The LGUs should balance health and the economic considerations and help ecotourism sites recover by giving people leeway to travel locally. Patronizing ecotourism sites is a great way to boost local tourism and at the same time, promote healthy communion with nature that can refresh wearied bodies, souls, and spirits during these depressing times.
- 5) For tourism to recover, local government units are recommended to harmonize their requirements to tourists. Travel bubbles between cities or provinces can be arranged to revive and boost local tourism. Travel bubbles between nations can also be arranged to revive international tourism.

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Note: All tables and fi
(Please see the next pages).

Figure 1. Essential building blocks of ecotourism

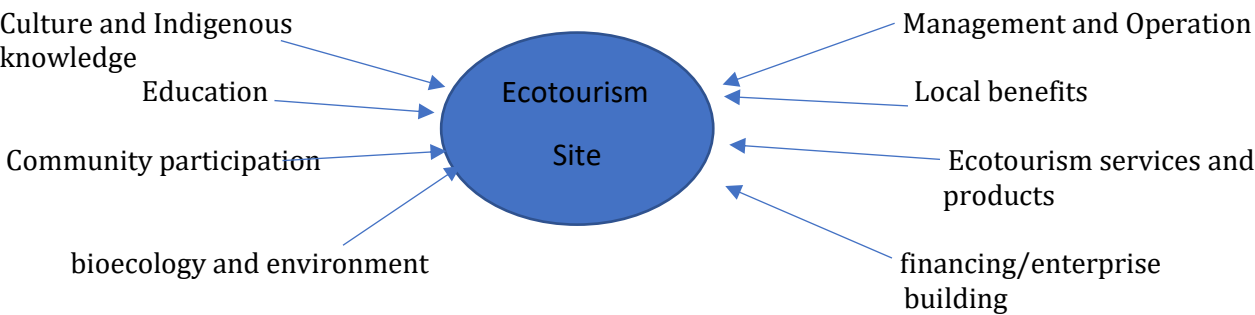


Figure 2. Mutually Affecting Aspects of Sustainable Ecotourism

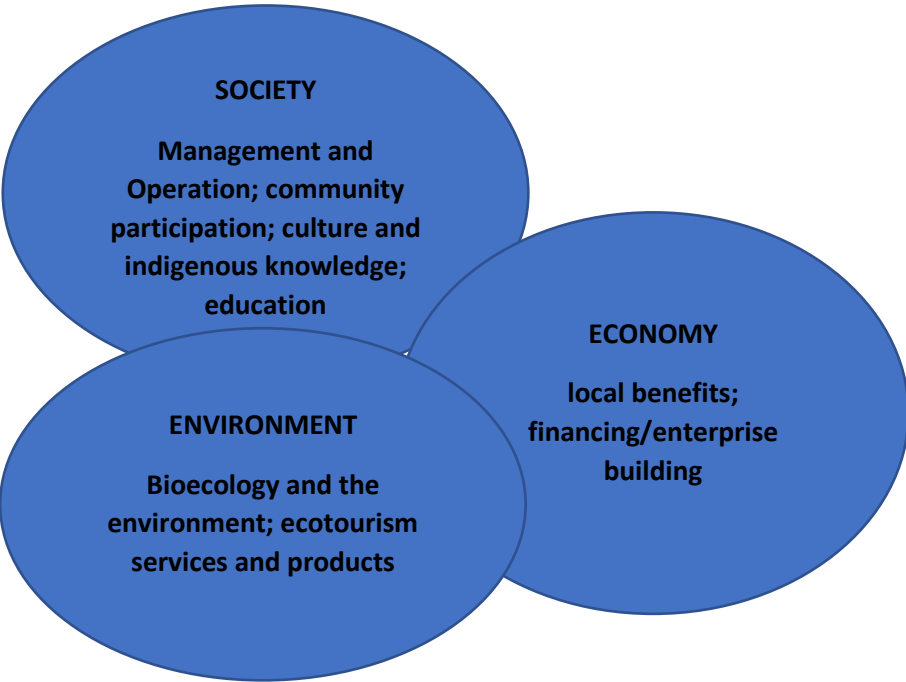


Table 1. Types of Community Quarantine undergone, Operation during the Quarantine, and Percent of Staff during the Months of Closure

Ecotourism Site	Types of Community Quarantine its Location Underwent	Operation during the Quarantine	% of skeletal staff during the months when the site stopped accepting tourists
1) Costales Nature Farms Majayjay, Laguna	GCQ (May), MGCQ (June-Present)	Closed from mid-March to May; Reopened farm dining and day tours under MGCQ.	60-70%
2)Donsol Whale Shark Tourism Donsol, Sorsogon	ECQ (March), GCQ (May to June), MGCQ (July to Present)	Closed from mid-March up to the time of FGD on September 23, 2020	100%
3)Ilagan Sanctuary Ilagan, Isabela	ECQ (March), GCQ (May), MGCQ (June-Present)	Closed From mid-March until its re-opening to local tourists under MGCQ	30%
4. Masungi Georeserve	GCQ (May), MGCQ (July to Present)	Closed from mid-March until it reopened during MGCQ to residents	100%
5. Pawikan Conservation Center Morong, Bataan	ECQ (March),GCQ (May to June), MGCQ (July to the present)	Closed from mid-March until it reopened to local tourists under MGCQ	30%
6. Taklong Island National Marine Reserve, Guimaras, Iloilo	ECQ (March), GCQ (May), MGCQ (July-Present)	Closed from mid-March until it reopened to residents of Guimaras during MGCQ	100%
7. Danao Adventure Park Danao, Bohol	ECQ (May), GCQ (May-June), MGCQ (July-Present)	Closed from mid-March until August 2020	100% but reduced to ten working days
8.Enchanted River Hinatuan, Surigao del Sur	GCQ (May), MGCQ (June to Present)	From Mid-March to May until it reopened under MGCQ to Hinatuanons	10%
9. Lake Sebu South Cotabato	GCQ (May), MGCQ (June to Present)	From mid-March to May	50%
10. Philippine Eagle Center	ECQ(March), MECQ (May), GCQ (June and July), MGCQ (September – Present)	Closed from mid-March until its reopening under MGCQ to local tourists	25% plus Work from home

Table 2. *COVID-19 Impact on Management and Operation and Local Benefits*

Ecotourism Site	Impact on Management and Operation	Impact on Local Benefits
1) Costales Nature Farms Majayjay, Laguna	The site lost millions because most of their partner restaurants also closed. Staff had to shift focus to farming and selling produce online.	The income they were getting was from their door-to-door deliveries. The management also shared their produce to their employees who lost jobs.
2) Donsol Whale Shark Tourism Donsol, Sorsogon	The site was closed just in time for their peak season.	No income because of restrictions in ecotourism activities so, livelihood of the people stopped. Only some benefitted from SAP.
3) Ilagan Sanctuary Ilagan, Isabela	Operations were focused on COVID response since site was converted to quarantine facility. Essential skeletal forces still report on specific days.	No income from the site. Some employees benefitted from SAP and management's support
4. Masungi Georeserve	Operations for ecotourism, which is their main source of funding, stopped.	There was no source of income during the community quarantine. Donation drives assisted the communities affected by the pandemic. Only some got aid from the government.
5. Pawikan Conservation Center Morong, Bataan	The site was closed for public viewing for several months. No income during those months.	Offers were made by tourism authorities, but the site and staff decided not to avail. Financial assistance was provided by management to their workers.
6. Taklong Island National Marine Reserve, Guimaras, Iloilo	The operations stopped during quarantine. No recorded visitors since March until it reopened to local residents of Guimaras under mGCQ.	People's organizations stopped their operations so there was no income. Management gave aid for those affected.
7. Danao Adventure Park Danao, Bohol	Operation of all activities in the park was halted, reduced working days for the staff, no contingency plan, closed	The services of the staff were shifted into accommodating the frontliners and some

	operation also affected the municipal development plan.	benefitted from the social amelioration program funds.
8.Enchanted River Hinatuan, Surigao del Sur	Although they were able to utilize the lockdown by improving the facilities, their contact with the stakeholders were limited and majority of their staff were laid off.	There was no income for the staff and not all received the SAP.
9. Lake Sebu South Cotabato	Due to the closure of the ecotourism sites, there were no income for staff, tourists were not allowed to visit the sites.	There was no income gained and community-based ecotourism was not practiced although assistance, both in money and in kind, was given.
10. Philippine Eagle Center	First time that the site was closed, work from home set up for other staff and skeletal work force. Foundation lost its largest source of income.	No income since PEC was completely closed. Not all received assistance from government and management.