



Stakeholders awareness on the conservation and preservation of the hundred island national park

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Abstract

Hundred Island National Park is one of the famous getaway in the Western part of Pangasinan, Philippines. This study was conducted to know the different practices of the stakeholders with regards to the awareness, conservation and preservation of the Hundred Islands National Park in Alaminos City, Pangasinan. The study made use of secondary data from the tourism office of the City. Highly extent ecological activities of the stakeholders such as its “*Scubasurero*”, a monthly clean-up activity to ensure the cleanliness of the island is conducted. Regular meetings with the stakeholders such as the hoteliers, restaurateurs, associations, “*bantay dagat*”, boatman, souvenir shops and tour guides are likewise done in order to monitor their plans in waste management activities, restorations and future plans. Likewise, recycling and proper garbage disposal is highly observed in the park. Moreover, the park has also its program known as the “*Basura mo, Iuwi mo*” in which biodegradable and non-biodegradable trash were collected in order to maintain the cleanliness of the island in exchange to a corresponding gift certificate. Coral propagation and restoration activities plus mangrove planting activities were highly practiced too, Hence, the greater level of environmental awareness, the higher extent of ecological initiatives made them.

Keywords: hundred island, scubasurero, boatman, tour guides, stakeholders

Introduction

Hundred Islands National Park is one of the famous getaway in Northern part of Luzon where travelers and tourists visit and spend time most of their time. The place is known as built up as product of corals that may have come from sea beds. During low tides, the peculiar ‘mushroom-shape’ of the islands are visible making them spectacularly amazing. There are 124 islands during low tide and 123 during high tide, and are scattered in Lingayen Gulf covering an area of 16.76 square kilometers (Juarez 2018). Activities such as swimming, banana boat rides, Stations of the Cross, helmet diving, trekking, cliff jumping at Marcos Island, island hopping, and use of the zip line are some of the major reasons in visiting the place. Facilities like cottages that can accommodate ‘informal’ meetings such as team-building, celebrations, workshops, parties and family vacation were some of its major features too.

The Hundred Island National Park has been famous known across the world for good reason—scattered beautifully upon the blue-green waters of the Lingayen Gulf, abundant inland and underwater flora and fauna, cream-colored fine sand that yields to every step, and friendly local islanders. Austria 2019, in her column describes that fun never ends at the HINP as tourists’ influx is recorded all-time high. The water adventure activities introduced to spice up their stay, aside from the usual beach swimming and frolicking.

The islands were given names and every island has its unique features. Visperas (2016) ^[11, 12], in her column stated that “aside from swimming, visitors can enjoy various activities such as ziplines, kayaking, helmet diving, snorkeling, cliff diving and visiting and exploring the islands on a boat.” Governors Island, can be climbed through its 141 steps leading to its viewing deck. This is the largest of the islands and has a guest house “PBB

(Pinoy Big Brother) House” that can be rented. The island is also surrounded by trees and a famous tree with foul smell known as “bangar” which is abundant in the islands. Also featured of the island is the Pilgrimage Island, where, ‘Jesus the Saviour’ and statue Christ the Redeemer is found. Other islands are also given names based on their shaped like the Virgin Island famous site for helmet diving in order to see the beauty of marine organisms. The famous Quezon Island was named after President Manuel L. Quezon has a gold-colored statue of the late President. Due to its famous features the island is ideal for snorkeling, zip lines, and swinging bridge. While, picnic huts and tables could also be rented in the famous Childrens Island. As the name implies, the area is often visited due to its idealistic swimming areas for little ones. Other islands includes Braganza, Rumulo, and Lopez and were outcrop of rocks and is greenery views. Like Quezon Island, Marcos Island is named after a late president and has its cavern with a deep pool, which you can jump into from a 20-foot high platform. Fish swimming in a clear water is the offer features of Scout Island too.

The Hundred Islands National Park of Alaminos City is protected area in the Philippines covering around 16.76 square kilometers. It was created by virtue of Presidential Proclamation No. 667, s. 1941. Alaminos is the home to the Hundred Islands National Park, the very first national park in the Philippines. It is also the heart of Western Pangasinan, its center of commerce, finance, education, industry and services. Sustainable tourism is achieved by the Hundred Islands National Park (HINP) through its Alaminos City Tourism Council (ACTC). This is a policy-making body tasked to perform functions protecting the ecosystem. All recommended policies, guidelines for the efficient and effective management of the park and other tourist

destinations in the City of Alaminos is reviewed and further approved by its Sangguniang Panlungsod together with the City Mayor. Other members of the council includes the city mayor, city administrator, committee from culture and arts, Public Information, Tourism, Environmental Protection And Waste Management, Coastal Resources Management Officer, City Planning, accredited NGO, PAMB Chair, Vendor Association, Boatmen association ,Environmental Organization and hoteliers and other owner of establishment near the island.

Considered as one of the famous tourist destination with sustainable tourism operations over years and so hence, this study focused on finding the Stakeholders Awareness on the Conservation and Preservation of the Hundred Island National Park.

Objectives

This study aimed in determining the 1.) The influx stakeholders visiting the place and its peak season, 2). Classification on types of trashes obtained from the hundred islands national park 3.) The type of trashes commonly collected from the island and 4.) Awareness of the “ Basura Mo ,Iuwi mo “ policy of the island and 5.) The conservation and preservation activities conducted in the hundred island national park.

Methodology

This study made use of qualitative research. In particular case study method which complemented by the secondary data obtained from the City Tourism Officer. Due to covid-19 pandemic and Inter-agency Task Force (IATF) restrictions researchers just made used available data. A descriptive design using frequency, percentage average weighted mean and ranking were used in this study.

Results and Discussion

In general, Hundred Islands National Park’s Stakeholders awareness on the conservation and preservation practices is a monthly activity for the stakeholders. Coastal clean-up within the vicinity of the island is regularly done, mangrove planting activities and a regular meeting together with the PAMB (Protected Management Board) and Officials of Department of Environment and Natural Resources (DENR) is done in order to conserve and preserve the beauty of the protected park.

Regular activities such as “Scubasurero”, clean-up drive is being joined by various stakeholders. Through this activities wastes left at the islands are recovered. Moreover, the office of the City Tourism also has its on program known as “ Basura ko iuuwi” or “bringing home of trashes” , the mechanics of this program involves the tourists visiting the island. Upon registration, group of visitors going to the islands were given sacks to fill their trashes. This sacks will be later surrendered to the front desk of the tourism office for a corresponding freebies. In addition, thrashes is also classified whether biodegradable and non-biodegradable.

Influx of Visitors in 2019

Table 1 shows the foreign and domestic visitors entry to the hundred islands national park in 2019. It can be gleaned on the table that those came from the United States ranks first on the list followed by visitors from South Korea, Canada and China. Meanwhile, from the domestic, it is the NCR or national Capital

Region ranks first, followed by those from Ilocos Region, Baguio and Davao. Moreover, visitors and stakeholders from the primary cities of the province often make their tours to the island. Such that, City of Alaminos ranks first followed by Dagupan City, San Carlos City and Urdaneta City. All other are the towns near the City of Alaminos.

In the article of De Guzman (2017) ^[8] he described the attributes to the numerous times the park has been featured in social networking sites as among the top tourist destinations in Pangasinan. That, majority of the foreign tourists who visits the place are Americans, Koreans, and Japanese. Further, authorities began the beautification of the park and putting additional facilities in the islands, and that have achieved a record high of 352,000 tourist arrivals this October 2017. This only shows that influx of visitors in the island is constantly increasing over years.

Table 1: Influx Visitors in 2019

Rank	Foreign	Domestic	Local
1	United states	NCR	Alaminos City
2	South Korea	Ilocos	Dagupan City
3	Canada	Baguio	San Carlos City
4	China	Davao	Urdaneta City
5	Australia	Bohol	Lingayen Pangasinan
6	Japan	Camiguin	Mangaldan, Pangasinan
7	United Kingdom	Bataan	Bayambang Pangasinan
8	Germany	Abra	Binmaley,Pangasinan
9	Taiwan	Cebu	Anda Pangasinan
10	India	Palawan	Calasiao ,Pangasinan
11	France	Mindoro	Bugallon Pangasinan
12	Switzerland	Cagayan De Oro	Sta Barbarra, Pangasinan

Peak Season of Tourist Arrival in Hundred Islands National Park

Table 2 shows the tourist arrival to hundred islands in 2019. For local tourist, the month of April got the highest tourist arrival with 38,775 followed on May with 26,812 tourist and the month of January with 20,302. This months were known as vacation time for most of the children prior to pandemic and it is also the summer season in the country. Meanwhile the month of August and September got low arrivals for this is still rainy season the place.

Table 2: Peak Season of Tourist Arrival in HINP

Month	Local	Rank	Domestic	Rank	Foreign	Rank	Total
January	20,302	3	29,295	6	2,551	2	52,148
February	13,264	6	24,521	7	2,645	1	40,430
March	14,088	5	29,399	4	1,794	3	45,281
April	38,775	1	82,585	1	1,331	5	122,691
May	26,812	2	62,115	2	792	7	89,719
June	12,540	7	30,918	3	702	9	44,160
July	7,639	8	14,152	8	1,258	6	23,049
August	3,385	11	9,008	11	642	10	13,035
September	2,123	12	4,873	12	520	12	7,516
October	6,318	9	12,217	9	628	11	19,163
November	5,687	10	11,517	10	722	8	17,926
December	17,001	4	29,395	5	1,403	4	47,799
Total	167,934		339,995		14,988		522,917

For the domestic arrival in 2019, the month of April and May ranks first and second on the list with 82,585 and 62,115 respectively. While, 30,918 were noted for the month of June which ranks third on the list. The months of August and September got the lowest arrivals as also noted in the local category.

As gleaned on table 2, foreign tourist arrival at Hundred Islands National Park has its peak during the month of February with noted visitor of 2,645. Second on the list is the month of January which has 2,551 and March with 1,794 and September and October got the lowest rank.

According to Hamper (2019) the Philippines is a tropical climate, so it is hot and humid most of the time, but the biggest travel consideration that will impact vacation is the country's wet season. Hence, November to April being the dry season is the best time to visit the country since wet season is from June to September, which can bring monsoons.

Finding confirms with Pointer (2020) [17] stating in her article that the best chance of comfortable weather and visiting beaches are during the coolest months of the dry season (December – February). Likewise, she also include that it is advisable to avoid visiting tourist spots from August through mid-October as this is Typhoon season.

Conservation and Preservation by determining types of trashes

Shown in table 3 is Hundred Islands National Park ways of Classification of Trashes Obtained from the Islands. Trash bags were given to all island visitors in order for them to return their trashes and not to pollute the island. In addition, according to City Tourism officer, stakeholders are fully aware on this process of conserving and preserving the beauty of the island. Only that, some of the foreign and from domestic visitors are sometimes surprise for having the “Basura mo, Iuwi mo” role of the tourism office. It can be gleaned from table one that in 2019, the month of December got the highest kilos of biodegradable material which is 3,830.60 kilograms and 1567.17 kilograms of non-biodegradable ones. It only shows that December is really a peak season and that most tourists visits the area.

Table 3 A: Classification of Trashes Obtained from the Island in 2019

Year	Biodegradable /Kgs.	Non-Biodegradable /Kgs.
January	634.50	1,031.90
February	2114	922.39
March	2469	655.59
April	5467	1528.90
May	2781.20	558.15
June	1851.20	273.10
July	1493	174.38
August	986.50	160.71
September	708.60	138.50
October	1668.70	388.10
November	1241.70	275.45
December	3830.60	1567.17
Total	25,246	7674.34

Table 3B: Classification of Trashes Obtained from the Island in 2020

Year	Biodegradable /Kgs.	Non-Biodegradable /Kgs.
January	3,829.80	1355.80
February	3,206.20	986.60
March	1,241.00	340.90
May	14.90	16.80
August	22	13.70
December	25.70	11.20
Total	8339.60	2,725.00

Table 3B showed the total number of biodegradable and non-biodegradable trashes collected from the Hundred Islands National Park as a part of their conservation and protection of the island. However, due to pandemic and to the Luzon lockdown in 2020, a total of 8,339 kilograms biodegradable and 2,725 kilograms non-biodegradable were only collected. Truly, the effect of pandemic affects the tourist entry in the island.

Vila (2018) [10] stated that the Philippines belongs the world's third-largest ocean polluter despite a waste management act coming into effect 18 years ago. That culprits is addiction to single-use plastic sachets and masses of plastic trash swirling in waterways, garbage clogging drainage canals and huge stinking dump sites are among the most visible manifestations of the waste crisis in the Philippines. Hence, everyone must be responsible in disposing their trashes.

Hong (2021) describes in his paper that biodegradable waste which typically originating from plant or animal sources, which may be degraded by other living organisms. While wastes that cannot be broken by other living organisms are called non-biodegradable. Biodegradable wastes can be commonly found in municipal solid waste (sometimes called biodegradable municipal waste, or BMW) as green waste, food waste, paper waste and biodegradable plastic. Existence of biogas is possible through the use of non-biodegradable wastes.

Trash Collected by “Scubasurero”

The “scubasurero” is an activity wherein group of stakeholders together with other volunteers join forces to conduct scuba diving cleaning to the island. As shown on the table the food wrappers ranks first on the list with accumulated total of 13,872 followed by cups and plates group with a total of 2892 and followed by empty bottles of plastic beverages with a total of 1892. Meanwhile, fork and spoons which has the lowest rank.

Lorenciana 2020 stated that scubasurero literally means scuba divers collecting "basura" or trash underwater. She describes the various cleanup drive and practices in Lapu-Lapu City, Cebu in which was participated by various group. Each group is composed on 10 divers per motorboat and that their main aim is preserving the environment specially the bodies of water or oceans. She also give emphasis on “scuba divers that they can do so much” in helping preserve the environment especially the ocean.

Table 5: Trash Collected by Scubasurero in 2019

Trash Collected	Jan	Feb	Mar	Apl	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Rank
Cigarette butts (pcs)	14	155	9	479	826	195	6	2	-	-	6	11	1703	4
Food wrappers (pcs)	684	1244	491	1259	2214	1702	1210	392	1970	893	872	941	13,872	1

Beverage-plastic bottle(pcs)	107	111	84	158	167	366	146	87	237	143	119	167	1892	3
Forks and spoons(pcs)	89	69	44	235	316	193	89	6	142	53	79	46	1361	5
Cups and plates (pcs)	247	122	173	366	391	521	341	52	243	175	101	160	2892	2

Other Activities of the Stakeholders

Other activities of the HINP stakeholders includes clean up drive, coral restoration ,mangrove planting activity and free the sea activity. All of this activities are well coordinated with partner agencies of the said park.

Table 6: Other Activities of the Stakeholders of HINP

Other Activities	Persons Involved
1.Clean up Drive	Stakeholders- NGO, LGU, DENR, Schools
2.Coral Restoration	Stakeholders- PAMB,
3.Mangrove Plating Activity	Stakeholders- NGO, LGU, DENR, Schools
4.Free the Sea activity	Stakeholders- NGO, LGU, DENR, Schools
5. Scubasurero	Stakeholders- NGO, LGU, DENR, Schools,

Cecconi (2019) in her study she stated that, participation in the beach clean-up increased the knowledge of students towards the fact that trash at the beach kills marine life organisms. Results of her study showed that students of Tramonti knew less than the students of Minori about the effect that plastic pollution has on marine life. In addition, willingness of the respondent student to recycle is too high.

Conclusion

The findings of the study led to the following conclusion:

1. Stakeholders of the Hundred Islands National Park takes part in the conservation and preservation of the island.
2. The Hundred island national park has its system of maintaining and preserving the island through is Basura Mo, Iuwi mo scheme where gifts are given in exchange of trashes.
3. Scubasurero is a monthly activity which ensures cleanliness of the island.
4. Other activities are well supported by stakeholders and other agencies.

Recommendations

Based on the findings and conclusions, the study recommends the following;

1. The Hundred Islands Management Park must continue its “Basura Mo, Iuwi mo” or Bring Home your Trashes Scheme and level up its gifts or give-away.
2. Continue with the monthly *scubasurero* or *clean-up drive* activities and create a device which will automatically segregate trashes.
3. Create boats with GIS (Graphic Information System) to capture, store, manipulate, and analyze data in order to know more and other island to be discovered.
4. Enhance the Material Recovery Facility (MRF) to accommodate all collected materials while waiting to be sold or transferred to final site.

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