

# Status and Potentials of Ecotourism Sites in Samar Philippines

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## Abstract

*Samar is the third largest island in the Philippines blessed with world-class, less known ecotourism destination like highly diverse forest/reefs, gigantic caves, waterfalls, beaches, etc. Tourist arrival share attributed mostly to the private sector remains very low because of poor intervention especially from the local government. Private-led initiatives to promote Samar's world-class sites are relatively successful, bringing in tourists from all over the world. Samar's ecotourism sites are rated by these tourists higher in terms of panoramic appeal but poor in terms of accessibility; support structure, services and facilities compared to the more known and government-supported destinations in the Philippines. Samar Island towns are one of the poorest in the Philippines. Increasing tourist arrival through improved government intervention will result into a better economic activity which will potentially reduce the poverty level in the three provinces of Samar.*

**Keywords:** Samar, Calbiga, Lobo Cave, Pinipisakan Falls, ecotourism, tourism

## I. INTRODUCTION

The Philippines is as one of the top biodiversity hotspots in the world (Protected Areas and Wildlife Bureau, 2013). It is also considered as one of the world's biologically rich countries (Conservation International, 2005). It is also one of the countries in the world gifted with so much natural attractions from ridge to reef. In 2012, the Philippines underground river located in Puerto Princesa Palawan was chosen by worldwide voters as one of the new seven wonders of nature (New7wonders, 2013). Earlier in the same contest, Tubbataha Reef National Marine Park, Chocolate Hills, and Mayon Volcano ranked 3rd, 5th, and 11th based on the votes garnered worldwide. In 2012, Lifestyle

Asia identified Donsol Sorsogon's Whale Shark Ecotourism Programme as one of the top 5 ecotourism destination in Asia (Lifestyle Asia, 2012).

In the year 2012, the travel and tourism sector in the Philippines accounted around PhP 215.5 Billion (2% of Gross Domestic Product -GDP) direct contribution. This amount accounted for with a total contribution of PhP 740.5 Billion (7.0% of GDP) (World Travel Tourism Council-WTTC, 2013). The total contribution to GDP of travel and tourism is expected to increase by 5.5% for 2013 and 6.0% per annum from 2014 to 2023 (ibid). This increase incorporated the projected improvement of the tourism industry

followed by a successful “It’s more fun in the Philippines” promotional campaign with projected tourist arrival of 10 Million by 2016 (Jimenez, 2013). Tourism is the largest service industry with ecotourism considered the fastest growing sector (Dasenbrok, 2002). In the Philippines, five(5) of eight(8) top Philippine tourist destination are eco-tourism sites (Department of Tourism-DOT, 2009). As compared to other countries in the Asia-Pacific Region, the Philippines remains behind in terms of tourist arrival (1.7%) (World Tourism Organization, 2011). Further, a CNN special report showed Philippines still laggard in terms of tourist share despite the world-class scenery, adventure opportunities, friendly locals, fascinating history to name a few (Ehrlich, 2012).

Samar is the third largest island in the Philippine archipelago after Luzon and Mindanao (National Mapping and Resource Information Authority-NAMRIA, 2012). It contains one of the Philippines’ largest unfragmented tracts of lowland rainforest (United Nations Development Programme, 2012). Its biodiversity is considered globally significant as it harbors some over 1000 species of plants (approximately 53% endemic) and 330 species (56% endemic) (ibid). The Samar Island Biodiversity Project (SIBP) was implemented from 2001 to 2011 with the aim of enacting a law to establish the Samar Island Natural Park (SINP). It is a new protected area zoned for multiple uses centering on protection, but providing for sustainable use of non-timber forest products, operationalization of park management in partnership with forest-edge communities (PAWB, 2011). An act establishing the SINP is already filed in congress and has been elevated to Senate for second reading (Senate, 2013). The enactment of SINP will provide a much-needed support by the tourism sector in Samar. At the moment, the relatively limited and slow government

supports to tourism in this part of the country lead some small groups of nature lovers to introduce the hidden treasures of Samar their way.

It is the aim of this paper to present the ecotourism sites in Samar visited by tourists brought-in by private groups or individuals. It presented the state of ecotourism sites in terms of access, facilities, availability of services, and quality of the site, risk and time of travel as perceived and experienced by tourists. Estimated potential revenue derived from the ecotourism sites was conducted.

## II. METHODOLOGY

The study both used secondary and primary data. Data mining technique was used to generate information regarding status and potentials of ecotourism sites in Samar. Primary data were gathered from travel blog owners and guides.

The list of ecotourism sites were taken from the identified and recommended tourist sites of the Department of Tourism(DOT). Other sites identified by local tour providers and those in the tourists’ travel blogs were also considered. A total of 20 travel blogs owners were asked to rate the various sites they have visited in terms of sites strength and weaknesses of facilities, tour packages availability, access and panoramic quality. Networking sites such as Facebook, Skype were used in the dissemination of the questionnaires. These assessments were reinforced by reviewing more than 35 uploaded YouTube videos, 20 travel blogs, personal site visits, and face to face interview with the most active tourism provider in Samar.

Ecotourism sites were compared with the known similar tourist destination. Local sites were compared to the Underground River of Palawan for caves, Pagsanjan Falls of Laguna for falls, and Cagayan de Oro City river for white water rafting. Each respondent rated the Samar tourist

destination from -5 to +5, (+) which means better, (-) which means poorer and (same) as compared with a similar tourist spot. Risk assessment used scale with zero rating means absence of risk and five as high risk. The tourist was requested to rate based on perceived risk before visit and post visit risk rating based on what he/she experienced. The risk areas include security, health hazard, geohazard and wildlife attack.

### III. DISCUSSIONS

Samar Island towns are among the poorest in the country (NEDA 8, 2012).

One of the best options to generate income is through tourism. Ecotourism plays an important role because it creates jobs in remote regions that historically have benefited less from economic development programs in the more populous areas (Lindberg, 1996).

#### Some of Several Ecotourism destinations in Samar

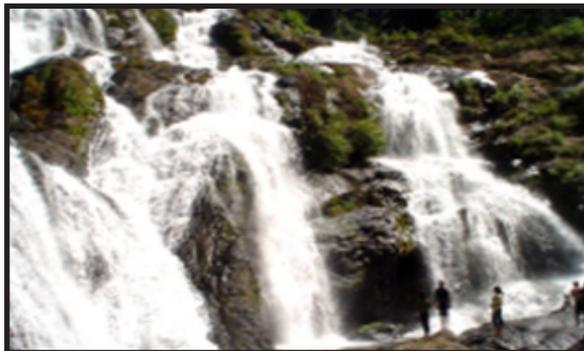
Figure 1 is a group of pictures of some of the world-class quality ecotourism sites in Samar. Samar is blessed with natural resources and attractions with every town having its own festivals, and several natural attractions to boast. Attractions



Lulugayan Falls



Pinisakpisakan Falls / Sulpan Cave



Bangon-Bugtong Falls



Lobo Cave



Ulot River

Source of pictures: Joni Bonifacio



Calbiga Cave

Figure 1: Some of the world-class tourist destinations in Samar

are present from ridge to reef. There are more than 100 caves of various sizes that have been discovered, and 1000 more to be discovered and documented (Bonifacio, 2012). The huge number of caves found in Samar Island makes it the caving capital in the Philippines (DOT, 2013).

**Ecotourism Sites Assessment by Tourist, Guides and by Government Offices**

Appendix 1 summarizes the strength, weaknesses and how the site is compared by tourists to other similar most familiar and well-advertised tourism destination in the country.

Most of the sites were rated far better in terms of panoramic appeal compared to more known tourist destinations such as Pagsanjan Falls, Underground River, and the Cagayan de Oro River. The same sites however were rated very low in terms of accessibility and available facilities. Except the Sohoton cave with almost similar physical stamina requirement, others require more especially for the Pinipisakan Falls, Sulpan Cave, Calbiga Cave and Lobo Cave requiring long hours of walking in trails that have yet to be improved. Most of the sites do not have restrooms, camping sites, picnic facilities and resting place. There is also limited transportation facilities devoted to tourism activities. Access from the national highway into the tourist destinations is yet

Table 1.  
Tourist Assessment of Selected Ecotourism Destination in Samar

Ecotourism destination & comparison* with the more known sites in the Philippines	Site Assessment (By tourists, guides, others)		
	Strength	Weakness	Wished present
<p><b>Sohoton Cave Basey Samar</b></p> <p>Comparison with Underground River</p> <p>Facilities (-1) Tour packages availability (-2) Access (same) Panoramic quality (+1) Stamina Required (same)</p>	<p>One of the few ecotourism attractions in Eastern Visayas Region with good tourism support structure. They have an organized community-based support system, from transportation, trained tour guide, picnic facilities, tour facilities such as lamps and gears, and park management set-up. The Basey LGU has a tourism office ready to accept visitors and provide necessary assistance for the tour. The chambers in the cave are easy to navigate.</p>	<p>Some of its stalactites and stalagmites have been partly damaged.</p> <p>The boat ride is quite long.</p>	<p>Boats are not too noisy to be able to have a good chitchat while cruising the Golden River of Basey.</p> <p>Wish the boat trip is more entertaining like in Bohol.</p>
<p><b>Calbiga Caves Calbiga Samar</b></p> <p>Comparison with Underground River</p> <p>Facilities (-5) Tour packages availability (-3) Access (-5) Panoramic quality- (+2) Stamina Required (+5)</p>	<p>Dubbed as the second largest cave in Asia. It covers a total of 2968 has. It has at least 12 interconnected caves with several giant columns of stalactites and stalagmites, unique rock formations, about 20 underground water courses and springs. The cave system is home of rare species of blind crabs, blind fish, and home to hundreds of thousands of bats (Labro, 2011). It is also an ideal recreational and educational area for local and foreign visitors; Calbiga karst offers an ideal recreational ground for spelunking, mountain climbing and nature trekking. (DOT, 2012)</p>	<p>The more than one hour walk requires visitors to be physically fit. There is a need to spend at least 3 days to cover all sections/ chamber of the caves.</p> <p>The entrance chamber stalactites and stalagmites are heavily damaged.</p>	<p>Good trail, resting area with facilities like rest room</p> <p>The access road needs to be completed to reduce the time of travel specially the time for hiking.</p>

Continuation of Table 1

Ecotourism destination & comparison* with the more known sites in the Philippines	Site Assessment (By tourists, guides, others)		
	Strength	Weakness	Wished present
<p><b>Lulugayan Falls</b> <b>Calbiga Samar</b></p> <p>Comparison with Pagsangjan Falls</p> <p>Facilities (-5) Tour packages availability (-5) Access (-3) Panoramic quality- (+3) Stamina Required (+2)</p>	<p>There are a little more than 100 hundred cascades in the 14Km stretch stream/river starting from Lake Kalidongan to the Calbiga River. The largest and and most panoramic is the Lulugayan Falls approximately fifty meters wide. It is dubbed by visitors as a mini Niagara.</p>	<p>There are no facilities in the immediate vicinity such as camping site and restrooms.</p>	<p>Good trail, picnic ground, resting place, rest rooms, available food nearby the water fall.</p>
<p><b>Ulot River</b> <b>Paranas Samar</b></p> <p>Comparison with Cagayan de Oro River</p> <p>Facilities (-5) Tour guide quality (-3) Access (-5) Panoramic quality (+2) Stamina Required (+5)</p>	<p>The only watershed in the country selected for the Model Forest Project. It is a habitat for 296 species of plants, 134 species of amphibians, 18 species of reptiles and 28 species of terrestrial mammals. It has enchanting forests, caves, rivers, falls and spring among others. (DOT, 2012)</p>	<p>There are evidence of illegal logging, slash and burn.</p>	<p>Resting area, camping area and restrooms</p>
<p><b>Lobo Cave</b> <b>Jiabong Samar</b></p> <p>Comparison with Underground River</p> <p>Facilities (-5) Tour packages availability (-5) Access (-5) Panoramic quality (+2) Stamina Required (+5)</p>	<p>Crawlways, rivers, streams, waterfalls, mud chambers, and narrow descends. The stalactites and stalagmites are on its perfect form.</p>	<p>Tourist need to be physically fit in visiting this cave.</p>	<p>Good trail condition, resting area, camping area and restrooms</p>
<p><b>Bangon-Bugtong Falls</b> <b>Calbayog City</b></p> <p>Comparison with Pagsangjan Falls</p> <p>Facilities (-3) Tour packages availability (-3) Access (-2) Panoramic quality- (+3) Stamina Required (+2)</p>	<p>One of the many waterfalls of Calbayog City. Has a circular pond about 30 meters in diameter, wide enough for swimming and deep enough for diving. The cascading water seems to come from streams flowing endlessly, resulting from the pressure of its disgorge, which becomes even bigger in volume and noticeable as the time of the day passes (Calbayog LGU).</p>	<p>Located 1.25 hr and the 45-minute walk requires higher tourist stamina</p>	<p>Better trail, camping site and facility such as restroom</p>
<p><b>Blanca Aurora Falls</b></p> <p>Comparison with Pagsangjan Falls</p> <p>Facilities (-5) Tour packages availability (-5) Access (-2) Panoramic quality- (same) Stamina Required (-1)</p>	<p>Dubbed as the Pagsangjan Falls of the south. One of the first tourist destinations in Samar.</p>	<p>The natural beauty has deteriorated as the falls surrounding environment is populated. There is an unfinished building affecting the ambiance of the place.</p> <p>There is perceived presence of rebels in the area</p>	<p>Wish the site natural beauty have been maintained.</p> <p>Road is not yet fully paved. During rainy days, access is difficult.</p>

Ecotourism destination & comparison* with the more known sites in the Philippines	Site Assessment (By tourists, guides, others)		
	Strength	Weakness	Wished present
<p><b>Pinipisakan Falls &amp; Sulpan Cave San Jorge Samar</b></p> <p>Comparison with Pagsangjan Falls</p> <p>Facilities (-5) Tour packages availability (-5) Access (-5) Panoramic quality (+3) Stamina Required (+5)</p>	<p>Contains a series of star-like waterfalls; good picnic site cool climate. Now a fully documented spot by a local travel and tour office in the province, the site is considered the mother of all water towers in the town of San Jorge, for it being the open-start of Samar's longest river, the Blanca Aurora River. Its thundering and clear decant towards the Blanca Aurora river is a major element that constitutes the charm of this rushing watercourse making the river an excellent venue for various aqua trysts(NUP, 2012)</p>	<p>Tourist need to be physically fit in visiting this falls. The trail going to the place is very rugged and is very steep. The distance of the site is very far requiring an overnight stay in one of the barangay close to the site.</p> <p>There is a perceived presence of rebels in the vicinity.</p>	<p>Access road to a nearby place to reduce time of traveling and the stamina requirement. Place to stay overnight is essential, restrooms, better trail, resting place.</p>

to be finished. Blanca

Aurora, for example, is one of the oldest tourist destinations in the country but until today, the road from Downtown San Jorge to Blanca Aurora has not been completed . Blanca Aurora, San Jorge Samar is the take-off point to many tourism sites such as the Pinipisakan Falls, and Sulpan Cave.

Ecotourism sites in its natural state are preferred by purist nature lovers but fail to attract volume of tourist. For the ecotourism sites to impact local economy, it is essential to increase the volume of visitors but must see to it that control measure to manage the sites must be put in-place. Foreign tourist gave importance to quality of service available (Papanastaslou et.al., 2006) aside from the panoramic quality of the ecotourism sites.

**Private-led tourist arrival by nationality**

The province has no existing tourist arrival monitoring program. Tourism data is only available at the regional level while LGUs has no established protocols to record tourist arrivals. Based on NSCB 2011 report, Eastern Visayas tourist arrival in 2010 reached 199,705, 92% are

domestic visitors. Only 2.8% (5,199) of those tourists visited Samar wherein 8 of every 10 are domestic tourist. Around 2% of those tourists visiting Samar meet Joni Bonifacio, the proprietor of Trexplore the Adventure, a local tour package provider. Figure 2 are a number of tourist arrival by nationality over the last four years. Like the regional foreign tourist profile, Germans top the list of Trexplore clients.

The number of local tourists has reduced in 2012 because there were increases of groups providing tour-guiding activities. There were several government-led training and capability building activities to develop local guides.

Figure 3 presents tourist share in percent on various ecotourism sites in Samar. Tours facilitated by Trexplore are directed towards Lobo Cave and the Calbiga Caves. Trexplore conducts caving tours several times in a year attracting both local and foreign tourists. Trexplore promotes his tours in various forms such as flyers, posters, blogs, Facebook and Youtube videos. The extensive promotional campaign, ready and complete tour packages, availability of spelunking and safety gears with available trained guides, tourist arrival increases.

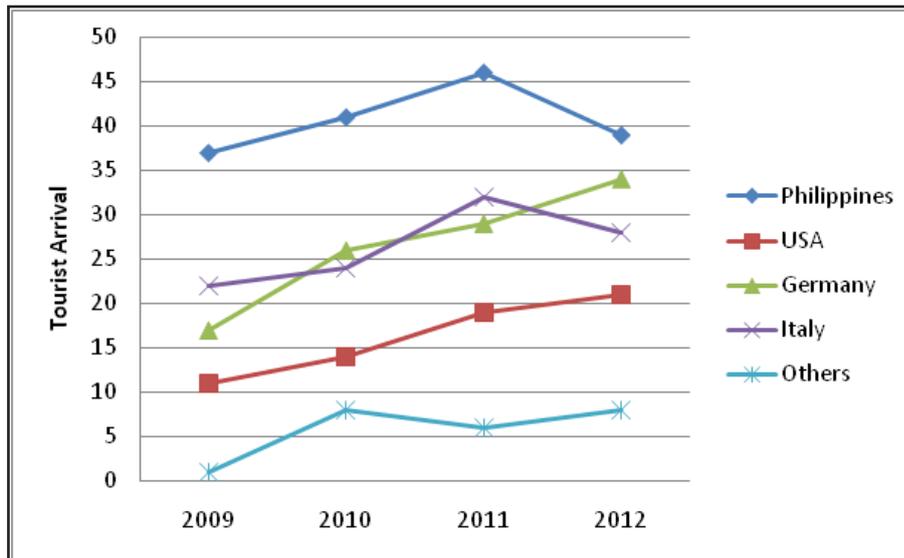


Figure 2: Tourist arrival by nationality (facilitated by Trexplorer)

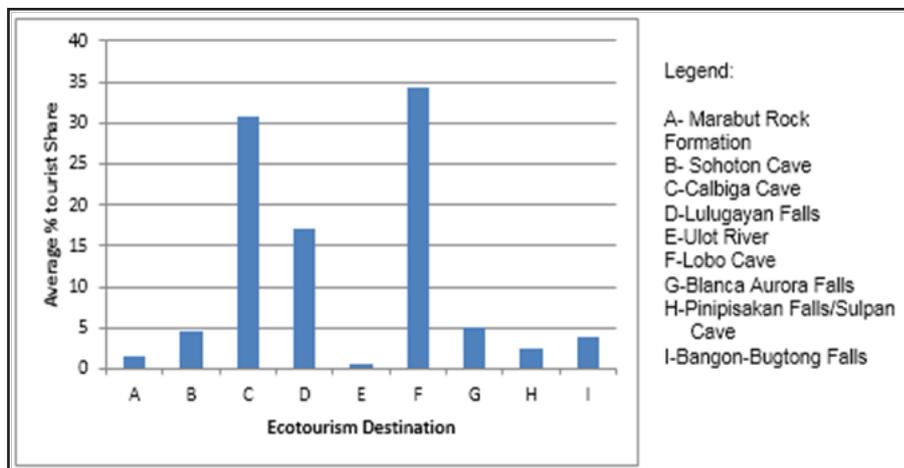


Figure 3: Most visited ecotourism site (tours facilitated by Trexplorer)

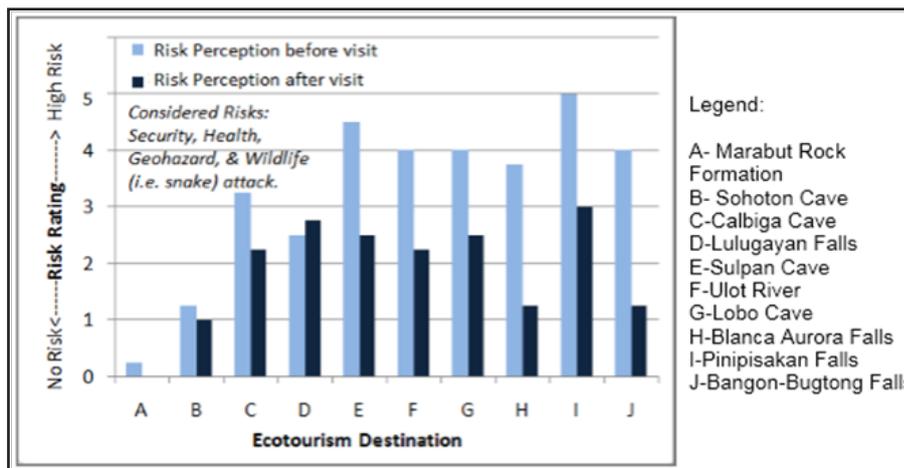


Figure 4. Risk rating of eco-tourism sites by tourists

Marabut Rock Formation can be viewed along South Samar coastal road. Thus, private guides are not necessary. Blanca Aurora and Bangon-Bugtong Falls are quite accessible making tourist guides unnecessary. On the other hand, even

if the beauty of the Pinipisakan Falls and Sulpan cave are incomparable, few tourists prefer to go there because of the effort and time needed to visit the place.

The limited intervention or involvement

of local government units where the sites are located posed risk to the ecotourism sites. Maintaining the ecotourism sites are informally delegated to the private tour provider. This

Private tour providers often led to poor or no recording of tourism activities that are very important in managing tourism. Romita (2007) called this kind of practice as “undetected” tourism which leads to several damages to the environment. The private-only or private-mostly tourism activities and less to no government involvement limits the sites potential and increases the potential negative effects. These negative effects can be controlled only if supported by government (Romita, 2007). It is essential that the ecotourism area has a variety of sites to visit with value-added services which encourage foreign tourists to stay longer thus spending more (Papanastasion, et.al., 2006). Government intervention/ involvement is very essential in improving eco-tourism activities.

Tourists going to Sohoton Natural Park are facilitated by the LGU and do not allow another tour provider to visit the place without approval from the tourism office of Basey Samar. In 2009, Sohoton tourist arrival reached 4052, 8.2% or 333 are foreigners while 91.8% are domestic tourist, almost double compared to 2008 data (NSCB, 2010). Sohoton cave is the most visited tourist destination in Region 8. Its share is about 78% of all Samar-bound tourists while about 2% are facilitated by Trexplore. The rest are either non-ecotourism visitors or tours facilitated by other groups or freelance tour guides. The bulk share of tourist arrival visiting Sohoton Cave is attributed to its good promotional campaign. With much better tourism infrastructure such as the existence of tourism management office with functioning staff coordinating a community-based tourist support services such as a transportation facility, caving

gears and tour guide. The presence of all of this leads to better accessibility of the tourism site to a wider type of visitors.

### **Tourists and guide perceived risk of visiting ecotourism sites in Samar**

Risk attributed to the location is some of the reasons of low tourist arrival. The risk is also one of the reasons why a tourist site no matter how beautiful it is may not be opened or supported by the government as an ecotourism destination. DENR Administrative Order 2013-19 states that the site must be free from the security risk and natural hazards that cannot be managed by a competent authority (DENR, 2013). Because many of the sites in Samar are not yet fully developed, various types of risk are present. Several tourists were asked regarding the perceived risk before and after their visit.

The perception that Samar is still infested with rebels affects the number of tourist arrival especially by foreign tourists. Health related risks, possibility of wild animal attacks like snakes as well as geohazards are among the common concerns of tourists. More than half of the tourist destinations were feared to be rebel-infested. However, after visiting the place, their perception changed significantly. “We could have reduced the rating to zero if we have not seen a military patrolling the place,” says a group of tourist. Since most of the sites are located inside forest reserves, malaria, dengue and other health related concerns attributed to such location are some concern of the tourists. The recent environment related disasters happening especially in the Philippines raised fears among tourists. About 70% of tourists are worried about earthquakes especially when they are inside the caves. Wildlife related attacks especially by poisonous snakes’ worries a lot of tourists.

The risk rating can be reduced if the

Table 2.  
Estimated Time of Travel Spent Excluding Time for Rest.

Ecotourism destination	Remarks (travel time from nearest Airport to take-off point. * Tacloban ** Calbayog	Travel time from nearest takeoff point accessible by public utility bus/van/jeepney/private car			
		Takeoff point	Boat	Motorcycle	Hike
Marabut Rock Formation	*1.5 hrs	Marabut	-	-	-
Sohoton Cave	* 1 hr	Basey	2 hr	-	-
Calbiga Cave	* 1 hr/**2 hrs	Calbiga	-	1 hr	2 hr
Lulugayan Falls	* 1 hr/**2 hrs	Calbiga	-	1 hr	15 min
Pinisikipisakan Falls and Sulpan Cave	* 4 hrs/**1.5 hrs	Blanca Aurora San Jorge	3 hr	-	4 hr
Ulot River	* 2 hrs/** 2 hrs	Paranas	2 hr	1 hr	15 min
Lobo Cave	* 2 hrs/** 2 hrs	Jiabong	30 min	-	20 min
Blanca Aurora Falls	* 4hrs/**2hrs	Blanca Aurora	-	-	-
Bangon Falls	* 4hrs/**0 hrs	Calbayog	-	25 min	30 min

support structure will be put in place. Infrastructure such as but not limited to paved access roads, better trails, other support infrastructures such as restrooms, resting place, information materials such as tourist reminders/directions/guides, and flyers.

#### Travel time from the nearest Access point

The inadequate infrastructure and support services limit the number of tourists' arrival. The poor infrastructure leads into longer time of travel, discouraging the potential tourists because visiting these sites requires higher stamina. Table 2 is the estimated travel time from the airport to the site excluding resting time.

#### Economic Revenue of Ecotourism

The absence of tourism infrastructure to record tourism activities makes it difficult to estimate revenue generated from tourism. In a study conducted by the Collaborative Partnership on Forests estimates that ecotours can return as much as 95% to the local economy (CPF 2011). These are far better than the standard all-inclusive package tours" that deliver 20% of the revenues to local companies the rest goes to airlines, hotels and large tour

companies (ibid). However, ecotourism benefits are limited as mismanagement or no management, including rapid growth and expansion could do more harm than good to delicate ecosystems.(Ibid).

A tourist in Samar would spend about PhP2000-3000/day (<http://trexplore.weebly.com>). This amount includes entrance fees, permits, traveling and guide expenses. Additional payment will be required to pay baggage assistants and rental of gears needed. Based on the CPF estimates, about PhP1,900.00 to PhP 2,850.00 goes to the local economy per tourist per day. If tourist arrival reaches the same level as Sohoton cave, host town of ecotourism destination such as Calbiga, Jiabong, San Jorge Samar will earn about PhP 7.6M to PhP 11.4M per site. This income can be increased further if tourists stay longer because of value-added services, variety of tourist destination, and quality of sites.

#### IV. CONCLUSIONS AND RECOMMENDATIONS

1. Samar is gifted with a huge number of potential eco-tourism destination. Samar has over 20 grand sized waterfalls; more than 100 caves and 1000 more to be

discovered, rock formation, river systems most can be found inside the Samar Island Natural Park.

2. Many of these ecotourism sites are far better in terms of panoramic quality but are poor in terms of facilities and available tourist services. Investing in tourism such as building or completing existing access roads, restrooms, resting facilities, and better trail are essential to improving the overall quality of these sites.
3. Private-led tourism activities increase visibility of Samar's tourist sites. They have brought in tourists from various parts of the world to visits various sites, not in the Department of Tourism menu, unlike government-led tourism activities that focus only on very few sites. Private-led tourism activities resulted in the discovery of many caves all-over Samar.
4. Private-led tourism share is very minimal; most of its tourists are foreigners that are able-bodied individual, adventurous and strong hearted. The relatively small number is attributed more on the absence of tourism support structure and services.
5. Promotional campaign to improve the image of Samar as tourist destination haven instead of haven for rebels needs to be increased. Government must exert more efforts to eradicate the insurgency. Resolving it would mean a lot to the tourism sector.
6. If the site is improved to the level of Sohoton Cave, the ecotourism host town is expected to generate between PhP 7.7 to 11.4M per site, improving inflow of money to the

town/city.

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