

Negative Environmental Impacts of Tourism in Unawatuna Beach Area

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Introduction

Any industry can cause both positive and negative impacts to country. As an industry, tourism directly makes social cultural, economical and environmental both negative and positive impacts.

Before tourism has become as an industry of Sri Lanka, Sri Lankan beach was very famous all over the world. Both literary and archeological sources are proved this phenomenon. Sri Lankan beach was famous among the foreigners since colonial period. Specially the southern and south – western coastal areas were highly transferred with sociological, economical and environmental facts because of tourism.

It should be highly considered that the impacts of tourism on natural environment, because the tourism industry is mainly based on environment. Both the natural sceneries and activities related to tourism are bounded with environment. On the other hand geographical factors can be changed due to tourism industry. (Easlin, 1994) It can be pointed out that the environment has been changed due to human acts caused with tourism and still this phenomenon is happening.

Unawatuna is a one of best beach situated in south-western coastal area of Sri Lanka. The beach Unawatuna has a great history as it was highly famous among the Europeans in colonial period with their arrival to Sri Lanka. Not only that this beach is considered as one of the best beaches that selected through international surveys, is much among the people with the interference of tourism on it. This beach is highly engaged with tourism in past as well as present.

Unawatuna and beach tourism

Unawatuna is a one of the famous beach which is got high attention among both local and international tourists. It was owned a leading place among the natural beaches all over the world and it was identified as one of the twelve most attractive beaches by Sir Arthur C.

Clarke. And also Unawatuna beach named as one of the best beach in the world, by comparing lot of beaches in Australia, Maldives like countries, in a program called “The Beach Hour” by Discovery Channel. And also the beach Unawatuna is included in to world’s 100 best beaches by CNN media network. It is expressed that the specialty of beach Unawatuna by categorizing it with world’s famous beaches such as Sun Island of Maldives, Sunrise in Thailand, Rubit beach in Ital, Boulder beach in Cape Town etc.

Semicircular shaped Unawatuna beach is very clean and can be bathed all over the year. Lot of tourists can be seen in Unawatuna beach in the period of November to March. Other than main tourist activities like sun bathing and sea bathing, there are lots of activities. It is a shallow sea without strong sea waves and floating currents. Tourists can experience all activities safely. Many tourists come to *Kudawella* and *Suduwella* in Unawatuna beach daily. (Pathirana, 2010, P37). The beach Unawatuna situated with the guardians of two coral reefs in Indian Ocean. Galapitela Reef and Napolian Reef provide comfortable surrounding for divers. Unawatuna is one of the famous diving locations in Sri Lanka (Ganewatta, 2012, P127). It is a very popular beach for diving, scuba diving, surfing and snorkeling. Whale watching is also a very popular tourist activity among both local and international tourists. Tourists can watch whales after traveling 20 minutes to sea belly by boats.

Unawatuna has a rich bio-diversity and high potential for eco-tourism. Mangroves, Mashas and Corals are main eco-systems of this area. Very rare fish species can be seen in this area due to high density of coral reefs. 36 Species out of 72 endangered fish species are lived in the Unawatuna beach area and around the coral reef Bonavista. Bonavista coral reef which is situated near the Unawatuna coastal area. It was named by Mr. William Gibson in 1976 which means ‘beauty scene’. This beautiful coral reef is a reproductive region for fish. 49% of fish are reported in this coral reef rather than other coral reefs. 25 species out of 36 species of “*PanaaMalu*” can be seen in this region. Rumassala coral reef is also situated near to this coral reef.

Ornithologist Clive Byers said that over 60 species endemic birds can be seen in this area (<http://en.wikipedia.org/wiki/Unawatuna>). These birds are mostly sighted in the remaining marshy area and Rumassala hillock. Lesser Whistling Duck, Asian Palm Swift and Black Bittern are specific from those. Tourists can join with turtle conservation projects in Turtle

Conservation Center which is situated around 3km distance from Unawatuna. Most of tourists are highly attracted for these projects.

Other main attraction of beach tourism is Shipwrecks. Shipwrecks are very important in marine tourism and marine archeology. This is a developing tourism product in present. There are many Shipwrecks around this beach area. Unawatuna beach and sea area is very important location for tourists who are interested in shipwrecks. It can be reached to sea area within 20 to 30 minutes by boat. The shipwreck “Rangoon” which has a history around hundred years. It is a main famous diving area. Unbroken mast of this ship can be seen even today. Other shipwrecks of this area are cargo ship called “Tango” and a ship called “Lord Nelson”. There are diving schools in Unawatuna area. They train divers and guide foreign divers. Jungle beach which is situated 4km far from Unawatuna beach also suitable coastal area for tourist activities.

There are lot of hotels, restaurants and rest houses which are related to industry of tourism. There are lot of guest houses registered in tourist board. And also tourist shopping complexes, boat services and street sellers also can be seen in this area.



(Source: -<https://www.google.com/maps/d/viewer?mid=z-jFo4xY7VLU.kZoAUbscFx2Y&ie=UTF8&t=m&oe=UTF8&msa=0>)

Negative Environmental Impacts of tourism in Unawatuna beach area

- **Problems related to waste products and marine water pollution**

Hotels, guest houses, restaurants and other similar places which have not formal waste product drainage system, evacuate their waste products to water sources. It pollutes both

land water and surface water. This problem is very worst in restaurants near the beach. Such places remove their waste products in to sea. Tourist activities related to sea also pollute the water environment. Water pollution is a one of main component of environment pollution.

There are many waste products remaining in coastal area. Remaining parts of king coconuts and plastic bottles can observe within the beach area. It may mainly happen due to the regardlessness of local tourists. And there is a one canal which carries waste products mixed water. It flows to the sea at the pathway from *WalleDevalaya* to *Yaddehimulla* (Fig no 1). It can be negatively affected on the marine flora and fauna. It may further cause negative impact on tourism also. Polluting marine water will be a risk for tourism. Tourists reject this kind of dirty places. This is harmful for a destination.

(Figure 1) canal seen at a corner of coastal area



Other main tourist activity which can be seen in Unawatuna coastal area is motor boat tours. Tourists use boats for watching corals and for having entertainment. Those motor boats are also a reason for marine pollution. Oil evacuated from boats is harmful for marine environment.

- **Negative impacts on coastal flora and fauna**

Sea area which surrounded the Sri Lanka is rich with coral reefs. But most beautiful coral are seen in Hikkaduwa and surrounding area, Pigeon Island, Pasikuda, Unawatuna and

Tincomalee. Around 68 types of corals can be identified in marine environment of Sri Lanka and around 300 species are lived in these eco systems.

Coast Conservation Department has launching a special program to conserve coral reefs. The main disturbance for this process is the motor boats which are used for tourist activities. Natural growth of corals disturbed by the sticking of the broken parts of motor boats and sticking of the solid colluviums due to high pressure. People use speedy glass bottom boats for watch corals. This incident is a reason for make danger rare fish species who lived in coral reefs.

Food menus which exhibits on boards in front of tourist hotels and restaurants is sea foods. Because tourist's interest of consuming sea foods. Each and every hotel needs the lot of fish to fulfill the request of tourists. It is very bad effects on the fish species. There can see regular fishing activities in Unawatuna beach area. (Fig No 2)

(figure 2) regular fishing activities in coastal area.



International tourist's used high powerful Diana guns for fishing is published in a newspaper few years ago. Accuracy of the news was proved by inquiring the living community of that area. Such incidents were also endangering the rear fish species.

According to Coastal Conservation Department information, tourism is a main threat to the resource of turtles. Due to high population of tourists, heavy noises from beach hotels, beach festivals, strong light ways, and usage of shells of turtles to make fancy items are the threats for the survival of turtles. Turtle conservation projects preserves turtles from these threats.

- **Exceeding carrying capacity and weaknesses of common facilities**

Every eco system has a tolerating capacity. The balance of any eco system is destructed after exceeding of this capacity. The maximum amount of tourists come to Unawatuna coastal are between the period of November and March. Lot of tourists can be seen in the beach in this time duration. Exceeding of carrying capacity makes direct impact on the coastal environment. Increasing of the water pollution, disturbances to the turtles of laying eggs, sound pollution and air pollution will be occurred due to that reason. Certain Coastal areas of some other countries had converted to prohibited zone due to over usage. Coastal area of Israel is a good example.

Though the Unawatuna coastal area is nominated to the world best ten beaches, the common facilities of this area makes visitors unsatisfied. There is no proper place to change clothe after sea bathing, and no place to get good drinking water and less sanitary facilities are some examples for weakness of common facilities. That is a big problem can be seen in this beach are.

- **Visual pollution**

Other than main environmental problems like water pollution, air pollution and sound pollution, visual pollution is a major problem.

Tourist accommodations which were constructed in improper manner mainly cause to visual pollution. Though the Coastal conservation Department had removed the illegal constructions, some parts such as broken parts of foundations can be seen the certain place of coastal area. This kind of constructions are harmful for natural environment. These constructions are called as “eye sore” in tourism industry.

And also inconsistent scenarios and disturbed sceneries for natural environment can be seen in the Unawatuna coastal area. The tables and chairs in the restaurants in coastal area and arm chairs in sand area make lot of disturbance the natural beauty of environment and disturbed coastal area. (Fig no 3)

(figure 3) Disturbed costal area by inconsistent scenarios



Disorganized and misused coastal zone was created due to that kind reason. This visual pollution makes negative impacts not only for the beauty of beach but also it responsible for the reduction of value of geological conditions of beach, making negative impacts on flora and fauna and minimizing the transparency power of sun light which leading the growth of sea grass.

- **Coastal erosion**

Another main environmental problem of Unawatuna coastal area is the coastal erosion. It makes a huge problem with living community. Coastal Conservation Department takes lot of actions to prevent coastal erosion. Coastal Conservation Department constructed a water break from the Unawatuna *Welle Devalaya* as a solution for coastal erosion. (Fig no 4) Though the Coastal Conservation Department made this for the preservation of coastal zone, the living community show that the coastal area of Unawatuna (central) was totally destructed due this water break and the coastal erosion rapidly increased.

(Figure 4) Water break constructed in Wella Devala beach area



The community suggests that it is better to remove this water break and the beach should be reconstructed in proper manner. The organization of Tourist Industry Protection held a picket on 16th of September 2014 in front of the Galle Coastal Conservation Department for this problem. The decision which makes to preserve the coastal environment by Coastal Conservation Department creates lot of problems in present. The coastal zone of Unawatuna (central) is totally damaged in present. It was clearly identified by comparing an image which gets from internet with a photograph which is presently taken. (Fig no 5)

(Figure 5) Differential states of beach area of Unawatuna (central)



Before making the preservation plans for any coastal area, doing a complete study is must. If any construction which make to preserve the coastal area can be harmful for another near coastal area due to the energy waves. This phenomenon had occurred in the Unawatuna coastal area. The water break which made in *Welle Devalaya* to preserve coastal side is caused to the erosion of coastal area of Unawatuna (central). It makes a negative impact not only for coastal area but also beach tourism in this area.

Environmental Impact Management

Environmental Resource Management

Resource management means effective usage of each and every resource on earth in formal manner (Edirisingha, 1998, p62). Environmental negative impacts are rapidly increasing

in present and it is essential to make remedies in that complicated situation. Management can be introduced as a policy planning procedure to adapt this phenomenon.

Two main causes are generated this complicated situation

1. Rapid dwindling of lot of resources.
2. Improper consuming of resources. (Edirisinghe, 1998, p62)

These causes can be seen in tourism industry also. Environmental resources are hugely used and as a result of that, environmental resources are rapidly deducted in industry of tourism. It should be managed these resources in formal way is essential. If not it may be effect back to industry of tourism. Coastal area which is highly attracted by tourists is felt into risk in colossal tourism industry. Tourism is depended on the quality of environment. When a tourist going to select a destination for travel, mainly pay attention to the environmental conditions of the destination. So it should be minimize the negative impacts on environment of tourism and improve positive impacts to preserve the beach which is the most attractive production of tourism.

Legal Frame of Beach Tourism in Tourism Industry

The first ordinance which makes provisions for conservation of coastal area of Sri Lanka is Coastal Conservation Act no 57 of 1981. It can be identified that certain rules and regulations of this act are important to industry of tourism.

Sri Lanka republic has the authority to control, manage, guard and administrate of coastal area. This act decreed the appointment of a director and Advisory Council was established under the control of director. There is a senior officer who was appointment by minister in charge in his ministry is a one of members in this Advisory Council according to the (b) sub statement of 6th statement. According to 7th statement the functions of the Council should be

- i. Advise the Minister on all development activities proposed to be commenced in the Coastal Zone;
- ii. Review the Coastal Zone Management Plan prepared in accordance with the provisions of Part II of this Act and furnish recommendations, if any, thereon to the Director;
- iii. Inform the Director of the need for schemes of work within the Coastal Zone, whenever such need arises;

- iv. Advise the Minister or the Director, as the case may be, on any other matter relating to coast conservation that may be referred to the Council by the Minister or the Director, as the case may be.

As well as 11th statement states that as soon as practicable after the appointed date, the Director shall cause a survey to be made of the Coastal Zone and shall prepare a report based on the results of such survey. Here around 10 fields are widely surveyed and some fields which are directly bounded with industry of Tourism are surveyed. The report shall include an inventory of all structures, roads, excavations, harbors, outfalls, dumping sites and other works located in the Coastal Zone. And also this report shall include an inventory of all areas within the Coastal Zone of religious significance or of unique scenic values or of value for recreational purposes, including those areas most suitable for recreational bathing. 12th statement expressed that how Coastal Zone management plan come in to effect after this survey. Here it is mention that the director should, not later than three years after the appointed date, submit to the Council a comprehensive coastal zone management plan, based on the results of the survey. This plan includes,

- Reservation and management of the scenic and other natural resources.
- Development of recreation and tourism.

A permit behalf by the director is required for all construction activities in the coastal zone. Director has legal authority to temporary repealed or permanently canceled the permit of any constructional activity that will significantly degrade the quality of designated nature area. 1st and 2nd sub statements of 31st statement states that director has legal authority to command to demolish of unauthorized structures in coastal zone.

Suggestions for Preventing and Minimizing the Negative Impacts of the Environment

There are many negative impacts of Unawatuna beach area. If it is not prevented this, Unawatuna coastal area will be destructed and it may be cause the destruction of tourism. Therefore, it is very essential to minimize and prevent those negative impacts as possible.

There are lot of hotels and other tourist facilitating sites in coastal area. This phenomenon is common to the Unawatuna coastal area also. It can be proceeded the concept of ‘Green Hotels’ as there are lot of problems regarding the removal of waste products of hotels. This concept was introduced by Ministry of Economy Development. Here the main attention

goes to manage the Power, Water and Waste products. This concept creates a hotel which saves water and energy in a constructive manner.

Mainly,

- Recycling waste products to make compost by using formal separating manner
- Selecting a working staff who has the training of sustainable usage of resources
- Setting separate storing tanks in kitchen to prevent mixing of waste products and oil, which are evacuated from kitchen

Are proceeded in Green Hotel concept. This is timely important concept which can be applied for hotels and tourist rest houses of Unawatuna coastal area. Many of negative impacts on environment can be minimize by applying this concept.

The main problem which can be seen in Unawatuna coastal area is the negative impacts of motor boats which are used for watching corals and for entertaining programs on marine flora and fauna. This has become a worst problem due to repetition of those tourist activities. Boats with energy source of battery, sail boats and peddle boats can be introduced instead of motor boats are good methods for minimizing this kind of problems. It will be minimized the environmental pollution and as well as it will be a new experience for tourists. And also, it should be prohibited the boat travelling in hypersensitive coral areas is important. It will be helpful to sustainable growth of corals.

It is very important to introduce a formal procedure to evacuate and recycle of gathering colluvium in beach which is removed from hotels. It can be prevented the pollution of coastal area by introducing recycling procedure to tourist hotels and other related business organizations. As an example can make Bio gas and compost. Many times, foreign university students has come to beach areas for volunteer services. An attractive projects can be made to protect the coastal area by joining those students with beach cleaning programs. Very clean and high quality coastal area can be created by using this kind of programs.

Another main weakness in Unawatuna coastal area is, lack of common facilities. It is very important to set up a fully completed and well planned sanitary and infrastructure facilities like, drinkable water facility and a changing room system etc. Quality of beach will be improved through this and it will be helpful to maintain the beach.

The high density of tourists has come to Unawatuna beach area in the period of November and March. Overflow of huge amount of tourists is a one of the main reasons that makes negative impacts on coastal area. Making tourist guiding programs to refer tourists to beach associated cultural, religious and natural attractions such as Unawatuna WelleDevalaya, Rumassala and Unawatuna Meegaha Devalaya is the one of ways to reduce the fixing amount of tourists in beach area. Other than that, this helps to promote those places also. Attractive tourist management can be done by introducing nature trails in Unawatuna beach area.

Coastal erosion is a main environmental impact on Unawatuna coastal area. Tourism industry also has a responsibility for preserve coastal area. Though coastal Conservation Department had made a water break, but it had made a big problem among Government and living community of that area. With the idea of that water break increases the coastal erosion. Responsible organizations such Coastal Conservation Department should study the environment in proper manner to prevent a rising of such complicated problems. When making the decisions it is better to gather ideas and suggestions of related parties such as living community of that area and business community to prevent such complicated situations.

Visual pollution is one of the main problems that make negative impacts on natural beauty of Unawatuna coastal area. Geological beauty helps for the preservation of natural beauty and tourism. It is very important make constructions and use coastal area in a formal way. Lots of countries of the world moves to sustainable development with the preservation of environment. An environmental Impact Assessment (EIA) will be regarded in that case and it helps to measure the amount of negative impacts on environment. It is a suitable procedure to minimize those impacts. EIA history of Sri Lanka is begins with the association of beaches. Act. No. 51 of 1981 expressed that an Environmental Impact Assessment (EIA) will be required in the case of any developmental activity in coastal area. According to the Coastal Conservation Act, EIA is a written document which expresses the significant impacts of any development activity on the coastal environment.

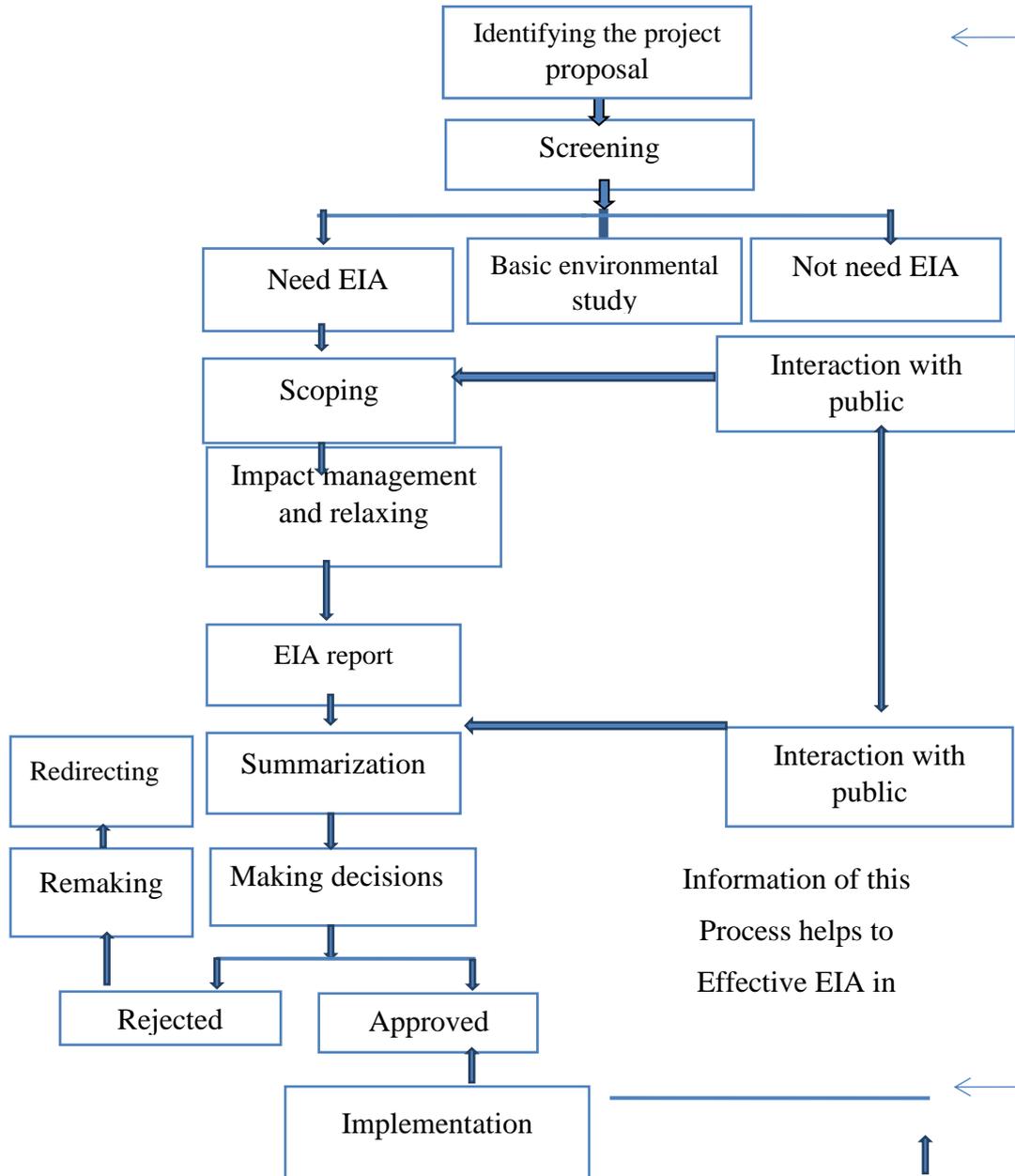
Here all the information of,

- Planned developmental activity
- Preventable and non- preventable implications on environment caused by
- Alternatives which makes minimum implications on coastal area

- Reasons for refusing those implications
- Unchangeable or unusable resource usage of developmental scheme

Should include in this report.

(figure 6) Environment Impact Assessment procedure.



(Source: - Silva & Wijekumara, 2011, p11)

It is essential to make legal ordinance for usage of EIA in any developmental activity. It will be helpful to make solution for informal developments cause to harm environment not

only Unawatuna beach area but also every coastal area. This kind of suggestions can use for preserve environmental negative impacts on beach areas as well as every place related to tourism industry.

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