

Shallow Lake Ecological Systems Help towards Economical Growth through the Eco Tourism (A Case Study in Sandhapan Villu)

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Natural lakes and reservoirs are distributed worldwide and exhibit much variety in their limnology characteristics. From the perspective of eutrophication, thermal stratification, mixing and its ecological relevance, several limnology aspects are of particular importance. Physical factors of importance are size and depth, flushing rate, and patterns of stratification.

Shallow lakes distributed in Sri Lanka are called Villu. According to the grassland ecological system categories, the ecological system of shallow lakes belong to the grasslands of dry zone in Sri Lanka. Shallow lake grasslands cover a total area of 12500 ha in Sri Lanka. Many of the larger shallow lakes are located in the Mahaweli floodplain of the east. Wilpaththu national park also contains several shallow lake ecosystems from the Kala Oya floodplains. Polonnaruwa district is very specialized for shallow lake grassland. There are seven shallow lakes in Polonnaruwa and they are interconnected. Handapana is the largest shallow lake in Polonnaruwa. Its extent in the gross area of Hadapan villuwa is between 900 – 1000 hectares and has become a specialty in the Polonnaruwa Districts due to the sub climax of the soil found there. These wetlands have water throughout the year due to floods or rains. Shallow lakes distinct vegetation and animal habitats have a high contain biodiversity. Especially many human activities are dependent on Sadapan Villu, As well as it has varieties valuable habitat, living for many animals and insects.

The research was conducted to ascertain whether the shallow lake ecological systems would be helpful towards the economical growth. Further to find out whether they could be used for Eco-Tourism. The objective of this research is to investigate into the factors to ascertain as to what extent the shallow lake system contributes towards the economic development of the people living close by. In addition, condition of Eco tourism around the sandapan villu. Finally identify the new methods of promote Eco- Tourisms.

Primary and secondary data sources were used to fulfill the objectives of this study. Methodologies such as interviews and participatory observations were conducted in order to gather primary data. Similarly, secondary data were collected using books, newspaper, magazines, research papers, map reading, and information from internet. As means of analyzing the collected data, maps, tables, graphs, photographs and graphics were use according to the GIS technology and Google Earth.

It was observed through this study that 52% of the people living in and around Sadapan Villuwa are engaged in fresh water fishing. 16% of them are living on agriculture while 25% are attending to livestock farming. 62% of the people are engaged in cattle farming. 24% of them are attending to poultry farming. while 14% are conducting goat farms as their means of living. 3% of the population in the study area are attending to handicraft industry and 4% are engaged in sand mining. 89% of the population living around Sadapan Villuwa.earn their living through the implementation of economic strategies related to Sadapan Villuwa. However, the tourism related activates in connection with these Shallow Lake reaming at a very low level. 92 percentage of the people expressed that tourism activities are not being carried on in this area. 8% of them were of the opinion that tourists arrive for certain aims and objectives but the patronage from foreigners lakes a minus value.

Accordingly, the conclusion of this research is that, people have made use of shallow Lake Ecosystems from ancient times for their daily requirements such as fresh water fishing industry,

dairy and livestock farming, agriculture, handicraft industry etc. Shallow Lake Ecosystems helped to increase daily income for the community. Another conclusion is Shallow Lake ecosystems were not promoted for local Eco- Tourism and exotic Eco- Tourisms.

End of this research came to some findings, as this ecosystem is becoming increasingly important for the daily life of the people, as well as it helped increasing economic growth in daily. However, it not suitable for sustain lively hood. As shallow Lake Ecosystem is a natural creation, it can be recommend introduce for local and exotic Nature based –Tourist attraction. Shallow lake tourist attraction could be identifying as one of the tourism concept of forestry tourism, wild life tourism and eco tourism in Sri Lanka.

There is attraction such as bird's sanctuaries, fresh water fishes, Water body, Asian Elephants among the tourist attraction related to shallow lake ecology in Sri Lanka. Environment friendly tourist promotional activities in the following categories of tourist attraction could also introduce such as paddle Boating, Bird watching, Camping, and ecolodge in the polonnaruwa district with holiday resorts in the precincts of shallow lakes. When achieve value addition towards economic growth prosperity. In addition, should be informed sustain through about increasing economic growth.