

**SHALLOW LAKE ECOLOGICAL SYSTEMS HELP TOWARDS THE
DEVELOPMENT THE ECONOMIC AND SOCIAL BACKGROUND OF
MEN
(A CASE STUDY IN MANAMPITIYA VILLU)**

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Shallow Lake (Villu) is a very specialized ecosystem in Sri Lanka. Villu is the most common name used for Shallow Lakes in Sri Lanka categorized under grassland ecological systems. It becomes clear that the ecological system of shallow lakes belongs to the grasslands of the dry zone in Sri Lanka. Shallow lake grasslands cover a total area of 12500ha in Sri Lanka. Many of the larger shallow lakes are located in the Mahaweli floodplain of the east. The Polonnaruwa district is very specialized for shallow lake grasslands. There are seven shallow lakes here and there are in Polonnaruwa which are interconnected. Handapana is the largest shallow lake in Polonnaruwa. It can store water in 796 ha. Further, this ecosystem has become a specialty in the Polonnaruwa District due to the sub climax of the soil there. These wetlands have water throughout the year due to floods or rains. Shallow lakes are distinct vegetations and animal habitats in the area. Therefore, these areas have a high biodiversity. Particularly, they contribute disproportionately to biodiversity and they offer valuable habitat, resting and breeding grounds as well as nursery areas for many animals and insects. Succulent grass species, tree species and shrub species can be found here. Many human activities depend on Shallow Lakes. Mainly, local populations use water for agriculture and domestic activities. In addition, they use fisheries, sand, wood, flowers, and shrub species. Manampitiya villu is rather small. It has a water storage capacity of about 300ac. It has bio-diversity. It was declared as natural conservation sites after 1906. Hindu population is distributed around this villu. Many human activities depend on this area. The research problem is to ascertain whether the shallow lake ecological systems would be helpful towards the development of the economic and social background of man. At the same time, the other problem is to find out what the adverse impact on Shallow Lake ecological systems will be. The objective of this research is to study the manner in which the shallow lake ecosystems will help the economic and social background of man. Primary and secondary data sources were used to fulfill the objectives of this study. Methodologies such as interviews, questionnaires and participatory observations were conducted in order to gather primary data. Similarly, to collect secondary data, books, magazines, newspapers, map reading, and information from the internet were used. As a means of analyzing the collected data, tables, graphs, maps, photographs and graphics were used according to the GIS Technology and Google Earth.

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. Another conclusion is that Hindu culture was created in relation to the existence of Shallow Lake ecosystems. Other different lands in various other locations should be made available to set up colonies for the communities. As Shallow Lake Ecosystem is a natural creation, it could be introduced for Eco-Tourism too.