

Coastal pollution in Chilaw beach in Sri Lanka

Extended Abstract

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Background

The coastal is a very special environment in that it is where the land, sea, and atmosphere meet. Each of these contributes to the working of the coast, making coast very interesting, and yet a challenging subject to study. In present day, one of the critical phenomena facing mankind is coastal pollution. It can effect to the both social and economic life (Haslett, 2000). Coastal pollution occurs when harmful, or potentially harmful, effects result from the entry into the ocean of chemicals, particles, industrial, agricultural and residential waste, noise, or the spread of invasive organisms. The island of Sri Lanka has a coastline over 1700 kilometres long, more than kilometres to every 40 square kilometres of its land surface. Coasts are generally losing and pronounced indentations are few. Coastal landscapes exhibit considerable diversity. Various sources of the pollution of marine environment were identified and the causes for the same are understood. Many of the pollutants that are let into the sea are directly or indirectly by human activities. Some of these substances are biodegradable, while some are not. Several laws and policies have been taken in preventing marine pollution at the national and international levels. Simulation of oil spills has been done by developing models in some parts of the world. The pollution of the shore is increasing at an alarming rate and to address this problem of pollution in the oceans is a difficult task, and a variety of approaches are urgently required (Dwarakish, 2014). In this paper, the definition of coastal pollution, causes of coastal pollution, its impacts and preventive measures are discussed.

Objectives

Chilaw coast is one of the important coastal water bodies in Sri Lanka which has greater impact on country's economy and environmental value. In this study, the concept of "coastal pollution" is mainly used. Furthermore to study the importance of marine ecosystem, to identify impacts of coastal

pollution, to study causes of coastal pollution and to examine the measure to prevent of coastal pollution.

Methodology

Required data and information related to coastal pollution have been collected from the primary and secondary data sources. Sampling method has been used to collect primary data. Thirty samples have been collected by questionnaire survey. Secondary data has been collected from Marine Environmental Protection Authority report leaflet, newspapers and published books.

Result

Today one of the most dangerous phenomena facing mankind is that coastal pollution. Waste became a major threat for the lagoon and coastal area. Inadequate land for waste dumping and the negligence of the people are the major cause of this situation. Nowadays, the major problem arising in Chilaw area is the garbage problem. There is much garbage in Kurusapaduwa village. There is no particular place to waste garbage due to this reason people are completed to put garbage on the beach side. It causes to the lagoon and the beach people who live in this area have to face this problem. To collect data for this section, the researcher has used a questionnaire for 30 people of selected random sample. Especially, it's has paid attention to disposal methods of home waste. Such as Sea, Lagoon, Tractor municipal, Put into a garbage pit, Pig food and other. It indicates that the situation of lagoon source is very high level of disposal methods of home waste.

Conclusion and Recommendation

Coastal and marine pollution in Sri Lanka has been increasing over the years. The major sources of coastal pollution in Sri Lanka are mostly land based, mainly from development and human activities outside the coastal zone. According to result of the case study has shown that the pollution causes in Chilaw coast have serious negative impact on the human life and coast. There are a lot of bad side effects for people and their functions because of polluting the coastal area.

Defensive planning, consisting of restrictions, should be complemented by positive planning indicating where activities may be located provided that due consideration is given to environmental

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protection. The siting of industrial activities which have to be located in coastal areas should be such as to guarantee a maximum of environmental protection. Free access by the public to the sea front in areas of tourist interest should be ensured.

Keywords: Coastal pollution, lagoon, beach area, environment

References

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Haslett, S. K. 2000. *Coastal System*.