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PAPER

### **Sea Reclamation and its Effect on the Environment of Sri Lanka**

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Today, more than half of the world's population, and its production and consumption activities are concentrated in the coastal zone. It accounts for 10% of all land area in the world and hence if not utilized properly and sensitively, future generations may have to suffer due to after effects. Sea reclamation is the gain of land from the sea, or coastal wetlands *e.g.* for agricultural purposes, industrial use or port expansions. Today, Sea reclamation is normally carried out to increase ports and associated industrial and logistical zones. However, the environmental effects on species and habitats and ecosystem processes are still poorly understood and require further monitoring and assessment. Sea reclamation activities are closely related to coastal defence projects and the process consists of extraction of sand and gravel. Therefore sea reclamation causes permanent changes to that area considering the natural characteristics of the sea.

Being an island nation, sea reclamation projects are very important for Sri Lanka. Today, Colombo South Harbour Expansion Project and the Colombo City Expansion Project are the most important projects in Sri Lanka. Therefore, it is crucial to consider the positive and negative impacts which are paramount for sustainable development. There are a number of responsible institutions available in Sri Lanka such as Coast Conservation Department (CCD), Land Reclamation and Development Corporation (LR &DC) etc. However, these institutions are not fully responsible to take effective action to counter/minimize the environmental effects and to implement required conservation action. Therefore, this research is focused to find out whether a requirement for a joint mechanism against sea reclamation and existing environmental conservation is required.

The proposed study is aimed at finding out existing environmental effects due to sea reclamation. Further, it is time to rethink the role of relevant organisations such as Sri Lanka Navy (SLN), Coast Conservation Department (CCD), Land Reclamation and Development Cooperation (LR &DC) etc. for our sustainable development. This would help to propose a new joint mechanism in order to help in identifying, conserving and in turn, minimizing the environmental effects.