CHAPTER 2
MINIMIZING THE IMPACTS OF COASTAL RECLAMATION TO THE ENVIRONMENT

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ABSTRACT

Coastal reclamation is becoming a popular mode of expanding the landmass for economic activity in Southeast Asian cities. However, this activity comes at a price in terms of its adverse impact to the environment which mainly arises from landfill, sand quarrying and construction process. Current land development scenario has shown that there is no stopping point to coastal development and reclamation. Reclamation on coastal land usually confronted with issues such as marine and wetland pollution, coral reef ecosystem disturbances, aquatic resource depletion, degradation of natural scenery and coastal activities for recreation, housing and industrial developments. These issues will be continuously of great concern to all relevant people especially to environmentalists, planners and developers. To achieve a sustainable development and enhancing the ecosystem service, it is important to understand the process of coastal reclamation and its impacts to the environment so that any negative consequences could be minimized. The paper reviews the subject matter based on the records from local and international publications especially from Department of Environment Malaysia. As such, it highlights findings from the review based on two fundamental frameworks for coastal reclamation which explain coastal reclamation impacts to physical environment and community living in it. The study implicates that knowledge on the coastal reclamation is able to contribute to a better planning and design of built environment.

Keywords: Coastal Reclamation, Built Environment, Environmental Impacts

INTRODUCTION

The economic and environmental value of a coastal area is significant not only as a resource but the safety measure they provide at a coastal zone. Majid (1985) mentioned that coastal zone is important to the livelihood of the community living along the coast or on the lowland closed to the coastal zones. As coastal area is a very sensitive area, any development needs to be highly evaluated for its possible disturbances. In regard to the needs for landmass, coastal reclamation is increasingly popular response to the perceived need for more space in many Southeast Asian cities. According to Goodland (1995), a continuous development should consider three