

**DEVELOPMENT OF SPATIAL DATA BASE
FOR
COASTAL RESOURCE PROFILE (CRP) OF SRI LANKA**

A PROJECT REPORT PRESENTED BY

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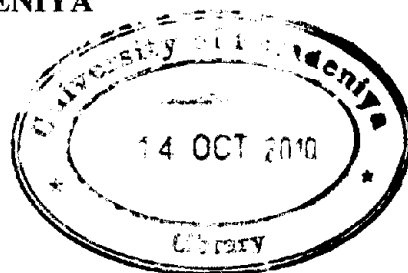
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DEVELOPMENT OF SPATIAL NATURAL COASTAL PROFILE FOR COAST CONSERVATION DEPARTMENT OF SRI LANKA

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A coastal resource profile is a spatial database which consists of all data about coastal resources. Like all other management processes the coastal resource management (CRM) is the cyclic process of planning, implementation and monitoring of resources within the coastal zone. CRM is involved extensive decisions to be made on the timely information of resources. Therefore the duly updated Coastal Resource profile is vital important in CRM.

The system's scope in research and development is considerably broad due to the presence of vast amount of data. At present there is no complete Resource profile in Sri Lanka.

This research work focuses on storing spatial data and non spatial data which are incorporated with Geographic Information Systems (GIS) software. The report proposes a spatial resource profile with a spatial database that solves the problems encountered in manual data. The system facilitates acquiring spatial data, storing spatial data and querying spatial data according to Coast Conservation Department's (CCD's) requirement.

The work presented in this thesis consists of four main stages. First it takes the images of coastal resources and analyzes images by using ERDAS Imaging Software and use senses data to get data about coastal resources. Then data is fed to the spatial resource profile using user friendly interfaces. Finally, querying data according to their requirement and viewing results is performed. Then the created spatial databases are connected with GIS software for further references.

A Visual Basic 6 program was used to create spatial resource profile and tested for its validity. The developed program is capable of storing and querying coastal resources.