

WEB BASED GIS APPLICATION FOR COASTAL ATLAS

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An atlas was needed to disseminate information about coastal ecosystems of Sri Lanka among government and local decision-makers to visually analyze and explore data for coastal and ocean planning activities. An atlas of coastal ecosystems (ACE) will be able fill the gaps between information about ecosystems that are currently eluding. The users of this atlas should be able to access relevant information (as maps or attribute data) whenever they needed. Most Geographic Information Systems (GIS) require at least a slight knowledge about the subject except Web based Geographic Information Systems (Web GIS). From the Web based atlas, maps and layers can be overlaid by clicking some checkbox in the Web page and final maps can be saved in picture format (PNG format). Therefore a Web GIS was proposed.

A Web GIS is a combination of internet and geographic information system as well as it is an online tool to represent spatial information over the internet with the ability of sharing, interconnecting integrated geospatial information through World Wide Web and it allows the public to access spatial information with added functionalities like zooming and querying the information in the form of an interactive map. It holds the potential to make distributed geographic information available to internet users from all over the world without requiring any knowledge about GIS.

The proposed solution was completely developed using basic web programming and UMN MapServer for Windows. For this project, coastal Divisional Secretariat Divisions (DSD) in Puttalam district was chosen. In the final version of this application is facilitating a large number of data layers including vector and raster data, basic GIS functionalities and saving map outputs. As a result of the application, geo-spatial information can be distributed through large number of users.

