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**A WEBGIS APPLICATION FOR SPATIAL IDENTIFICATION OF  
COMMUNITY DEVELOPMENT PROJECTS**

A PROJECT REPORT PRESENTED BY

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To the Board of Study in Earth Sciences of the  
**POSTGRADUATE INSTITUTE OF SCIENCE**

*In partial fulfilment of the requirements  
for the award of the degree of*

**MASTER OF SCIENCE IN GIS AND REMOTE SENSING**

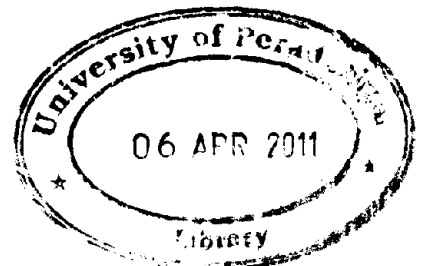
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## **A WEBGIS APPLICATION FOR SPATIAL IDENTIFICATION OF COMMUNITY DEVELOPMENT PROJECTS**

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### **ABSTRACT**

The community development is an essential need for national development. Several projects are being implemented to enhance community development in the eastern province of Sri Lanka. This community development projects are being identified by Government, Non-Government Organizations and community organizations of the beneficiaries.

In the community identification process internal participation, of Government, Non-Government, community based organizations of beneficiaries, are in a very weak level so that sustainability of the project is uncertain.

The local knowledge of the location is important to identify project location. The WebGIS application is providing GIS functionalities through the web. This technology is a suitable tool to integrate the project stake holders.

This pilot WebGIS application has been developed choosing the study area as Town and Gravet divisional secretary division of Trincomalee district with the objective of identifying community development projects with the participation of Public, Government and Non-Government Organizations. Open source software such as Apache Web Server, UMN Map server, Postgresql/Postgis and Phpmascript were used for this webgis application development. In this WebGIS application Government and Non Government institutions enter their project proposals, as well as on going projects and completed project details, Even public also can enter their required project details in this system, as well as they also make suggestion to the proposed project and project locations that are published by the Government or Non-Government Organizations. These project locations can be directly marked in the application. In order to identify the location easily raster

images of the area were used. The suitable project location is selected from suggested project location by the public

This application is performs successfully with the appropriate collected test data. Further the system performance was evaluated through a questionnaire. It shows that the project is overall satisfactory. Therefore this system has achieved the objective. This type webgis application can be used for other purposes such as epidemiology prevention and crime prevention with people participation.