

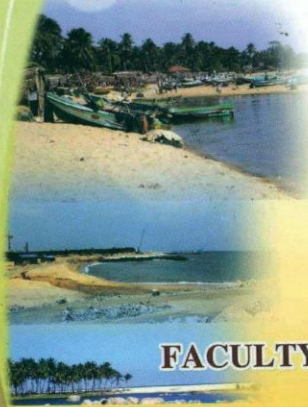


ABSTRACTS

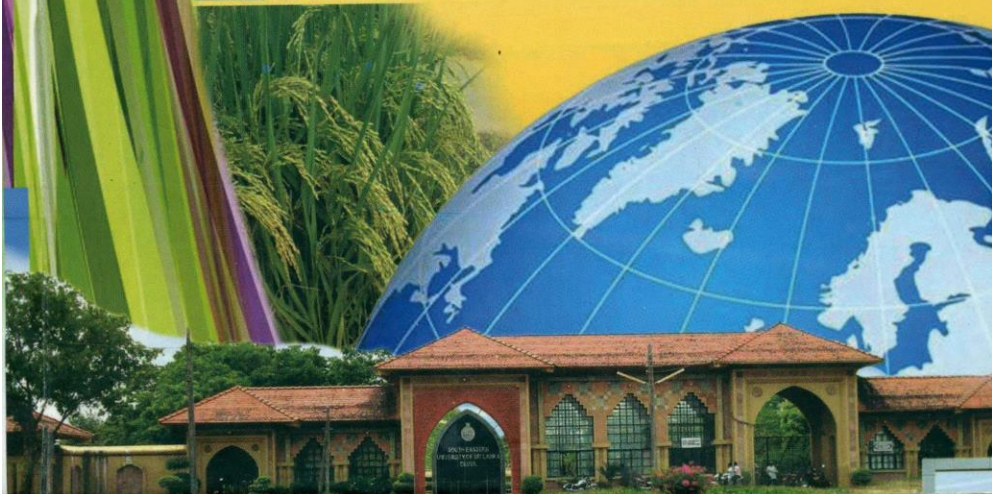
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Case Study on Potentials of Geo-informatics Application in Disaster Management:

Coastal DS Divisions of Ampara District

Mohamed Rinos MH¹

Asia is world's most disaster affected region in the world. Most natural disasters experienced by our region are water-related (either through excess water or a lack of it); typhoons and cyclones, flooding, storm surges, tsunamis, drought and desertification, etc. Further the natural and human disasters affected physical, social and economic development of our country destructed the infrastructure of coastal region of Ampara District.

This case study has been done to highlight the advantages or potentials of geo-informatics applications in disaster management in eastern coastal region from Panama to Neelawana, which examine the issues and impacts of the tsunami through intensive data collection such as spatial mapping using remote sensing imageries, ground data collection with the help of GPSs, questionnaire survey, field visits by environmental officers, and interviews of affected people and stakeholders and from secondary data sources. Generation of maps and the analysis were done in GIS environment using Arc GIS-9.2 software.

Synoptic observations by meteorological satellites of regional cloud patterns, precipitation distribution and other climatological and atmospheric parameters, as well as soil moisture-vegetation indices, in near real time from geosynchronous and polar orbiting satellites, have become important elements in disaster warning, damage assessment and mitigation.

Continuous monitoring, rapid data acquisition, easy accessibility, communication, information sharing & dissemination, Synopticity / bird eye view, accuracy and comprehensive analysis are the prime research issues in disaster management.

The study revealed that the geo-informatics technology can play a crucial role in disaster management provided it is integrated suitably in the decision making process.

Key words: Geo-informatics, Disaster Management, information sharing & dissemination and comprehensive analysis

* To whom correspondence should be addressed: rinosmhm@seu.ac.lk

¹ Lecturer, Department of Geography, South Eastern University of Sri Lanka.