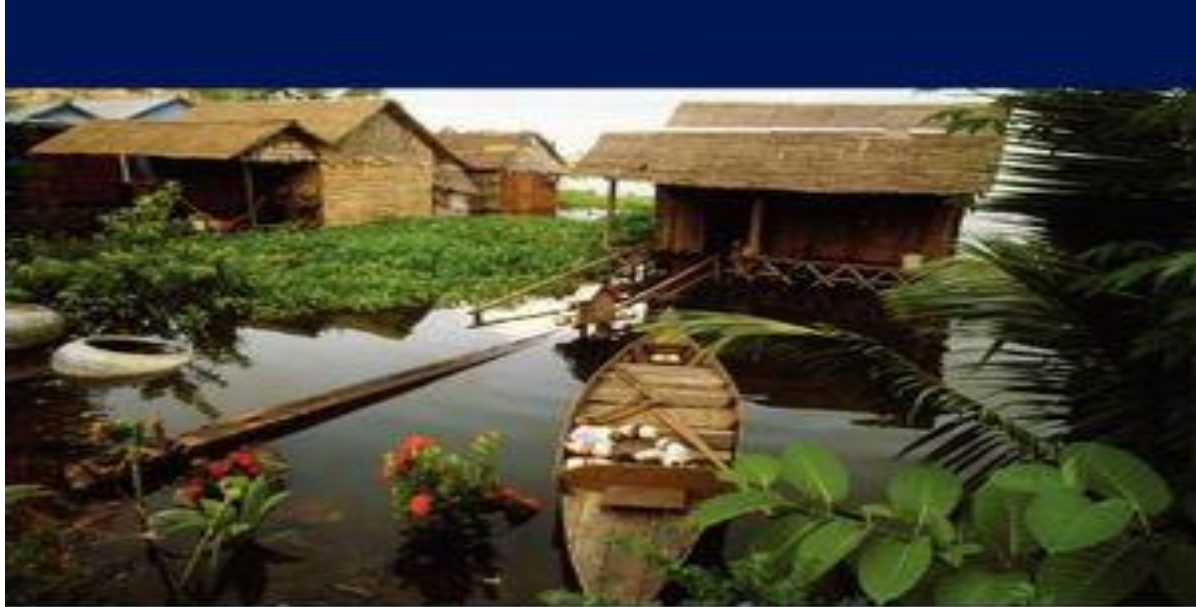


Flood Monitoring Using SAR Data, An Alternative Approach Using Remote Sensing & GIS: A Case Study at Attanagalu Oya Basin in Gampaha District, Sri Lanka



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**Flood Monitoring Using SAR
Data**

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Overview

Remote sensing methods based on optical and medium resolution imagery are limited in their applicability. Although the classification and object extraction is difficult because of the imaging mechanism is quite different from multispectral images, Radar Images find special application in the flood monitoring due to the properties of all-weather, day-and-night and capability of cloud-piercing. The PALSAR data can easily to detect the water surface because of its wave length. This report presents a comprehensive methodology, based on "Discrete Wavelet Transform" analysis for flooded area identification & shows the effectiveness and efficiency of the developed method. The analysis results were timely provided to the central and local governments to make decision for flood disaster reduction. These analysis techniques will help to shed light on these new and existing RS and GIS technologies. Therefore, this study will be especially useful to students and it would guide the city developers, planners, and decision makers how best the remote sensing technology could be used in detecting and monitoring flood.