

# **Incorporating Geoinformatics into Disaster Preparedness and Management Operations: A Caribbean Regional Approach**

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## **ABSTRACT**

The Caribbean region is prone to a wide range of natural disasters, particularly; hurricanes, floods, volcanic eruptions and earthquakes. These occurrences cause significant distress to the people and economies of the region. The region, through the Caribbean Disaster Emergency Response Agency (CDERA) is making efforts to mitigate the socio-economic effects of these disasters and to manage the recovery process. In recent times, efforts have been made to embrace advances in geoinformatics such as, Geographic Information Systems (GIS), Global Navigation Satellite System (GNSS), and satellite Remote Sensing Systems (RSS) that provide increased efficiency in disaster management. This paper reviews trends in the use of geoinformatics for disaster management. It also reviews major challenges and issues facing the Caribbean in the effective adoption of these contemporary technologies. It concludes by advancing the need to develop implementation approaches specific to the Caribbean institutional environment.

**Keywords:** Caribbean, Geoinformatics, Geographic Information Systems, GIS, Global Navigation Satellite Systems, GNSS, Satellite Remote Sensing, SRS, Disaster Preparedness and Management