

IAF EARTH OBSERVATION SYMPOSIUM (B1)
Earth Observation Applications, Societal Challenges and Economic Benefits (5)

Author: Ms. PATRICIA KHWAMBALA
Cape Peninsula University of Technology (CPUT), South Africa, patriciakhwambala@yahoo.co.uk

Mr. Mahommed Yagoub Ibrahim Esmail
South Africa, esmailmoh19@gmail.com

IMPACT OF NATIONAL DISASTER MANAGEMENT PRACTICES ON THE PROGRESSIVE USE
OF SATELLITE AIDED TOOLS FOR DISASTER RESPONSE AND MANAGEMENT IN
DEVELOPING COUNTRIES.

Abstract

Natural and man-made disasters are harmful events affecting both developed and developing countries. Disasters can result in high level of losses in development achievements and may destroy the core beginning of capacities they have accumulated, reducing their prospects of future wellbeing. Earthquakes, floods, landslides, droughts, storms, fire and Tsunamis can destroy pre-existing progressing capacities and affect their functioning and outcomes, including markets, production processes, infrastructure, critical facilities, networks, natural resources and ecosystems. The duration and intensity of current disasters are increasing in several regions across the globe, hence the need to enhance the efficacy of ways of managing disasters. Satellite-aided tools, is one of the ways nations are using for disaster response and management. The international charter for space and major disasters, as a space platform, has helped various nations with earth observation data. The platform has provided 2958 optical and radar data, 2320 optical images, 638 SAR images and 14430 images of US VHR optical satellites between year 2000 and 2016. As of February 2019, the charter has received 596 activations from 125 countries. However, the rate of adoption of the space technologies for disaster management differs across different nations. There is a big difference in the rate of adoption between developed and developing countries. The difference in the rate of adoption is affected by among other things, national policies, skills to interpret the data, economic developmental status of the country and practices of the national disaster management organisations. In this paper, focus will be on the impact of culture and practices in responding and managing disasters and the rate of adoption of satellite aided tools for disaster response and management in developing countries. The knowledge will influence national disaster management organisations to review and reconstruct their disaster management practices to easily accommodate and adopt the use of satellite-aided tools for disaster response and management. Keywords: Disasters, Space technologies, disaster management practices, International charter for space and major disasters.