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Space applications: Sustainable and sensible usage during disaster relief

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When it comes to disaster applications; space applications are the most efficient resources for rescue and relief. It is highly important to utilize these sophisticated applications during the time of emergencies, for effective operations, especially when the region is cut off from the world physically. Recently, South Asia witnessed two major events when space applications were being used for quick disaster response in India (2013) and Nepal (2015). However, the impletion also triggered issues due to lack of effective communications between the data providers and end users. In today's time, there is a serious need for bridging the gap between data providers and end users for sustainable and sensible usage of space applications during disaster relief. This paper contains strategic recommendations emphasizing smooth operations between the operative teams for the effective and efficient disaster response.

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Managing forest through working plan prepared using satellite data and GIS: A case study of Pune forest division, Maharashtra, India

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Forest management in India is carried out as per the guidelines prescribed in the Working Plan of a division, at compartment level which is the smallest management unit. Forest working plan is a written document prescribing the management practices in view of the forest health, general land use, anthropogenic and topographic features in a forest division. The working plan is implemented over a period of ten to fifteen years. At the end of the plan period, the working plan is either revised or rewritten owing to the existing variability both in crop and other conditions. Preparing or revising a forest working plan conventionally is a costly affair. It takes about two to three years to prepare a working plan of a forest division. Satellite data has been found to be of much use to derive thematic maps at desired scale. These maps along with other collateral data can be integrated in GIS. A query can be subsequently be made to allocate area for specific management practice. A working plan thus prepared is cost effective. Realizing the importance of geomatices, Maharashtra Forest Department joined us in revising/preparing the Forest Working Plan for Pune forest division as a pilot project. The present study describes the methodology to derive various thematic maps from satellite data at desired scale and their integration with other collateral maps in GIS. It also elucidates the criteria for defining working circles. For each working circle, a management practice was also prescribed which was approved by the state for implementation.

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