

EARTH OBSERVATION SYMPOSIUM (B1)  
Earth Observation Applications and Economic Benefits (5)

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PLANNING FOR CITY OF MYSORE AND ENGAGING CITIZENS – BENEFITS FROM EO AND  
GIS BASED “INTERACTIVE” SYSTEM

**Abstract**

Mysore Urban Planning Development Authority (MUDA) is an important state level urban authority in Karnataka, India to “Create and improve an economically vibrant, efficient and sustainable basic infrastructure and other facilities in the urban areas of Mysore to enhance the quality of life”.

MUDA has prepared a draft Master Plan 2031 to sustain the growth of city for next 20 years. The core of the development plan is the zoning and spatial regulation map, setting the binding building constraints for each zone type.

MUDA decided to establish a “single-window” GIS mechanism – that addresses EO and GIS-based urban planning and administration in the city. MUDA utilised the services of the Karnataka State’s Remote Sensing Centre – KSRSAC – the nodal agency for all RS and GIS activities in the state of Karnataka. The overall MUDA-GIS addresses the following:

- IRS and high-resolution satellite image based mapping and monitoring of city urban spread and urban landuse – generating a temporal image-based urban growth and change analysis.
- Organising, Updating and Maintaining a systematic and detailed GIS database for MUDA region – including satellite images, generation of about 31 maps, cadastral and land ownership/parcel data integration, geo-tagging of property/taxation/schemes/financial/industrial/demographic/MIS data etc. This has ensured that MUDA always has an updated image and GIS database available and accessible.
- Development, operations and maintenance of a GIS Decision Support System applications software in support of different MUDA activities like property taxation, planning, urban monitoring, urban management, Master Plan generation, Development Plan generation etc. Specific citizen-services GIS applications for e-services for citizens have also been developed. Citizens have been engaged to interact with MUDA on the discussion on 2031 City Plan and also participation in city development process.
- Establish, Maintain and operational experience of MUDA-GIS facility – which host a set of advanced servers, software, applications and the MUDA-GIS database and MUDA GIS DSS application.

This paper details the use of images, creation of a live city-GIS and also of how the 12 GIS application modules have helped the MUDA administration for better governance, administration of the city,

improvement of property tax collection and also engaging citizens in city-planning and approval process. Benefits from the usage of EO images and GIS have tremendously helped the MUDA to bring efficiency and unique performance – a broad assessment of ROI to the city authority will also be presented.