

VILLAGE INFORMATION SYSTEM

Project Investigator : H. Hemanth Kumar, Executive Secretary
 Budget : Rs. 31.60 lakhs
 Funding : DST, GoI
 Duration : 3 years

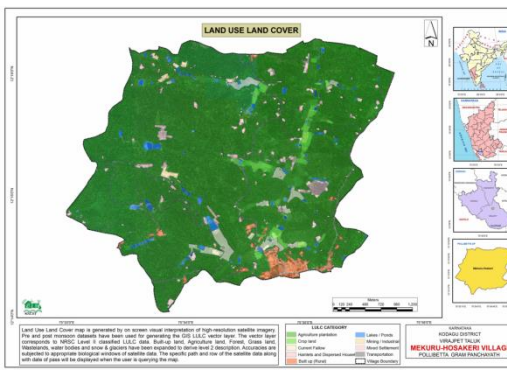
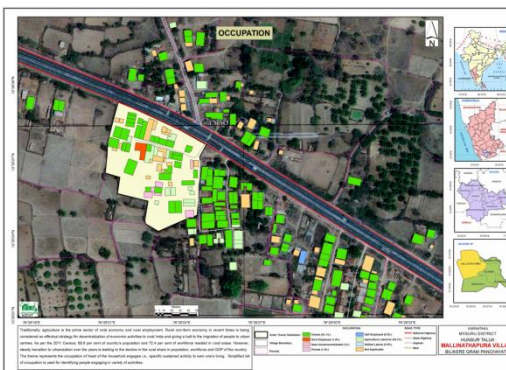
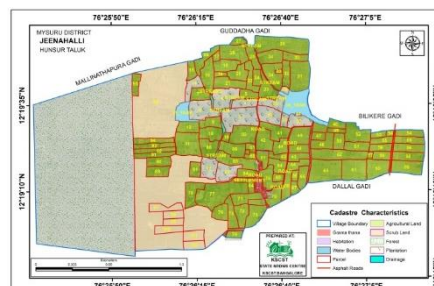
Background:

The concept of Village Information System was identified through a consultative working group meeting held at Andhra University, Vizag during 11-12 November, 2014 coordinated by DST-GOI. Mr. H Hemanth Kumar the PI of this project is a member of the working group. The Village Information System project is envisaged to comprise of spatial data on demography, natural resources, climate, land use land cover patterns and socio-economic aspects etc. to aid and support the decision makers and planners to make informed decision-making at village level. The Council is a partner in DST - GOI funded innovative programme on the development, validation and standardization of data structure and the optimum data requirements for providing village information system at cadastral level.

The Council earlier identified two locations in Karnataka for this R&D project i.e, Awaradi and Hirenandihalli Gram Panchayaths in Bailhongal Taluk, Belagavi district and Bilikere Gram Panchayaths in Mysore districts. Later two Gram Panchayaths Pollibetta and Kote in Kodagu and Udupi respectively were identified. Study area is identified based on contiguity of villages and further the selected villages also represent different agro climatic zones.

Activities:

Under this project the Principal Investigator, Mr H Hemanth Kumar brought out a document along with Dr K Srinivasa Raju for "Preparation of Digital Base Maps from Cadastral Maps and RS data products". This document provides detailed workflow of generating cadastral base maps using existing cadastral maps, High Resolution Satellite Imageries and through field survey. Based on the above the PI document the PI has completed the mapping of five Gram Panchayaths covering 13 villages showing cadastral (parcel/hissa), settlements, assets and soil and water parameters using publicly available high-resolution satellite imageries, cadastral maps, SOI topo maps, GPS/DGPS and extensive filed verification and validation. This guideline has been revised twice to accommodate preparing the digital base maps including unique code for settlements and land parcels guidelines based on filed inputs.



Village Information System

Preparation of Digital Base Maps from Cadastral Maps and RS Data Products

A network initiative of
 NRDCMS Division
 Dept. of Science & Technology
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The PI made a presentation to Pollibetta Gram Sabha on 30th July, 2018 and on 29th Aug, 2018 at Kote Gram Panchayath the benefits of village mapping. The Gram Sabha at both places unanimously approved the mapping of Pollibetta & Kote Gram Panchayath. Finally mapping was completed in both Pollibetta and Kote Grama Panchayath and VIS ATLAS is also printed and published. Geospatial database of these villages are published in the VIS portal launched by IIC Technologies which is funded by DST, GOI.

Key Features

- Scattered habitation, multi-storey & commercial properties
- Seawater intrusion – major issue
- Properties predominately owned by women
- Open wells are the primary source (polluted in places close to sea)
- Availability of Phone/Aadhar/Bank account/TV/LPG/ Electricity/water/sanitation almost 100%
- Majorities houses faces North (> 90%)
- Houses built during past two decades predominately RCC
- Use of Internet is common
- Agriculture/Horticulture is no longer the main source of income
- Migration is common
- Land ownership is minimal



Final reports and maps of 13 villages submitted to government of India. This methodology is under consideration for mapping villages by GoI. Further, villages in Bengaluru urban have been identified for mapping.

