(b) Programmes

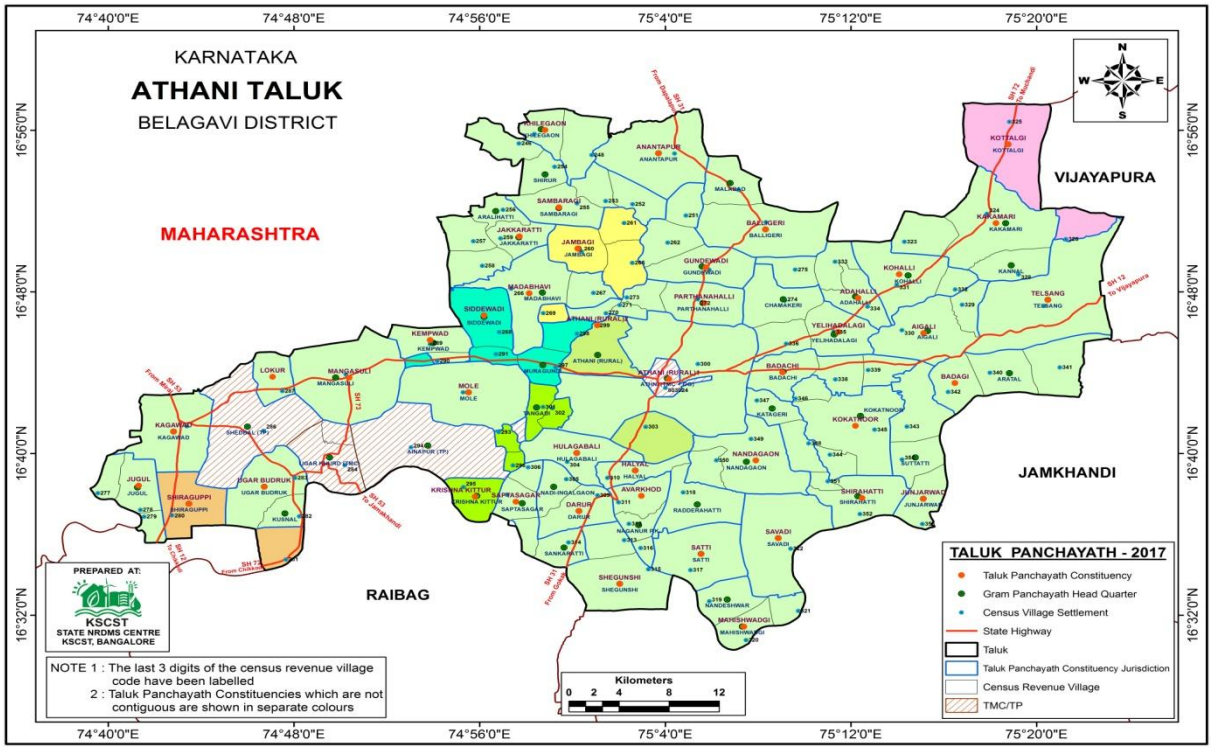
1. NATURAL RESOURCES DATA MANAGEMENT SYSTEM – KARNATAKA PROJECT

Principal Investigator	:	Mr. H. Hemanth Kumar
Budget	:	Rs. 200 lakhs (approx.)
Funded by	:	RDPR, GOK.

The NRDMS centres established during 1993 have been providing geospatial data and services for a wide range of uses since inception and have seen steady growth in the requests for both data and services. The NRDMS program is continuously updating its datasets in diverse fields with an increasing set of application requirements. Application domains include, for example, public health and education, environmental analysis and mapping, transportation, water quality/quantity, watersheds, elections, disaster planning and management, and administration and planning.

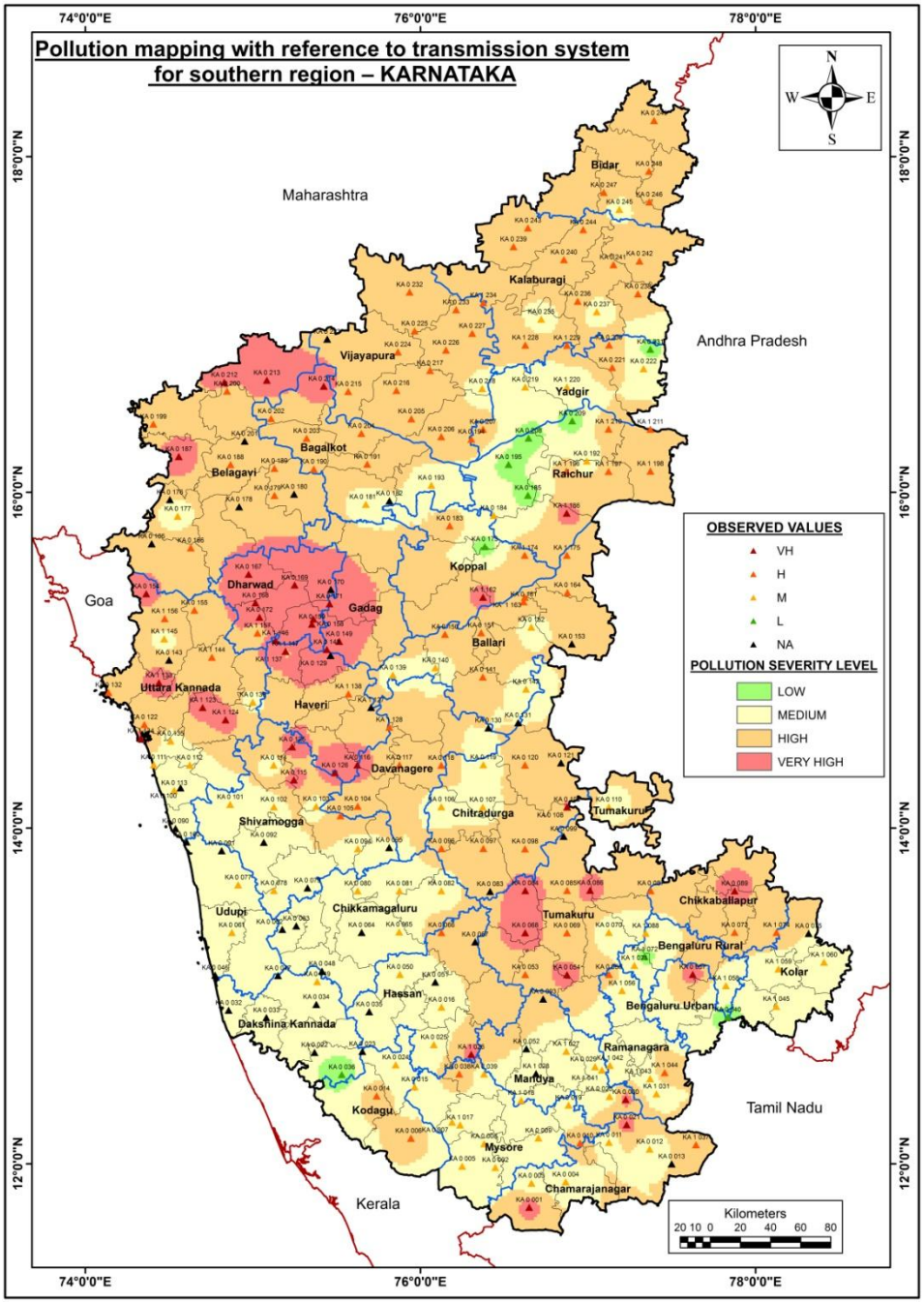
Progress:

- ✓ Training and support to district staff in the preparation of Nazari Naksha by district NRDMS centres as per the guidelines of State Election Commission. Google maps are being used extensively to prepare polling station information along with name & description and geotagged photographs. On an average such maps are being prepared for 2500 polling stations in each district.



✓ The Council published Karnataka Taluk Panchayat Atlas based on the Election Commission notifications and is updated as on August, 2017.

Pollution mapping with reference to transmission system for Southern region (CPRI) - Insulator pollution is considered as one of the main problems of insulators of high voltage transmission lines and substations. The performance of high voltage insulators is affected by the pollution that settles on the insulator surface and results in forming electrolyte layer on the insulator surface under the influence of environment and weather conditions such as moisture and rainfall. This layer extends over time and in some cases, such as in the case of inappropriate insulation design, leads to flashover and system outage. The major consequence of pollution is the reduction of insulation level in high voltage transmission and distribution lines and substations.



Several methods are being used to evaluate the site pollution severity (SPS). The degree of pollution is generally determined by measuring equivalent salt deposit density (ESDD) on the insulators surfaces which are removed from existing transmission lines and/or field testing stations. Non-soluble material deposit density (NSDD) is also measured, especially in case that much dust or sand is expected to accumulate on the insulator surface. Moreover, pollution level or pollution index (PI) is assessed using directional dust deposit gauge (DDDG). These maps are prepared based on the inputs provided by CPRI. The severity classes have been categorized by CPRI using ESDD and NSDD values. The insulators will be designed based on severity classes provided in the map.

✓ A Report in Kannada was published, titled "Utilization of Geospatial Technologies in Panchayath Raj Institutions - 2017". The report has 19 case studies.

District centres have been continuously supporting the NREGA, BRGF, Panchatantra, MPIC, TSP, Lokamitra package, Disaster Management, Nirmala Gram Program, water supply project under Jal Nirmal program ZP website, KVK program etc at district level.