

CURRICULUM VITAE OF H. HEMANTH KUMAR

Name : H. HEMANTH KUMAR
Designation : Fellow & Project Investigator – NRDMS
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Date of Birth : 1st Jan 1964

Educational Qualifications: B.E., M.E. – Bangalore University

Details of service:

Joined as Project Engineer in October, 1985 and presently serving as Fellow and Principal Investigator of NRDMS project.

Areas of interest:

Geospatial technologies, Spatial Data Infrastructure, Watersheds and Minor irrigation tanks, Alternate Building Technologies.

1. Geospatial Technologies:

- a. Project Investigator of Natural Resource Data Management System (NRDMS) - Primary functions involves building up of database, training, technical support and advice to district spatial data centres to provide analysed information to Zilla Panchayath, district administration and other line departments in the applications of GIS in planning & development using geospatial technologies in the form of technical reports, images, pictures, charts and tables; conducting periodical workshops for end users; advice to district authorities in the utilization geospatial technologies; development of DSS for large scale replicability since 1992.
- b. Developed and established a web based Geo-portal and a Clearinghouse for Karnataka State to provide a single window access mechanism to spatial data sources in the State and also to serve as centralized hub for other spatial data generating agencies in the State to support the process of Local Level Planning at the levels of state, district, taluk and village.
- c. Developed Decision Support System (DSS) using GIS on Health and Education using GIS software.
- d. Nodal coordinator for Zoning Atlas for Siting of industries during 1995-96. Zoning of industries was carried out using GIS methodologies.
- e. Member of several district/state level committees on IT policies/ programs/ implementation, energy etc.

2. Housing

- a. Research, development and dissemination of alternate building technologies mainly in the areas of wall and roofing elements.
- b. Design, construction and testing of arch roofing using materials like bricks, tiles, Ferro-cement and concrete.
- c. Provided guidance engineering students in testing soil-cement bricks and load carrying capability.
- d. Trained more than 500 engineers and architects in alternate building technologies.
- e. Provided technical consultancy to various government organizations, NGO's and public in construction pertaining to alternate building technologies.
- f. Constructed several buildings using alternate building technologies.
- g. Published reports on design and construction of beam and brick panel roofing for engineers and architects.
- h. Technical consultant to Karnataka Land Army Corporation during 1992-94.
- i. R&D on alternate construction materials to establish its suitability for fine aggregates' in concrete and mortar.

3. Training of users in geospatial technologies:

- a. Conducted district level training programs in all the districts of Karnataka under NRDMS program for senior official of line departments in geospatial technologies to create awareness among planners and administrators in the utility of GIS in 2007 and 2009.
- b. Trained district officials in Resource mapping for selected districts in 2009 under the project "Resource mapping for e-governance in Panchayaths - Suvarna Gramodaya program" during 2008.
- c. Trained senior officials of several states at IIT, Kharaghpur on the concepts and establishment of spatial data infrastructure.
- d. Training conducted on spatial data infrastructure and geospatial technologies to district NRDMS project personnel.
- e. Organised Arc-GIS, Karnataka GeoPortal training to NRDMS project personnel.
- f. Lectures: Engineering colleges & NGOs.

4. Publications/Training/Other Activities

- More than twenty Conference Papers and several popular lectures in conferences/workshops held by ASCI – Hyderabad, ISEC – Bangalore, RRSSC – Bangalore, IIM – Bangalore, IIT – Kharagpur, IIT – Bombay, IIRM-Ahmedabad, GIS Development, Map India, NSDI,NIAS – Bangalore etc.

- Published reports on “Status of tanks in Chitradurga district” and “Rejuvenation of minor irrigation tank – a case study”.
- Trained in Germany on “Environmental planning” using GIS and geo-spatial technologies.
- Participated as Indian Delegate to the Innovation Summit held at Carleton University, Ottawa, Canada on 20-25 June 2011 under DST's Indo-Canada Cooperation Programme.
- Monitoring, Evaluation, Learning and Documentation of baseline surveys, concurrent monitoring, impact assessment, biophysical parameters and thematic evaluation documentation in the selected sub watersheds distributed in 7 districts in Belgaum division under the Integrated Watershed Management Programme (IWMP) of Watershed Development Department, Government of Karnataka. Initiated in 2011.
- Conducted workshop/training for Oman ministerial staff at Muscat on geo-spatial technologies.
- Guided 15 post graduate engineering/science students in spatial data technologies since 2005.
- Conducted course on GIS for the eGovernance Program participants at T. A. Pai Management Institute, Manipal during June 6-11, 2011.

5. Member – Expert/Technical Committee:

- a. Expert committee member – National Biodiversity Authority (2009-10).
- b. Technical Committee Member - Department Biotechnology, GOI. (2010).
- c. Coordinator - Conference on Infrastructure, Sustainable Transportation and Urban Planning at Bangalore (2010).
- d. Technical Committee member – Kerala Spatial data Infrastructure, Government of Kerala (2010-11).
- e. Technical committee member – Ministry for Human resource Development, Government of India (2010-11).
- f. Coordinator – Energy Efficient Building workshop series (2010-13).
- g. Organising Secretary – NSDI 11 event at Bangalore (2011-12).
- h. Technical Committee member – Haryana State Remote Sensing Application Centre, Haryana (2012).
- i. Technical Committee member – UAS, Bangalore (2012).
- j. Technical Committee member - Evaluation of BBMP data, Government of Karnataka.