

Application of Space Technology at Cadastral Level and Land Resources Management with Special Reference to Bhoomi Sena Project of Uttar Pradesh, India

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Abstract : Agriculture is the backbone of developing countries of Asian sub-continent like India. Uttar Pradesh is the most populous and fifth largest State of India. Total population of the state is 19.95 crore, which is 16.49% of the country that is more than that of many other countries of the world. Uttar Pradesh occupies only 7.36% of the total area of India. It is a well-established fact that agriculture has virtually been the lifeline of the State's economy in the past for long and its predominance is likely to continue for a fairly long time in future. The total geographical area of the state is 242.01 lakh hectares, out of which 120.44 lakh hectares is facing various land degradation problems. This needs to be put under various conservation and reclamation measures at much faster pace in order to enhance agriculture productivity in the State. Keeping in view the above scenario Department of Agriculture, Government of Uttar Pradesh has formulated a multi-purpose project namely Bhoomi Sena for the entire state. The main objective of the project is to improve the land degradation using low cost technology available at village level. The total outlay of the project is Rs. 39643.75 Lakhs for an area of about 226000 ha included in the 12th Five Year Plan (2012-13 to 2016-17). It is expected that the total man days would be 310.60 lakh. An attempt has been made to use the space technology like remote sensing, geographical information system, at cadastral level for the overall management of agriculture engineering work which is required for the treatment of degradation of the land. After integration of thematic maps a proposed action plan map has been prepared for the future work.

Keywords : GPS, GIS, remote sensing, topographic survey, cadastral mapping

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