

## **DECLINING TRENDS OF IRRIGATION TANK CAPACITIES IN SRIKAKULAM DISTRICT, ANDHRA PRADESH - A STUDY USING RS & GIS APPLICATIONS**

**YERRAMSETTY ABBULU<sup>1</sup> & G. V. R. SRINIVASA RAO<sup>2</sup>**

<sup>1</sup>Associate Professor, Department of Civil Engineering, AUEC (A), Andhra University,  
Visakhapatnam, Andhra Pradesh, India

<sup>2</sup>Professor, Department of Civil Engineering, AUEC (A), Andhra University, Visakhapatnam, Andhra Pradesh, India

### **ABSTRACT**

The space technology is useful in generating information on natural resources which is a pre-requisite for their optimum utilization and effective management. Remote Sensing is one such space technology which can aptly be utilized for the study of Land use/Land cover (LU/LC) patterns and various other factors related to irrigation studies. Hence, an attempt is made in the present work to study the minor irrigation under tanks in Srikakulam district of Andhra Pradesh using Remote Sensing and GIS applications. The Topo Sheets, IRS-P6 LISS-III satellite data of the study area during Khariff, Rabi and Zaid seasons are used to develop LU/LC maps and for the determination of tank capacities. A comparative study of the present capacities of the tanks obtained from the imageries with that of original tank capacities is conducted. It is observed that the capacities of tanks in most of the mandals of the district are reduced to 2/3<sup>rd</sup> of their original capacities.

**KEYWORDS:** Land Use/Land Cover Patterns, Toposheets, Khariff, Rabi and Zaid Seasons