ABSTRACT

This study deals with the technique of remote sensing and how far it helps in the rapid study of geographical phenomena especially land use within a very short time and accurate manner. It evaluates how well data from the Landsat - Multispectral Scanner (MSS) could be used to detect, identify and delineate land use features within the Andhra Pradesh State. The main objective was to prepare a small scale land use map from satellite imagery showing the broad distribution of land use patterns to serve as a base for monitoring land use change.

INTRODUCTION

Till now land use studies have been carried out by conventional ground method, old records, census and aerial photographs. Field observation and interpretation of aerial photographs, which have become routine, will continue to be of importance for work of a local nature, but for mapping large areas of terrain Landsat imagerys may be used in future.

Land use mapping has always been a time consuming and expensive process. Often, when the study has time limitation, the planner’s and specialist in various disciplines are forced to use existing data on the land use which is usually outdated because of the pattern of available resources and demand for resources are constantly changing.

We presently have maps of land use of the area and have had such maps for some time. These maps were prepared using questionnaires, census records, cadastral maps, door to door survey and field data of sample areas. Considering the most recent land use map of India, which appears in the Irrigation Atlas published in 1975, compilation of the data, cartographic work and publication took about 10 years. So, the map is based on what the situation was about 10 years before its publication. Moreover, some of the data used were at least 20 to 25 years old by the time of its use and inadequate for future mapping. To save time, planners were compelled to generalise information and fall back on less accurate methods of data collection.

Land use is a matter of continuous growth and change in pattern. For economic development of a region, planners need up to date information which can only be obtained quickly, economically and accurately through remote sensing techniques.

STUDY AREA

The state of Andhra Pradesh, the fifth largest state of India lies between the latitudes of 12° to 20° N and longitudes 76° to 85° E. It has an area of about 276,754 sq.km.