NRSC/ISRO Ver.1

## NATURAL RESOURCE CENSUS LAND USE LAND COVER DATABASE FOR DISSEMINATION THROUGH BHUVAN

## **INTRODUCTION**

Earth observations from space platforms play a crucial role in generation and dissemination of information on LULC pattern in a timely and reliable manner providing vital inputs required for optimal land use planning. The evolution of Indian remote sensing program over the past two decades, providing a variety of remote sensing- based solutions for national development, is an apt and timely national initiative. Some of the important projects of ISRO/DOS under the theme of LULC are given in the Table -1.

Table – 1: Major Land Use Land Cover Mapping Projects carried out by ISRO / DOS

S.NO.	PROJECT NAME	YEAR
1	Nationwide Wasteland Mapping	1985, 1986 – 1999, 2003, 2005-06,
		2008-09, 2015-16
2	Land Use Land Cover Mapping for Planning based on Agro-Climatic Zone	1989 – 1990
3	Nationwide Wetland Mapping	1995
4	Urban Sprawl of Million Plus Cities	1988 – 1990
5	Land Use Land Cover Database for Zoning Atlas	1999
	for siting of Industries	
6	Urban Information Systems (BMR; NCR; MMDA;	From 1990 onwards at different
	AUDA, HUDA,NCRPB etc.	times
7	Land Use Land Cover Mapping using AWiFS data	2004 onwards at one year of interval
8	Integrated Mission for Sustainable Development	1992-1998
9	Integrated Resource Information for Desert Areas	2002
10	Land Use/Land Cover Mapping on 1 : 50,000 scale	2005-06, 2011-12

A project on National Land Use/ Land Cover Mapping on 1:50,000 scale (Second Cycle) using multi-temporal Resourcesat-2 terrain corrected Linear Imaging Self Scanning Sensor (LISS) -III data was taken up by DOS, under Natural Resources Census (NRC) Project of National Natural Resources Repository (NRR) Program. The project has been accomplished with the active participation of various state, central, universities and others partner institutes. The land use/land cover classification scheme of 1:50,000 scale consists of Level-I: 8 classes, Level-II: 31 classes and Level-III:

54 classes (NRSC, 2012). This classification was finalized after elaborate discussions within the DOS and various Central/State government departments/institutions. The project had been completed and atlas (NRSC, 2011) was released for the use of various departments central, state and others. LULC data is regrouped for web users with an emphasis on land cover classes as given in Table - 2. This has been undertaken keeping in view of volume of data, faster access to database and visualization.