



The purposes of this study are: (1) to better understand the impact that accelerated urban sprawl is having on the city; (2) obtain knowledge of the interrelationships between urban planning, zoning, and land use; (3) Most land use studies that are available have been made on cities of more than @ the scale of 50,000, this study will attempt to acquire some knowledge of land utilization on a small city of less than 10,000; (4) acquire first hand experience in compiling a land use survey and map; and (5) to draw some conclusions concerning land use in small cities and large cities

Level 1	NLCD	Maine LCD
Developed	High Medium Low	High BuiltUp Medium BuiltUp Low BuiltUp
Agriculture	Cultivated	Kharif Crop Rabi Crop Multi Crop
Forest	Deciduous Forest EverGreen Forest Scrub Forest	<ul> <li>Deciduous Forest</li> <li>EverGreen Forest</li> <li>Scrub Forest</li> </ul>
Plantation	Plantation Swamp Grassland	<ul> <li>Plantation</li> <li>Littoral Swamp</li> <li>Grassland</li> </ul>
Water	Waterbodies max Waterbodies min	Max lavel

Landsat 7 Enhanced Thematic Mapper (ETM), Landsat 8 Operational Land Imager (OLI) and Thermal Infrared Sensor (TIRS) images obtained in 1991, 2005 and 2014 with maps, and field survey data were used to classify land use and land cover (LULC) changes over 23 years and predict soil erosion risk.

Based on field check data, the overall classification accuracy was accessed from random samples that resulted as 80% for 1991, 83% for 2005 and 86% for 2014. The study discovered that rice field and rangeland increased by 1.12 and 2.81%, respectively, deciduous forest, and on the other hand, it decreased by 8.28%. GIS analysis identified the potential risk areas of soil erosion as 46,431 ha (0.63%) at very high risk.

