

Urban Land use Classification

M.Sc. Remote Sensing and GIS
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Introduction:

Land is a valuable natural resource utilized for cultivation of crops, settlements of population, creation of Dams and reservoirs, development of industries and maintaining forests, and Wildlife. Any kind of permanent (or) cyclic intervention of land is called as landuse.

It is the surface utilization of a vacant or developed land for a clear purpose, at a given time.

The utility value of a land depends on various geographic factors. The type of land use depends on the location, availability of water and soil, moisture soil, fertility or proximity to other human activities. A large number of land use types and categories have been worked out by various researchers of different disciplines.

The classification of a land into its various uses and how these uses change over a period of time provide the background information needed for planning land resources.

The basic level of categorization separates them into

Two major groups as:

- a) Urban Landuse and
- b) Rural Landuse

Land utilized for residential, commercial, industrial, institutional, transportation, communications and general utilities all belong to the Urban Land use categories.

All other land not classified as urban, including agricultural land, farmland, cropland, rangeland and forest land belong to the Rural Landuse categories, in general.

In this module, let us see some of the essential urban Landuse categories. Urban development is a major mission of every city of every developing nation in the world. There is an unprecedented increase and expansion of urban sprawls due to concentrated amenities and facilities in many major towns and cities.

Classification of Landuse:

At Continental Levels, Landuse classification is attempted based on the agro-climatic conditions, topography and soil types. Another major factor involved in this classification is the rainfall. Based on meteorological parameters, Agro-meteorological regions are also classified for analyzing the rainfall intensities and drought.

The pattern of landuse of a country at any time is determined by its physical, economic and institutional framework.

Urban Landuse is broadly classified into the following classes

1. BUILT-UP URBAN
 - a. Residential
 - b. Commercial
 - c. Industrial
 - d. Recreational
 - e. Public/Semi Public utility lands
2. RURAL BUILT-UP
3. RURAL -AGRICULTURAL
4. Vegetation-Forests & others
5. Transportation & Communication

6. Water bodies
7. Wastelands
8. Open spaces

Major Urban Land Use Categories

<p>Built-Up Land-Urban-</p> <p>a. Residential/ High Density/ Medium Density Residential/ Low Density Residential</p>	<p>High rise apartments/Flats</p> <p>Medium rise apartments/Flats</p> <p>Low rise apartments/Flats</p> <p>Low rise row houses</p> <p>Low rise Group houses</p> <p>Slums/Clusters</p>
<p>b. Commercial</p>	<p>Retail & General Business</p>

Typical Types of Residential Communities



Typical Types of Residential Communities



**Socialized/
Economic Housing**

Types of Commercial Centers



Commercial Strips

	Community Centre
	Wholesale & Warehousing
	Major Shopping Centres / Malls
	Major Hotels
	Parking Area
	Market Yards
	Exhibition halls
	Petrol bunkers
	Banks

c. Industrial	Service Industry
	Light Industry
	Extensive Industry
	Heavy Industry
	Hazarders Industry
d. Recreational	Parks/Gardens
	Stadium
	Playground
	Gold Course/Race Course
	Zoo
	Botanical Garden

	Historical Monument/Fort
	Planetarium
	Major Fountain Hall
	Swimming Pool
	Major Cinema Halls/Theatres
	e. Public/and Semi- Public
Cantonment	
Major Hospitals	
Cremation/Buried	

	Ground
	Social/cultural Centre
	Religious Places
	Major Government Offices
	Petrol/Gas filling Stations
	Police Station
	Fire Station
	Circuit House
	Electric Substation
	Jail

	Water treatment Plant
	Landfill / Dumping Ground
	Electric Power Plant
	Sewage treatment Plant