Subject: Environmental Science (Hons.) Semester/Year : 2<sup>nd</sup> Semester/1<sup>st</sup> year Name of the teacher: Dr. Arijit Chatterjee Name of Topic: Land Use Pattern

# Land Use Pattern

#### **Definition of Land**

Land as a physical entity in terms of its topography and spatial nature thus including natural resources like the soil, minerals, water and biota existing on the land. These components provide a variety of services essential to the maintenance of life-support systems and the productive capacity of the environment.

# **Functions of Land**

- 1. Production Function
- 2. Space function for socio-economic and infrastructural development
- 3. Human settlement space function
- 4. Biotic environmental function
- 5. Climate regulative function
- 6. Hydrologic function
- 7. Waste and pollution control function
- 8. Storage function
- 9. Archive or heritage function

## **Classification of Land Area**

- Land Cover Classification physical appearance
- Agro-Climatic / Agro-Ecological Classification technical attributes like soil profile, soil texture, agro -climatic conditions etc.
- Land Use Classification purpose for which it is being used

#### Land Use Classification

To measure land and its impact on ecosystem land use classification is required

The traditional nine-fold land use classification

**UN ECE classification** 

## **Nine-fold classification**

- 1. Forests
- 2. Land put to non-agricultural uses
- 3. Barren and unculturable land
- 4. Permanent pastures and other grazing lands
- 5. Miscellaneous tree crops and groves, not included in the net area sown
- 6. Culturable waste
- 7. Fallow land, other than current fallows
- 8. Current fallows
- 9. Net area sown

#### **UN ECE Classification**

Economic Commission for Europe (ECE) released a Standard Statistical Classification of land use mixing some categories of land cover and taking into account additional economic activities like mining, industrial land, land used for public services, etc.