# 6. LAND USE



### Try this.

- Draw a sketch of your house. On this sketch show the following with proper directions.
- kitchen, bathroom, courtyard, living room, bedroom etc.
- After the sketch is ready have a discussion on the following points. (A) Why do we need to fix a place for everything in the house? (B) What would happen if there were no fixed places?

## Geographical explanation

You may have realised that there is a fixed place for everything. If this is not done the house appears disorganised. There will be difficulties while moving around the house.

Even if these arrangements are changed there will be confusion for a few days. The land available in your house is used for different purposes.



## Try this.

This activity has to be performed by all the students together.

Commercial Residential Open ground Entertainment

Industry Transport Agriculture Institute Mixed Land Use

- Prepare boards with these names. Let the students stand in a circle holding these boards.
- Now prepare chits with the following names and put them in a box. shop, garden, bank, utensil factory, school, bungalow, residential building, mall, hockey field, cinema house, hospital, bus stop, port, airport, swimming pool, badminton court, reserved forest.
- Each student will pick up one chit and as per the land use category will stand close

- to the person holding the respective board. Once the activity is completed, have a discussion based on the following points.
- > Why did you select the particular board
- > Explain how you will use this chosen land.
- Correlate our needs with land use.

### Land Use:

## **Geographical explanation**

Land use is the way or purpose for which land in a region is used. The interaction between geographical factors and man have resulted in land use. Land use undergoes changes with time. As man's needs have increased the use of land for different purposes has also increased. Mineral rich land is used for mining. Fertile plains are used for agriculture.

### Types of Land Use:

Rural Land Use: In rural areas, agriculture is the main occupation. Agro based activities are also common in rural areas. This influences the location for the rural settlements. Hence these settlements are located close to the agricultural fields and forest areas. The settlements of miners are close to the mining areas while fishermen's settlements are near the seashore. In rural areas the availability of land is more and the population is less, hence population is sparse. In rural areas the extent of residential areas is less. Land use in the rural areas can be classified in the following manner.

**Arable Land:** This is the land under cultivation. Normally this land is under individual ownership. This land can be classified as per the ownership of the land and types of agriculture.

**Fallow Land**: This is agricultural land which is temporarily not in use. In order to improve the fertility of the soil, the farmer does not use a part of his agricultural land for one or two seasons.

**Forest Land :** A demarcated forest area is also a type of rural land use. From this area forest products like firewood, gum and grass are obtained. Forests comprise of large trees, bushes, creepers and grass.

**Grassland/Pastureland**: This land is under the ownership of the village Panchayat or the government and is used for grazing purpose. This land belongs to the entire village. Very little grassland is under individual ownership.

**Urban Land Use:** There has been an increase in urban settlements in the twentieth century. In urban areas land is used for different purposes. It is necessary to make maximum use of the land. In urban areas with reference to population the land is limited. Therefore the distribution of population is dense. Urban land use can be classified in the following manner.

Commercial land use: Some parts of cities are only used for commercial purposes. In these areas there are many shops, banks and offices. This has given rise to the concept of the Central Business District. (CBD) For example. In Mumbai, the Fort Area or the BKC (Bandra Kurla Complex)

**Residential land use:** Here the main land use is for residential purposes. In this area houses and residential buildings are included. Since population is more in the urban areas, residential land use has increased.

Transport Land use: In urban areas, transportation facilities are important for the movement of goods and people. For this purpose different types of transportation facilities are found in cities like public bus stops, railway lines, metro, monorail, commercial vehicles etc. In addition to this, the number of private vehicles is also large. Hence in cities roads, railway lines, station, petrol pumps, transport depots and vehicle repair centres occupy large areas. These are included in the transport land use.

**Public Utility Area:** For the various needs of the population some services are provided by the local governing bodies, state government or central government. The area under these services comes under this category eg. hospitals,

# Give it a try.

Take a map of your surrounding area and using different colours, show the land use of your area.

post offices, police stations, police grounds, schools, colleges, universities etc. The land use under the category is important. These services diffuse the tensions caused due to burgeoning population.

**Recreational land use:** In cities some areas have to be specially reserved for the entertainment of the population. The use of such spaces is mainly for fields, gardens, swimming pools, theatres etc.

**Mixed land use:** In some areas we find all these uses together. Such areas are said to have mixed land uses. Eg. residential areas and entertainment areas.

On maps special colours are used to indicate such areas. Red-residential, Blue-Commercial, Yellow- agricultural and Green- Forest areas.

### **Transitional areas and Suburbs:**

Rural settlements start outside the boundary areas of urban settlements. But the intermediate area in between is called the transitional area. In this area there is a blend of rural and urban land use. In these areas land use is of a mixed nature. In this zone cultural activities are also of a mixed type. Over time this area is converted to an urban area and these regions become

# Think about it.

If land is left fallow, or is not in use, then can it be termed as a kind of land use?

suburbs eg. Bandra, Bhandup etc. are suburbs of Mumbai city.

**Planned Cities**: After the industrial revolution, urbanisation occurred on a large scale throughout the world. Since this urbanisation was not wellplanned, cities began to grow in a haphazard manner. Because of employment opportunities there, a large scale migration to cities occured. As a result, the availability of land is always a serious problem in cities. A lot of diversity is visible in the landuse of cities. Limited land, varied landuses and burgeoning cities resulted in the thought of having planned cities for the future. Even before a city grows, its land use is pre-determined and a planned layout is prepared. Accordingly, the cities are developed. Singapore, Seoul (South Korea), Zurich (Switzerland), Washington D.C. (USA), Brasilia (Brazil), Chandigarh, Bhubaneswar (India), etc. are all examples of planned cities.

# Can you tell?

Examine the pie charts showing land use in figure 6.1 and answer the following questions:

Land use in Japan 2011

Land use in India 2011

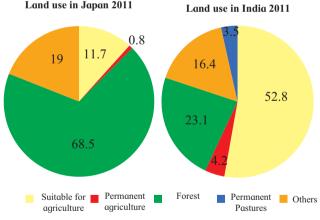


Figure 6.1: Land use in Japan and India (%)

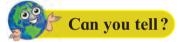
- In which country is the land under forests more?
- In which country is the land under agriculture more?
- Considering the two questions above, how will you relate the physiography and climate of India and Japan with their respective land uses?

- Correlate their land use and development.
- Which land use is found in Japan?
- Considering the land use in both the countries, make a list of factors affecting the land use.

# Geographical explanation

You may have realised that in different countries, the percentage under various land uses differ. Based on the availability of land the population of a country, its quality and needs, land use types vary. In Japan for example the percentage of land under forests is more and the percentage of land under permanent agriculture is very low. As compared to that in India the percentage of land under forest is low while the percentage of land under permanent agriculture is high.

### Ownership of land and ownership rights:



- What kind of land use is shown in Fig 6.2 and Fig 6.3?
- Can you tell in which area the property is located?

# Geographical explanation

### **7/12 Extract:**

Under land utilisation we have seen how land is put to different uses. The ownership of land could be private or public. Land registration in this context is done under the revenue department of the government. All the information about the registered land can be obtained from the revenue department in the 7/12 extract. Let us get some information about this.

One can get to know under whose ownership the land is from the 7/12 extract. The extract is a record kept by the public revenue department. Serial Number 7 and 12 are distinctive sections of the law pertaining to the ownership of land.

The seven by twelve extract is a kind of mirror about the land. This is because just by reading the extract sitting in one place one can

### गाव नमुना सात

### अधिकार अभिलेख पत्रक

( महाराष्ट्र जमीन महसून अधिकार अभिलेख आणि नोंदवहया ( तयार करणे व सुस्थितीत ठेवणे ) नियम, १९७१ यातील नियम ३, ५, ६ आणि ७)

गाव :- वडडिरे

जिल्हा :- अहमदनगर तालुका :- पारनेर ओगवटदाराचे नांव गर कमांक त भुधारणा पद्धती उपविभाग 757 भोगवटादार वर्ग शेतीचे स्थानिक क्षेत्र आकारआणे पै पौ.ख. फे.फा खाते क्रमांक क्षेत्र एकक हे.आर.चौ.मी [60], [185], [1681], 2444, 4243 [ अशोक दत्तात्रय सुरुडे 3947 कुळाचे नाव जिरायत 2.10.00 इतर अधिकार इतर कैलास दत्तात्रय स्रुडे बागायत -आप्या पाँड याने 88 क चे सर्टिफीकेट 3947 मिळवणार (1) तरी सौ.इ.प.क.घे , 500 / - 27-6-73 ( 1 ) वरकस -सुभाष दत् स्रडे बोजा - सहकारी सोसायटी इकराइ इतर सो.इ.प.क.घे . ( 2038 ) 1.05.00 0.56 एकुण क्षेत्र2.10.00 0.01.00 7 प्रशांत परशुराम आहेर (3892) (3938) 3947 [इतर] (3939) [(3938)](3939) इतर सचिन परशुराम आहेर 1.05.00 0.56 0.01.00 पोटखराब (लागवडीस बोजा 3947 अयोग्य) सेंट्रल बँक ऑफ इंडिया शाखा-वर्ग (अ) 0.02,00 ाडझिरे र.रु. 1000001- सुभाषचा हि. ( 461) वर्ग (ब) -विहीर, वहीवाट हक्क एकुण पो 0.02.00 सचिन आहेर व प्रशांत आहेर यांची क सामाईक विहीर ( 5639 ) आकारणी 1.12 जुडी किवा -विशेष आकारणी (1),(790),(1149),(2492),(3492),(3892),(3925),(3938),(3939),(4883), सीमा आणि भुमापन चिन्हें (5798)https://mahabhulekh.maharashtra.gov.in/Nashik/pg712\_changes.aspx 1/2 गाव नमुना बारा अधिकार अभिलेख पत्रक ( महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवह्या ( तयार करणे व सुस्थितीत ठेवणे ) नियम,१९७१ यातील नियम २९ 🕽 गावः वडझिरे तालुकाः पारनेर जिल्हाः अहमदनगर निर्भेळिपिकाखालील शेस ਕਲ पिकाखालील क्षेत्राचा तपशील लागवडी**साठी** सिंचनाचे उपलब्ध नसलेली मिश्र पिकाखालील क्षेत्र निर्भेळ पिकाखालील क्षेत्र जमीन

मिश्रणाचा संकेत घटक पिके व प्रत्येकाखातील वर्ष हंगाम **ਕ**ਲ अजल पिकांचे जल अजल पिकांचे जल अजल स्वरूप क्षेत्र सिंचित सिंचित सिंचित नाव 2014-15 स्ब्बी ज्वारी 2.1000 खरीप 2,1000 बाजरी 2015-16 रब्बी 2.1000 ज्वारी 2.1000 जवारी

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बार्बीसाठी वापरता येणार नाही.

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Figure 6.2 : A sample of 'Satbara'



Figure 6.3: Property card

get complete information about that piece of land without actually going there. The register of the revenue department records the details of the ownership rights of the family, status of debts and loans, transfer of ownership and the area under different crops. 'Village Form' No.7 and 'Village Form' No.12 are combined to prepare as 7/12 extract, hence it is termed as 7/12 extract. These village forms are available with the talathi of every village for land and revenue collection purposes.

### How is the 7/12 extract read?

- Occupant class 1 means the land over which ownership rights are available through generations. This is ancestral property.
- Occupant Class 2 means the land given by the government to marginal farmers or landless people. Such land can be sold, leased, pledged, given as charity or transferred only with the sanction of the district collector.

- Below that under "Assessment" the amount of tax levied on the land is given in Rs/Paise.
- In "other rights" the names of other joint holders are included. This also shows the status of loans taken for agriculture and whether they have been repaid or not.

### **Property Card:**

Ownership of non agricultural land is recorded on the property card. This document showing ownership rights and the area of the property is made available from urban land records. It has the following information - city survey number, plot number, amount of tax, area of the property assessed, right to access etc.



Give the answers on the basis of figure 6.4

- Which are the land uses of 1990-91 that show a decline in 2010-11? What could be reasons for this?
- Which type of land use is maximum? What would be the impact of this on India's environment?
- Can a decline in the area under agriculture be equated with a food shortage?



Area under crops

56.8%

**Give it a try.** 

10.2%

7.9%

Non-agricultural

land

Grazable and

cultivable

fallow

Area under forest

8.3%

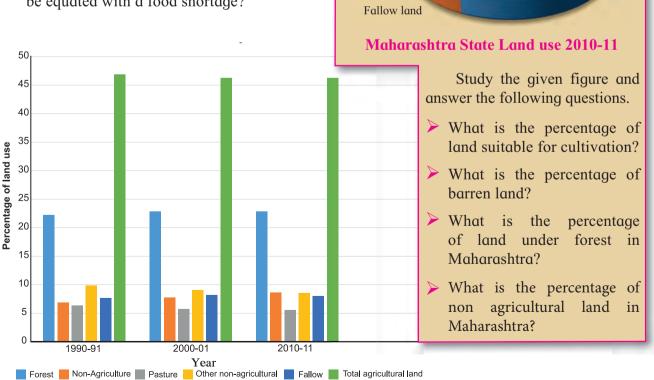


Figure 6.4 : General land use and its changes in India (1990-2011)







In the figure showing the satellite images of Mondha Village (Taluka- Hingna, District-Nagpur) find out the changes in land use pattern over time and write a note.



- Q 1. Examine the statements and correct the incorrect ones.
  - (A) Mining is not a type of land use.
  - (B) There are factories in the Central Business District.

- (C) In urban areas, the largest area is used for residential purposes.
- (D) The village attendant issues the 7/12 extract.
- (E) In rural areas residential areas occupy large tracts.
- (F) Extract 7 indicates Record of Rights.
- (G) Extract 12 indicates change in ownership.
- Q 2. Give geographical reasons.
  - (A) Landuse for public facility are extremely important in urban areas.
  - (B) The record of the ownership of non-agricultural land is the same as that of the agricultural land.
  - (C) A region can be classified as developed or developing on the basis of landuse.
- O 3. Write answers.
  - (A) Why is agriculture important in rural land use?
  - (B) State the factors affecting land use.
  - (C) Clarify the differences between rural and urban land uses.
  - (D) Differentiate between 7/12 extract and property card.

### **ACTIVITY:**

- (A) Obtain information about a town close to your village based on the following points and make a presentation in class. (site, condition, development, land use pattern work)
  - Classify your settlement as rural or urban.
  - Note the changes in land use from Central Business District outwards to the periphery in your settlement after consulting elders. Prepare a land use pattern.
- (B) Study the 7/12 extract or the Property Card in your house and write a note.

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