

Land Use

Exercise

Q. 1. A. Examine the statements and correct the incorrect ones.

Mining is not a type of land use.

Answer : This statement is false. Mining falls under the category of rural land use. There are many agro-based activities prevalent in a rural area. Such as fishing, agriculture, forestry etc. Mining is also an example of rural land use. The miner usually prefers to reside in areas closer to the mines.

Q. 1. B. Examine the statements and correct the incorrect ones.

There are factories in the Central Business District.

Answer : This statement is false. A Central Business District or CBD is the central place of an urban area that has the maximum land concentration for commercial purpose, For example, banks and shops.

Q. 1. C. Examine the statements and correct the incorrect ones.

In urban areas, the largest area is used for residential purposes.

Answer : This statement is true. In urban areas, there is a maximum concentration of population. People even migrate from nearby rural areas to urban areas in search of jobs and livelihood. So, the population is dense and a large part of the urban areas are denoted for residential purposes.

Q. 1. D. Examine the statements and correct the incorrect ones.

The village attendant issues the 7/12 extract.

Answer : This statement is false. 7/12 extract is issued by the revenue department of the government. All the information about the land can be obtained from this department. It is recorded in the register of the revenue department. It includes details like the ownership of the land, status of land, transfer of ownership etc.

Q. 1. E. Examine the statements and correct the incorrect ones.

In rural areas, residential areas occupy large tracts.

Answer : This statement is false. In rural areas, the number of people residing is less. The space for settlement is more as compared to the population. So, the residential areas do not occupy large tracts. The people also prefer to reside near to their area of

work. Such as the miner prefer to reside near the mines and the fishermen prefer to reside near to the water bodies.

Q. 1. F. Examine the statements and correct the incorrect ones.

Extract 7 indicates Record of Rights.

Answer : This statement is true. Extract 7 includes detailed information about the owner of land and rights and liabilities of the landholder. Extract 7 and Extract 12 are combined to prepare the 7/12 extract.

Q. 1. B. Examine the statements and correct the incorrect ones.

Extract 12 indicates a change in ownership.

Answer : This statement is false. Extract 12 indicates information about the registration of crops, type of crop, fallow land etc.

Q. 2. A. Give geographical reasons.

Land use for the public facility are extremely important in urban areas.

Answer : Land use is the function or functions that a man applies to the land available to him. The interaction between geographical factors and man have resulted in land use. There are some essential public service facilities like hospitals, schools, police stations, etc. which requires some land. The quality of life of citizens is dependent on the effectiveness of these public services. With the increasing urbanization, the provision of the public facilities becomes more important to cater to the large population which requires effective land use.

Q. 2. B. Give geographical reasons.

The record of the ownership of non-agricultural land is the same as that of the agricultural land.

Answer : The ownership of agricultural land is recorded in the Extract 7/12. It is the extract of the land records which is kept in the registers held by the public revenue department. It contains important details of the ownership rights of the family, the status of debts and loans, transfer of ownership and the area under different crops. This document is an important indicator of the legal status of a property. The ownership of a non-agricultural land is recorded in the property card. It is made available from the urban land records. It contains details of ownership rights, the area of the property, plot number, amount of tax, right to access etc. So, it is right said that the record of ownership of non-agricultural land is the same as that of the agricultural land.

Q. 2. C. Give geographical reasons.

A region can be classified as developed or developing on the basis of land use.

Answer : Land use is the function or functions that a man applies to the land available to him. The interaction between geographical factors and man have resulted in land use. The country's economic development determines the pattern of land use. Developed countries have high agricultural productivity, robust manufacturing sector compared to developing countries. Thus, developed countries tend to have a small proportion of land under agriculture and more under secondary and tertiary sector.

Q. 3. A. Write answers.

Why is agriculture important in rural land use?

Answer : Land use is the function or functions that a man applies to the land available to him. The interaction between geographical factors and man have resulted in land use. Agriculture is the main occupation in rural India. More than half of the country's workforce is dependent on agriculture. Thus, the land use for agriculture in rural India is very high. The livelihood of large sections of the society is dependent on the ownership of land and the availability of quality inputs. In 2011, 52.8% of land use in India was under agriculture. In rural areas, the land use under agriculture can be further categorized into arable land, fallow land, grassland or pastureland etc.

Q. 3. B. Write answers.

State the factors affecting land use.

Answer : Land use is the function or functions that a man applies to the land available to him. The interaction between geographical factors and man have resulted in land use. There are numerous factors affecting land use.

- 1) The regions rich with mineral resources are used for mining. For instance, states like Odisha, Jharkhand, Chhattisgarh have more land under mining compared to other states.
- 2) The pattern of land use is also determined by certain physical factors like topography, climate etc. For instance, the population density is less in mountainous regions compared to plains.
- 3) Government policies like the development of metro lines, dedicated freight corridors, bullet train project converts the land into transport land use.
- 4) The government has also announced several housing projects like Pradhan Mantri Awas Yojana, which promotes affordable housing for the weaker sections. Such projects convert land to residential land use.

5) It is also affected by the population, quality of lands, and needs. For examples, in Japan. The percentage of land under forest is more as compared to the land used for agriculture purpose.

6) In urban areas, the number of people residing increases with the passage of time. People tend to migrate from other rural areas to these urban areas. So, a major portion of the land in urban areas is used for residential purpose.

Q. 3. C. Write answers.

Clarify the differences between rural and urban land uses.

Answer : Land use is the function or functions that a man applies to the land available to him. The interaction between geographical factors and man have resulted in land use. In rural areas, primary activities like agriculture, fishing, and mining are predominant. Hence, a large amount of land is used for such activities. In rural areas, the land use under agriculture can be further categorized into arable land, fallow land, grassland or pastureland etc. The population density of rural areas is low compared to urban areas. In urban areas, with growing migration from rural areas, the number of urban settlements are growing at an exponential rate. The land in urban areas is used for commercial purposes, residential use, public utility provision, recreational land use in the form of parks and malls etc.

Q. 3. D. Write answers.

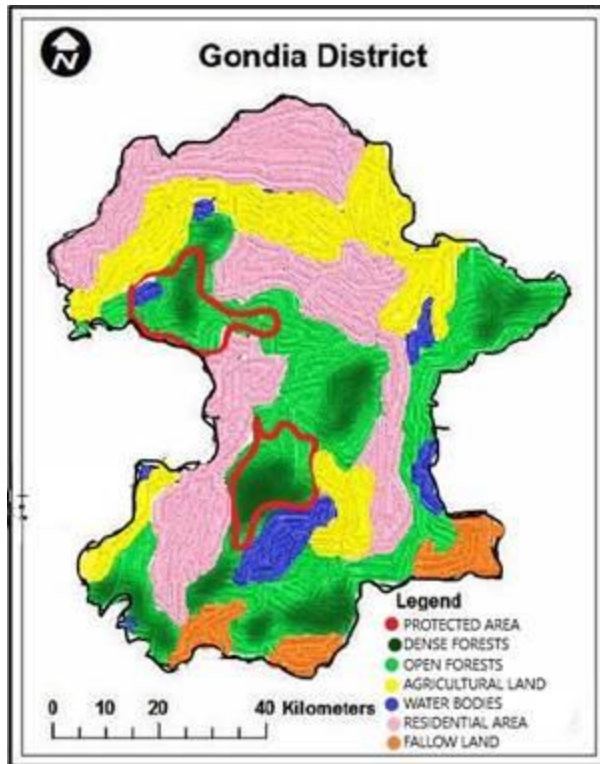
Differentiate between 7/12 extract and property card.

Answer : Both 7/12 extract and property card are used to get the required information about the registered land. 7/12 Extract is the extract from the land records registers held by the public revenue department. It contains important details of the ownership rights of the family, the status of debts and loans, transfer of ownership and the area under different crops. This document is an important indicator of the legal status of property (agriculture land). When the land property is located in an urban area the details of the ownership of such property, survey number, plot number etc, are recorded in the property card, available from urban land records.

Intext Questions

Q. 1. Take a map of your surrounding area and using different colours, show the land use of your area.

Answer :



Gondia district is in the state of Maharashtra. It is also called as rice city due to the abundance of rice mills in the area.

Q. 2. If the land is left fallow or is not in use, then can it be termed as a kind of land use?

Answer : Land use is the purpose or way in which a particular stretch of land is used. It is the modification and changes that are brought into the natural environment for the development of built environment, settlements, agriculture or management of forests. It determines that pattern in which the land is used.

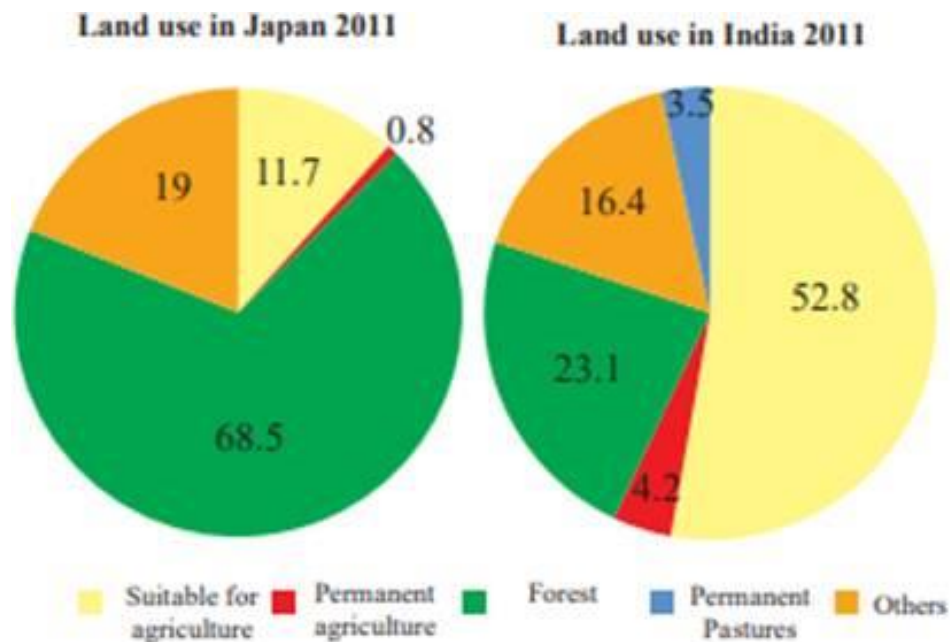
Fallow lands are those lands that are left barren to improve the physical features and fertility of the soil for some seasons. The farmers leave a part of their land that they cultivate s barren to allow the soil to regain its nutrients. This is the agricultural land that is not temporarily cultivated. Sometimes, the land is permanently left barren if it is unfit for cultivation. Thus, if a particular stretch of land is left fallow, it cannot be termed as land use as the land is not being used for any purpose. The future potential use of the land is also uncertain. Thus, leaving land fallow cannot be termed as land use.

Q. 3. Can you tell which area the property is located?

Answer : The property is located in the Parner taluka of Ahmednagar district in Maharashtra. It can be understood from the ownership documents issued by the

Revenue Department. It is available with the village office for the purpose of land analysis and revenue collection.

Q. 4. Examine the pie charts showing land use in figure 6.1 and answer the following questions:



- 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?

Answer : **a.** The land under forests is more in Japan as compared to India according to the land use data of 2011. Japan has 68.5% of its area under forests, while in India it is just 23.1%.

b. The land under cultivation and agriculture is more in India. It accounts for 4.2% in India while the area under cultivation is just 0.8% in Japan. As compared to Japan, the total area that is suitable for agriculture is also more in India. It accounts for 52.8% in India, while in Japan it is just 11.7%.

c. The land use in different countries differs according to their circumstances, situations and needs of the people. Japan has more forest cover, while India has more agricultural land. While comparing the total land area, India is nearly 8 times larger than Japan. Most of the land area in India is also suitable for cultivation. With the growing population in India, the demand for an increase in the area under cultivation is rising. Thus more land has to be brought under cultivation in the case of India. Also, India is well-endowed

with the natural resources and the climate that gives the country an edge in increasing its agricultural productivity. But Japan with limited land availability and negligible resources lacks the potential to increase its agricultural productivity. Still, the island country has achieved development in many other fields.

Q. 6. Give the answers on the basis of figure 6.4

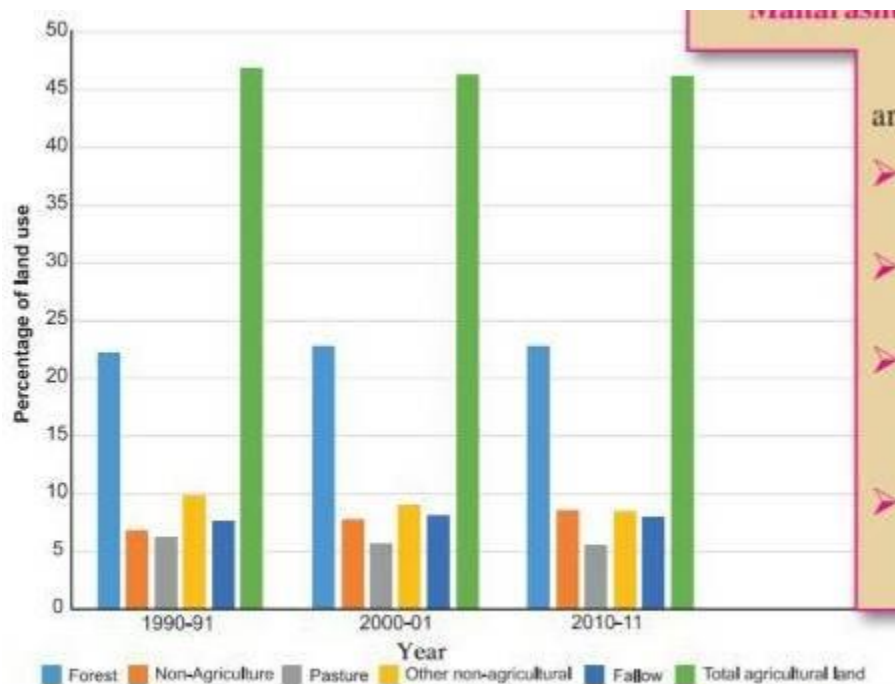


Figure 6.4 : General land use and its changes in India (1990-2011)

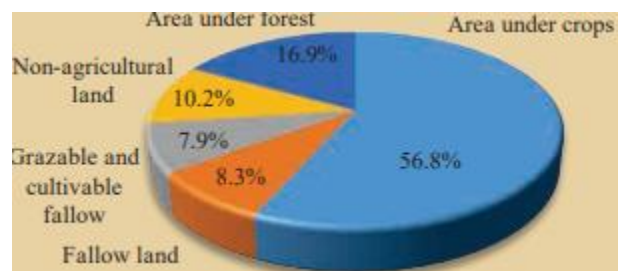
- Which are the land uses of 1990-91 that show a decline in 2010-11? What could be reasons for this?
- Which type of land use is maximum? What would be the impact of this on India's environment?
- Can a decline in the area under agriculture be equated with a food shortage?

Answer : a. Pastures and other non-agricultural land have shown a decline comparing the land use in 1990-91 with 2010-11. With the growing population in India, the demand for an increase in the area under cultivation is rising. Thus more land has to be brought under cultivation in the case of India. India is well-endowed with the natural resources and the climate that gives the country an edge in increasing its agricultural productivity. Also, the demands of the increasing population have resulted in the conversion of such areas to other residential and community areas. This describes the increase in non-agricultural areas in 2010-11.

b. In all the three years of 1990-91, 2000-01 and 2010-11, the maximum land use shown is the agricultural area. With the growing population in India, the demand for an increase in the area under cultivation is rising. Thus more land has to be brought under cultivation in the case of India. Also, India is well-endowed with the natural resources and the climate that gives the country an edge in increasing its agricultural productivity. But this can have serious environmental impacts. The indiscriminate clearing of pastures and other areas for agricultural purposes can affect the ecosystem in which we survive. It can lead to the endangering and the extinction of many flora and fauna and ultimately a threat to ourselves.

c. The decline in agricultural area can be equated with a food shortage. With the growing population in India, the demand for the increase in the area under cultivation is rising. In such a situation, if the area under cultivation falls, then it can lead to food shortages to feed the increasing populace. Even though imports of food grains can be done, it will raise the import bills and also will not enable the country to achieve self-sufficiency in food production.

Q. 7. Study the given figure and answer the following questions.



Maharashtra State Land use 2010-11

a. What is the percentage of land suitable for cultivation?

b. What is the percentage of barren land?

c. What is the percentage of land under forest in Maharashtra?

d. What is the percentage of non-agricultural land in Maharashtra?

Answer : **a.** The total percentage of land that is suitable for cultivation includes the area that is under cultivation that accounts for 56.8% and the grazable and cultivable fallow that accounts for 7.9%. Thus, the total percentage of land suitable for cultivation is 64.7%.

b. The total barren land includes the permanent fallow land that accounts for 8.3% and the grazable and cultivable fallow that is left barren temporarily that is 7.9%. Thus the total of barren land is 16.2%.

c. Maharashtra has nearly 16.9% of its total area under forests. It is in the fourth position among the state with the highest forest cover.

d. Non-agricultural land constitutes for 10.2% of the total land area of Maharashtra.

Q. 8. The figure shows the satellite images of Mondha Village, Nagpur. Find out the changes in land use pattern and write a note.



2003



2010



2017

Answer : All the three images clearly illustrate the changes in land use pattern that has occurred in the village over the time span of years. Land use is the purpose or way in which a particular stretch of land is used. It is the modification and changes that are brought into the natural environment for the development of built environment, settlements, agriculture or management of forests. It determines that pattern in which the land is used.

The image of 2003 shows the abundance of agricultural fields, pastoral lands, and areas with dense flora growth. The built infrastructure is negligible in the time with no visible building and other structures. With the passage of time, the agricultural fields and pastoral areas have paved the way for the development of built infrastructure in the region. In 2007, a bulk of densely forested area had been cleared, and buildings have come up in the place. But the changes in agricultural fields is negligible. But in 2017, most of the agricultural areas have also been cleared. The area has lost its green cover, and the buildings and other structures are clearly visible. Thus the images show the transition of an area with the changes in the demands of the populace.

With the growing population in India, the demand for the increase in the area under cultivation is rising. Thus more land has to be brought under cultivation in the case of India. India is well-endowed with the natural resources and the climate that gives the country an edge in increasing its agricultural productivity. Also, the demands of the increasing population have resulted in the conversion of such areas to other residential and community areas. But this can have serious environmental impacts. The indiscriminate clearing of pastures and other areas for agricultural purposes can affect the ecosystem in which we survive. It can lead to the endangering and the extinction of many flora and fauna and ultimately a threat to ourselves.