

CHAPTER-2: NATURAL RESOURCES

Q-1 Define Natural Resources.

Ans A natural resource may be defined as any material given to us by nature which can be transformed in a way that it becomes more valuable and useful.

Ex:- Wood is used for making furniture.
Yarn obtained from cotton is used for cloth.

Q-2 Classify & explain Resources.

Ans:- Resources are classified into two types.

(a) Renewable Resources

(b) Non-Renewable Resources

Renewable Resources:-

(i) Resources which can be renewed along with their exploitation, are always available for use. Hence they are called Renewable resources.

(ii) For Instance Forests are renewable.

If trees are felled for wood, original forest covers may be maintained through planting new trees, i.e., Forestation.

(iii) Exactly Solar energy, wind energy etc. are also example of renewable resources.

Non-Renewable Resources

(i) Resources which cannot be renewed with their exploitation, are not available for use. Hence, they are called Non-Renewable resources.

(ii) Example :-

The formation of some resources like iron ore, coal, mineral oil etc. has taken several thousand years. Once they are used in unlimited way, they cannot be easily replaced.

Q-3 Write down some importance of forest resources. (Syllabus → Use & over exploitation)

Ans Importance of forest resources :-

(1) Ecological balance :-

Forests & wildlife are essential to maintain ecological balance of an area.

(2) Renewable natural resources :-

Forests are an important renewable natural resources.

(3) ECO-System :-

Trees dominate forests ecosystem; their Species content varies in different parts of the world.

(4) Economic development

Forest contributes to the economic development of the country, because they provide goods & services to the people & industry.

(5) Environment Quality :-

The forest enhance the quality of environment by influencing the life supporting system.

(6) Safeguard against pollution
Forest check air pollution and soil erosion. Thus, they exercise safety against pollution.

(7) Soil conservation
Forest save the hill slopes from landslide

(8) Attract Rainfall
By causing condensation of water vapour in clouds, forests attract rains.

(9) Supply of Raw materials
Forest supply wood, which is used as under:-

(i) Fuel, (ii) Paper, board

(iii) Timber for furniture item

(iv) Preparing matches.

(v) Sports good etc.

(10) Control floods

The floods are controlled because forests dry up rainwater like sponge.

(11) Revenue Receipts

The forest provides Rs 500 crores per year as revenue to the government.

(12) Linked with cultural & civilization

Forests are linked with our cultural & civilization.

(13) Fodder for Cattle

Forest provide fodder to cattle.

(14) Minor Forest Products

Some example of minor forest products are canes, gums, resins, dyes

Flocks, medicine, Lac, etc.

For tribal people are provided with food like tuber, roots, leaves, fruits, meats from birds & other animal etc.

(15) Employment opportunities

About 8 crore people are employed in wood based industries like paper, match & Cottage industries. Besides, those who are employed in the forest department in various states.

(16) Foreign exchange Earners:-

Forest produce a great no. of articles like essential oils, resins, dye etc. which find markets in foreign countries.

Nearly Rs. 100 crores are earned in foreign exchange through selling those items.

Thus, forests are nations wealth. They are useful to us directly & indirectly.

Q-4 Deforestation

(i) Deforestation is a simple process which means the felling & clearing of forest cover or tree plantation in order to accommodate agricultural, industrial or urban use.

(ii) It involves permanent end of forest cover to make that land available for residential, commercial or industrial purpose.

Q-5 What are the Causes of Deforestation?

Ans Causes of Deforestation:

(1) Agricultural Activities:-

Agricultural Activities are one of the major factors affecting deforestation. Due to overgrowing demand for food products, huge amount of trees are felled down to grow crops & for cattle grazing's.

(2) Logging:- (अन्य कारण)

Other point of view, wood based industries like paper, match-stick, furniture etc also need a substantial amount of wood supply. Wood is used as fuel both directly and indirectly, therefore trees are chopped for supplies. Firewood & charcoal are example of burning wood as a fuel. Some of these industries thrive on illegal wood cutting and felling of trees.

(3) Urbanization

Further on order to gain access to these forests ~~as with the expansion of cities more~~ the construction of roads are undertaken. Once again trees are chopped to create roads. Overpopulation too directly affects forest covers, as with the expansion of cities more land is needed to established housing and settlements.

(4) Desertification of Land

It occurs due to land abuse making it unfit for growth of trees. Many industries in petrochemical release their waste into rivers which results in soil erosion.

considerable amount of forest land. Apart from this roads & highways have to be built to make way for trucks & other equipment. The waste that comes out from mining pollutes the environment & effects near areas.

(6) Fire:-

Another example would be forest blaze. Hundreds of trees are lost each year due to forest fires in various portion of the world. This happens due to extreme warm summers.

Q-6 what are the environmental effects when deforestation occurs.

Ans:- Environmental effects:-

- (i) Food problems.
- (ii) Ecological imbalance.
- (iii) Increasing CO₂
- (iv) Loss of biodiversity.
- (v) Environmental pollution.
- (vi) Global warming.
- (vii) Changes in climate.
- (viii) Some indigenous people way of life and survival are threatened by the loss of forests.
- (ix) Insecure future for forest workers.
- (x) Most humid region changes to desert.
- (xi) Heavy siltation of dams.

(xii) Floods leading to soil erosion.

(xiii) Destruction of Resources
(१४)

(xiv) Loss of future markets for ecotourism.
(१५)

The value of a forest is often higher when it is left standing than it could be worth when it is harvested.
(१६)

(xv) Heavy rainfall and high sunlight quickly damage the topsoil in clearings of the tropical rainforest. In such circumstance, the forest will take much longer to regenerate and the land will not be suitable for agricultural use for quite some time.

Q-7 Define Conservation & explain its concept.

Ans Conservation:-

It derived from two Latin words
Con → together ; Servare → to keep or guard.
which means an act of preservation or to keep together.

Concept of Conservation:-

- (1) Restraining cutting of trees and submerging the forest.
(१७)
- (2) Reforestation.
- (3) Afforestation (१८)
- (4) Control forest diseases & forest fire.
- (5) Safe forest products.
- (6) Bringing awareness among people
Ex:- Narmada Bachao Andolan.
- (7) Avoid diversion of forest lands for other activities through act like forest conservation Act & wild life protection Act.
(१९)

Q-8 Explain about Timber extraction & Mining.

Ans ^(Ch 10)
Timber Extraction

(i) Logging for valuable timber such as teak & mahogany not only involves a few large trees per hectare but about a dozen more trees since they are strongly interlocked with each other by vines etc.

(ii) Also road construction for making approach to the trees causes further damage to the forests.

(iii) In India, firewood demand would continue to rise in future mostly consumed in rural areas, where alternative sources of energy, are yet to reach.

Mining:-

(i) It is the process of removing deposits of ores from substantially very well below the ground level.

(ii) Mining is carried out to remove several mineral including coal.

(iii) These mineral deposits invariably found in the forest region and any operation of mining will naturally affect the forest.

Ex:- Rourkela Steel Plant, are presently under stress of mining activities.

Effect of Mining Resources

(i) Mining operation requires removal of Vegetation along with underlying soil mantle rock masses. This results in destruction of landscape in the area.

(ii) Large scale of deforestation has been reported in mussoorie & dehradun valley due to mining of various areas.

(iii) Indiscriminate mining in Goa since 1961 has more than 50,000 ha. of forest land.

(iv) Mining of radioactive mineral in Kerala Tamilnadu & Karnataka are posing similar threats of deforestation.

Q-9 Discuss about Dam & their effect on forest and tribal people.

Ans (i) Big Dams & river valley projects have multipurpose uses & have been referred to as "Temple of Modern India".

(ii) India has more than 1500 large dams, the maximum being in the state of Maharashtra (more than 600) followed by Gujarat (more than 250) and Madhya Pradesh (130), Chattisgarh (57)

(iii) The highest one is Tehri dam, on river Bhagirathi in Uttarakhand and the largest in terms of capacity is Bhakra dam on river Sutlej.

Effects on Tribal People

(i) The greatest social cost of big dam is the widespread displacement of local people.

(ii) It is estimated that the no. of people affected directly or indirectly by all big irrigation projects in India over the past 50 years can be as high as 20 millions.

(iii) The Hirakud dam, one of the largest dams executed in fifties, has displaced more than 20,000 people residing in 250 villages.
(२५११ ११११)

Effects on Forests

(i) Thousands of hectares of forests have been cleared for executing river valley projects which breaks the natural ecological balance of the regions. Floods, landslides become more prevalent in such area.
(११११)

(ii) Example :-

→ The Narmada Sagar project alone has submerged 3.5 lakh hectares of best forest
(११११)

comprising of rich teak & bamboo forest.
(११११)

→ The Tehri dam submerged 1000 hectares of forest affecting about 430 species of plants according to the survey carried out by the botanical survey of India.
(११११)