

Q1: What is a resource?

Ans: Everything available in our environment which can be used to satisfy our needs, provided it is technologically accessible, economically feasible and culturally accepted can be termed as a resource.

Q2: How are resources classified?

Ans: Natural resources can be classified as follows:-

On the basis of Origin:-

(i) Biotic resources:- These resources are obtained from biosphere i.e. human being, livestock, ~~flora and fauna~~ etc. Coal and Petroleum may be considered as biotic resources as they are formed by decaying of life forms.

(ii) Abiotic resources:- These resources are composed of non-living things e.g., soil, rocks, ~~metals~~, winds, etc.

On the basis of Exhaustibility or limitation of use:-

(i) Renewable resource:- The resource which can be renewed or re-produced by physical, chemical or mechanical process are known as renewable or replenishable resource e.g. solar energy, wind energy, forest, water, wildlife etc. It can be further sub-divided into two forms

Flow or continuous resource:-

These resources can be used and replenished at the same time. It does not remain in one location and moves about because of natural

in the physical environment. e.g. running water, solar radiation, wind and tides.

### (b) Biological resource :-

These resources are formed by biological processes.

It is further divided into two types :-

- Natural vegetation (forest cover and flora)
- Wild life (fauna)

(ii) Non-renewable resource :- These resources are formed through long geological time periods and cannot be renewed e.g. minerals, metals and fossil fuels. These resources may further be divided :-

- Recyclable :- Metal can be recycled by technological applications so they are recyclable.
- Non-recyclable :- Fossil fuels burn rapidly and cannot be recycled so they are non-recyclable.

### On the basis of Ownership :-

(i) Individual resources :- These resources are owned privately by individuals e.g. plantation, pasture land, farmland, water in well, pond, etc.

(ii) Community owned resource :- These resources are accessible to all the members of the community. e.g. grazing ground, burial ground, ponds in village, public parks etc.

(iii) National resource :- These resources are under the control of National countries e.g. canal, coal mines, territorial sea (upto 12 nautical miles from the coast), railway etc.

(iv) International resource :- These resources are owned and regulated by

international institutions. e.g. open sea used for peaceful navigation, open sky for flight movement etc. The oceanic resource beyond 200 nautical miles of the Exclusive Economic zone belong to open sea.

### On the basis of status of development :-

(i) Potential resource :- These resources are found in a region in abundance, but have not been developed properly e.g. solar and wind energy in Gujarat and Rajasthan, vast tidal waves in the coasts of India.

(ii) Developed resource :- These resources are surveyed and qualified for utilization through available technology e.g. coal, petroleum etc. Availability of technology and level of accessibility decides the quality of developed resource.

(iii) Stock :- These resources have the potential to satisfy human need, the required technical to use them is not developed e.g. coal, petroleum, etc. hydrogen and oxygen in water can be a rich resource of energy. But technical know-how for this purpose is not available.

(iv) Reserves :- These are specific stocks for which appropriate technological know-how is available, but exploration is not started yet. e.g. river water for hydel energy or forest are reserves but still has limited exploration.

Q3) What are Sustainable Development?

Ans) Sustainable development means development should be such that the present generation should not compromise with the needs of the future generation. For this, resource planning should be done.

The concept of sustainable development was first formulated in June 1992 at the first United Nations Conference on Environment and Development (UNCED) held in Rio-de-Janeiro, Brazil. This summit supported the

in the atmosphere (e.g. solar radiation, wind and rain).

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global forest principles and adopted Agenda 21 for achieving Sustainable Development in the 21<sup>st</sup> Century. The objectives of Agenda 21 are to eliminate poverty, hunger, sickness, illiteracy and reduce deterioration of the environment.

Q4+ What are the planning of resource in India?

Ans Resources planning means identification and qualification of the available resource along with national their development. Resource planning should match with national development goals. In India, the resources are vast but their development is insufficient or they are distributed unevenly. Some example are as follows:-

- (i) States like Jharkhand, Chhattisgarh and Madhya Pradesh are rich in ~~coal~~ coal and minerals, but lack technological and institutional supports.
- (ii) Arunachal Pradesh had abundant water resource, but lack in infrastructure development.
- (iii) Rajasthan is well endowed with wind and solar energy, but lacks water resources.
- (iv) Some states like Punjab, Haryana, have a poor resource base, but they are economically developed.
- (v) The cold desert of Ladakh lacks natural resources although it has a rich cultural heritage.

Q5+ What are the various process of resource planning?

Ans The process of resource planning involves the following:-

- (i) Identification and inventory of resources across the region of the

country. This involves surveying, mapping qualitative and quantitative estimation and measurement of the resource.

- (ii) Planning for resource development using appropriate skills, technology and institutional set up.

- (iii) Matching the resource development plans with overall national development plans.

India followed the policy of resource planning from the very First Five Year plan slightly after the Independence. The availability of resources alone cannot begin. The process of development, necessary technology and institutional set up are also required.

Q6+ What is sustainable economic development? Suggest any two ways in which resource can be used judiciously?

Ans Sustainable economic development means development should take place without damaging the environment, so that the development process in the present should not compromise with the needs of the future generation.

Two ways in which resources can be used judiciously are:-

- (i) Resource Planning
- (ii) Resource Conservation.

Q7+ What problems have been caused by human being using resource indiscriminately? Explain in brief.

Or  
What are the negative effect of human activities on resource?

Or  
Examine major problems caused by indiscriminately to use of resources.

Ans Human being have used resources indiscriminately, leading to the following major problems:-

(i) Excessive use of resources have depleted their stock throughout the world.

(ii) Resources have accumulated in a few hands, which in turn has divide society into two segments i.e. 'haves' and 'have not's' or rich and poor.

(iii) Exploitation of resources have lead to global ecological crisis such as global ecological crisis such as global warming, ozone layer depletion, environment pollution and land degradation.

Q:- How can we implement sustainability of development suggest three ways for its implementation.

Or  
What are the steps involved in the process of resource planning.

Or  
Describe the three stages of resource planning in India.

We can implement sustainability of development through resource planning.

There are three ways which can be ensure sustainable development or three stages of resource planning are

1. Identification and inventory of resource across the region of the country, which involves surveying, mapping and measuring the quality as well as quantity of resource.

2. Planning for the development of the resource by using appropriate technology and institutional set up.

(iii) Proper resource development plans matching with overall national development plans.

Q9+ Why is resources planning essential? Give some example which explain its need.

Or  
Explain the importance of resource planning in a country like India?

Ans+ Resource planning is the widely accepted strategy for judicious use of resources. It is essential as resources are limited and unevenly distributed over the country. Planning will help in reducing wastages as well as taking care of the requirements of future generations.

Example:-

(i) An example of uneven distribution in Arunachal Pradesh which has abundance of water resource but lacks infrastructural development to utilize the water resource.

(ii) Irrational consumption and over utilisation of resource leads to socio economic and environment problems like in Punjab, excessive logging has increase salinity and alkalinity in the soil.

Q10+ Discuss the purpose of Rio-de-Janeiro Earth summit and Agenda 21.

Or.  
What was the purpose of the Earth summit held in Rio-de-Janeiro, Brazil in 1992? What are the main provisions of Agenda 21 signed at its summit?

Ans+ The first United Nations conference on Environment and Development (UNCED) was held in Rio-de-Janeiro, Brazil in 1992 to formulate an Agenda to promote sustainable development.