

GEOGRAPHY

CLASS-X

Chapter-1 Resources And Development

Points to be remembered

- 1) **RESOURCES** - Everything available in our environment which can be used to satisfy our needs, provided ,it is technologically accessible, economically feasible and culturally acceptable can be termed as "RESOURCE".
- 2) **BIOTIC RESOURCES** - These are obtained from biosphere and have life such as human beings, flora and fauna, fishers, livestock etc.
- 3) **ABIOTIC RESOURCES** - All those things which are composed of non-living things are called abiotic resources. For Example- rocks and metals.
- 4) **RENEWABLE RESOURCES** - The resources which can be renewed or reproduced by physical, chemical or mechanical processes are known as renewable or replenish able resources. For Example, solar and wind energy, water etc.
- 5) **NON RENEWABLE RESOURCES** -These resources take millions of years in their formation. Some of the resources like metals are recyclable and some like fossil fuels cannot be recycled and get exhausted with their use.
- 6) **INDIVIDUAL RESOURCES** - These are owned privately by individuals.
- 7) **COMMUNITY OWNED RESOURCES** - There are resources which are accessible to all the members of the community.
- 8) **NATIONAL RESOURCES** - All the resources belong to the nation. The country has legal powers to acquire even private property for public good.
- 9) **POTENTIAL RESORCES** - Resources which are found in a region, but have not been utilised.
- 10) **DEVELOPED RESORCES** - Resources which are surveyed and their quality and quantity have been determined for utilisation.
- 11) **STOCK** - Materials in the environment which have the potential to satisfy human needs but human beings do not have the appropriate technology to access these, are included among STOCK.
- 12) **SUSTAINABLE DEVELOPMENT** - Sustainable economic development means "development should take place without damaging the environment, and development in the present should not compromise with the needs of the future generations".

- 13) **RESOURCE PLANNING** - Planning is the widely accepted strategy for judicious use of resources.
- 14) **CONSERVATION OF RESOURCES** - The judicious and planned utilisation of resources so that those cannot be wasted.
- 15) **LAND DEGRADATION** - None functioning of soil for agriculture due to various natural and human activities.
- 16) **NET SOWN AREA** - It represents the total area sown once or more than once in a particular year. Area sown more than once in the same year is counted only once.
- 17) **GROSS CROPPED AREA** - Including fallow lands in net sown area.
- 18) **FALLOW LAND** - Left without cultivated for one or less than one agricultural years.
- 19) **BARREN LAND** - Land which is not cultivated due to its non fertile capacity.
- 20) **LATERITE SOIL** - This soil develops in areas with high temperature and heavy rainfall. This is the result of intense leaching due to heavy rain. This is very useful for growing tea, coffee and cashew nut.
- 21) **SOIL EROSION** - The movement of upper layer of soil due to natural causes like wind, water and glaciers from one part to another.
- 22) **BAD LAND** - The running water cuts through the clayey soils and makes deep channels as GULLIES. The land become unfit for cultivation and is known as BAD LAND.

**VERY SHORT ANSWER TYPE QUESTIONS (1 MARKER) :-
QUESTIONS**

- Q-1 Which soil is found in the largest area of the country? How is it formed?
- Q-2 Which soil is found in Maharashtra, Saurashtra and Malwa? How this soil is formed?
- Q-3 Write the name of any two important factors in the process of soil formation?
- Q-4 Write the name of any two soils found in India?
- Q-5 Write any two features of forest and mountainous soil?
- Q-6 Write any two features of Arid soil?
- Q-7 What was the main agenda of Earth Summit 1992?
- Q-8 What is Agenda 21?
- Q-9 Write the name of any two states of India where step farming is in use? What are the benefits of this type of farming?
- Q-10 Write any two human activities which are responsible for the land degradation?

ANSWERS

Ans 1) Alluvial soil. This is formed by the deposit of the rivers.

Ans 2) Black soil. It is made up of lava flows.

Ans 3) Relief, Parent rock, climate, vegetation, inorganic materials, humus and time.

Ans 4) Alluvial, black, red & yellow, laterite, arid, forest & mountainous.

Ans 5) i) Found in the hilly and mountainous areas, loamy and silty in the valley sides and coarse grained in the upper slopes.

ii) In the snow covered areas of Himalayas, these soils experience denudation and are acidic with low humus content.

Ans 6) i) Colour red and brown.

ii) Sandy in texture and saline in nature.

Ans 7) For addressing urgent problems of Environmental protection and Socio-Economic development at the global level.

Ans 8) It is an agenda to combat environmental damage, poverty, disease through global co-operation on common interests, mutual needs and shared responsibilities.

Ans 9) Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Manipur, Nagaland, Mizoram. Step farming(terrace cultivation) controls the soil erosion.

Ans10) Deforestation, over grazing, mining and quarrying.

Short/long Answers Questions 3/5 Markers

Q.1 What problems have emerged due to over exploitation of Resources?

Q.2 Distinguish between Khadar and Bangar?

Q.3 Write a short note on Earth Summit,1992?

Q.4 How the soil erosion can be controlled? Write various protective measures?

Q.5 Distinguish between Net sown area and gross cropped area?

Q.6 What efforts have been made for Conservation of Resources at International level?

Q.7 What do you understand by Resource planning? Why does the conservation of resources is necessary?

Q.8 Explain different types of resources on the basis of ownership?

Q.9 Which factors are responsible in the formation of soil. Clarify?

Q.10 Describe about the various soils found in India and show their distribution on the outline map of India?

Q.11. Describe about the environmental importance of forests?

Q.12. Mention about some of the environmental issues which may be rise due to the over exploitation or unfair (non-judicious) utilisation of resources?

ANSWER KEY

- A.1
- i) Damage/spoiling(over-utilization) of resources.
 - ii) Resources are concentrated on the hands of a few people. One class is resource full and other class is deprived.
 - iii) Global ecological problems like global warming, environmental pollution, decay of Ozon layer and land degradation.

A.2 KHADAR

- i) New alluvial
- ii) More fine particles and more fertile
- iii) Continues renewal
- iv) It is found near river, delta and flood plains

BANGAR

- i) Old alluvial
- ii) Higher concentration of kanker nodules
- iii) No continuous renewal
- iv) It is found far from the river at higher level

- A3.**
- (i) Organised in June 1992 at Rio de janeiro in Brazil
 - (ii) More than hundred heads of states participated
 - (iii) The summit was convened for addressing urgent problems of environmental protection and social economic development at the global level.
 - (iv) The assembled leaders signed the Declaration on Global Climatic Change and Biological Diversity.
 - (v) The Rio Convention endorsed the global Forest Principals.

- A4.**
- i) Controlling the flow of rivers by making check dams over them
 - ii) Planting more and more trees.
 - iii) Planting thorny vegetation in desert areas.
 - iv) Terrace cultivation in hilly areas. v) Shelter belts or planting lines of trees.

A5. NET SOWN AREA

- i) The part of the total sown area which is used for cultivation.
- ii) In India almost half of the total sown area is Net sown area.
- iii) This is estimated on the basis of a single crop in an year.

GROSS CROPPED AREA

- i) The area in which more than one crop are sown in an agriculture period.
 - ii) In India gross cropped area is far more than net sown area.
 - iii) Calculation is on the basis of more than a crop sown.
- A.6.**
- i) The club of Rome advocated resource conservation for the first time in a more systematic way in 1968.
 - ii) In,1974,Gandhian Philosophy was once again presented by Schumacher in his book small is beautiful.
 - iii) In,1987,the Brundtland commission report introduced the concept of sustainable development.
 - iv) Another significant contribution was made at the Earth Summit 1992.
- A.7.** Resource planning is the skill and technology of appropriate use of resources. The need of resource planning.
- i) There are limited resources while unlimited needs.
 - ii) For judicious use.
 - iii) Uneven distribution.
 - iv) Some are non-renewable.
- A.8** Classification of resources on the basis of ownership
- a) Individual resources-
 - * Owned privately by individuals.
 - * Plantation, pasture lands, ponds, water in wells etc.
 - b) Community owned resources-
 - * Accessible to all the members of the community.
 - * Village common grazing grounds, burial grounds, village ponds ,etc.
 - * Public parks, picnic spots, playgrounds in urban areas.
 - c) National resources-
 - * Technically, all the resources belong to the Nation.
 - * The country has legal powers to acquire even private property for public good.
 - * All the minerals, water resources, forests, wildlife, land within the political boundaries.
 - * Oceanic area up to 12 nautical miles (19.2 K.M.) from the coast termed as territorial water and resources therein belong to the nation.
 - d) International resources-

- * Regulated by international institutions.
- * The oceanic resources beyond 200 km of the Exclusive economic zone belong to open ocean,
- * No individual country can utilise these without the concurrence of international institutions.

- A.9.**
- i) Rocks-the appropriate material for soil.
 - ii) Climate-changing rocks into small particles in long duration.
 - iii) Plant and Trees-roots break the rocks after entering in them.
 - iv) Over grazing-the change in rocks is possible due to continuous grazing by animals.
 - v) Rain-the rain water enters in rocks and break them.

After the long activation of these factors the process of breaking of rocks continues and thus the soil forms.

A.10. (1) Alluvial Soils-

- (i) Extended in whole northern plains.
- (ii) Developed by Indus, Ganga and Brahmaputra river systems.
- (iii) Having different ratios of sand, silt and clay.
- (iv) Very fertile and ideal for the growth of sugarcane, paddy, wheat and other cereal and pulse crops.

(2) Black Soil-

- (i) Black in colour and other name is Regur soils.
- (ii) Ideal for growing cotton and ground nuts.
- (iii) Covers the plateaus of Maharashtra, Saurashtra , Malwa, Madhya Pradesh and Chhattisgarh.
- (iv) Rich in soil nutrients, such as calcium carbonate, magnesium, potash and lime.

(3) Red and Yellow Soils

- (i) It looks red due to diffusion of iron in crystalline and metamorphic rocks. It looks yellow when it occurs in a hydrated form.
- (ii) These are found in parts of Orissa, Chhattisgarh, southern parts of the middle Ganga plain and along the piedmont zone of the Western Ghats.

(4) Laterite soil-

- (i) Develops in high temperature and heavy rainfall areas.
- (ii) This is the result of intense leaching due to heavy rain.
- (iii) Humus content of the soil is low.
- (iv) Mainly found in Karnataka, Karala, Tamil Nadu, Madhya

Prades and the hilly areas of Orissa and Assam.

(v) Suitable for crops like cashew nut.

(5) Arid Soils-

(i) Range from red to brown in colour.

(ii) Sandy in texture and saline in nature.

(iii) Due to the dry climate, high temperature, evaporation is faster.

(iv) Lacks humus and moisture.

(v) Can be made fertile and cultivable after proper irrigation system.

(6) Forest Soils-

(i) Found in the hilly and mountainous areas.

(ii) Texture varies according to the mountain environment where they are formed.

(iii) Loamy and silty in the valley sides.

(iv) In snow covered experience denudation and are acidic with low humus content.

A.11. The National Policy(1952) outlines that forest area of a country should be 33 percent of the geographical area. In India, it is about 19.39 per cent.

(i) Forests are essential for maintaining the ecological balance. Plants, animals and micro-organisms recreate the quality of air, that we breathe and the soil that produces our food, without which we cannot survive.

(ii) Forests are the primary producers on which all other living organisms survive.

(iii) Forests protect the genetic diversity of plants and animals for better growth of species and breeding.

(iv) Forests helps in water-cycle maintenance on earth, helps in raining. Forest holds water. The trees and the soil they make are full of water and they store this water for times of no rain. Thus forest keeps the land green.

(v) The forest protects the soil. It hold the soil with its roots and stops soil erosion. Thus forest conserve soil and protect land and it's beauty.

A.12. (i) Soil erosion

(ii) Global warming

(iii) Pollution

(iv) Climate change

- (v) Desertification
- (vi) Lack of bio-diversity etc.

MAP WORK

Q. On the outline map of India show with colour the distribution of soil in India.

The distribution of these soils is shown in the printed map of India here, practice it and observe state wise distribution of soil.

