

## FORESTRY

1. a)i) Is science of planting caring and using trees/forests and their associated resources or the practice of managing and using trees/ forests and their associated resources.

ii)

- The area receives high rainfall/1000 mm-2200mm throughout the year which
- encourages continuous growth of trees.
- The area has deep fertile volcanic soil that allow the roots for penetration deep
- into the ground support trees.
- The area is a gazetted reserve prohibiting cultivation and settlement hence
- allowing growth of trees
- The steep slopes discourage settlement thus forests thrive.

iii)

- The government policy of degazetement has allowed illegal cultivation and settlement in forest areas.
- Increased population of elephants that destroy trees
- Prolonged droughts have caused drying up of some trees.
- Plant diseases and pests destroy parts of forests.
- Over exploitation of certain species of trees

b)

- Legislations aimed of curbing encouraging public to participate in conservation of forests.
- Legislations aimed of curbing encroachment in forested areas.

- Encouragement in forested areas
  - Encouraging public to participate in conservation of forests.
  - Setting up of buffer zones to hinder human encroachment into forested areas  
(Nyayo Tea Zones)
  - Creation of forest reserves
  - Encouraging agro-forestry
  - Setting up presidential commission with the mandate of rehabilitation  
destroyed forested areas.
- c) Give the difference in exploitation of softwoods forests in Kenya and Canada  
under following sub-headings.
- i) Period of harvesting
  - ii) Transportation.

#### **Period of harvesting**

- In Kenya harvesting is done throughout the year while in Canada harvesting is in winter  
and early spring.

#### **Transportation**

- In Kenya transportation is mainly by road transport while in Canada transport is mainly  
by water transport.
- To ensure continuous supply of wood fuel, timber and raw materials for paper  
industries.
- To protect soil from being carried away (erosion)
- To protect water catchment areas

- To create room for conservation of wildlife
- To create employment opportunities
- To reduce importation of forest products thus saving foreign exchange
- To promote scenic beauty.

2.

- The low temperatures limit other land use activities making forestry a good alternative.
- The thin infertile soils due to keep glacial erosion limit agriculture and favours forests
- Adequate precipitation throughout the year
- Many rivers with waterfalls provide HEP used in the timber related industries
- River provides cheap transport and water needed in the processing purposes.
- An extensive ready market for forest products in Canada and U.S.A.

3.

- Meru Oak
- Elgon teak
- Cmpbor

4.

- Furniture making
- Wood carving industry
- Construction

5.

- Mature trees felled are replaced immediately.

- Tree farming is practiced in many parts with the aim of raising trees for future use.
- Regions which previously were devoid of trees are being planted with trees
- People are now being encouraged to plant trees and food crops in the same farms.
- The reduction of wastage e.g. the use of waste paper to produce newsprint.
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- People are required to seek permits if they have to cut trees. This reduces the rate of trees felling/unlicensed people do not cut down trees.
- The forest reserves are patrolled by guards to ensure that fires are reported promptly and also to ensure unlicensed people do not cut down trees.
- Forest reserves have been set aside to conserve indigenous species.
- Forestry department of the ministry of natural resources carry out research to produce and distribute seedlings to ensure the extension of forests.
- People are being educated through mass media on the importance of trees
- People are being encouraged to use alternative sources of energy/energy saving jikos.

6.

- There is a wide variety of trees species in a given area. This makes the exploitation difficult and expensive
- The buttress roots make the felling cumbersome
- The dense underground/thick forests and quick generation of plants hinder accessibility, exploitation difficult
- The heavy rainfall throughout the year results in muddy roads which makes transportation difficult.
- Inadequate capital limits the use of modern techniques in the exploitation of the forests.

- The demand within the region/markets are discouraging exploitation/expensive to transport/difficult to transport.
- River transport is hindered by waterfalls/rapids. This makes transport expensive.

7.

- Aridity that has reduced area under forests
- High population leading to clearing of forests for settlement
- Over exploiting of forests resources e.g timber fuel.
- Government policy of resettling people in forested areas.
- Forest fires which have contributed to destruction of forests.
- Pests and diseases which destroys trees.

8.

- Desertification
- Soil erosion/degradation
- Extinction of some tree species
- Decline in employment for those in forestry related areas
- Loss of plants with medicinal value
- Loss of aesthetic value
- Decrease in wild animals

9. Factors favoring forestry in Kenya

- Cool climate especially in the Kenya highlands.
- Fertile soils-Volcanic soils within the Kenya highlands and Rift valley.
- High precipitation ranging between 1000-2000 which favours growth of trees.

- Rugged landscape in some areas which discourages settlements and agriculture leaving growing of trees as the only alternative
  - Varied altitude which favours growth of different types of trees due to varied temperatures and rainfall.
  - High demand of forest products
  - Creation of forests reserves which enables forests to develop without interference from humans
10. Secondary products of forests-Ply woods, Vanner, fibre board, paper, wood, carvings wine, tannins
  11. Mahogany, ebony, ironwood, rosewood, green heart, goarea, mahure, supele, duhuma, African walnut, camphor, palms.
  12. a) Agro-forestry involves cultivation of both crops and trees.
    - b)
      - Provides sources of firewood and charcoal
      - Source of income to farmers after selling tree products like fruits
      - Trees act as wind breakers
      - Trees create micro climate within the farm
      - Some trees are of medicinal value
      - Trees leaves decomposes to form fertile soils