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## Agroforestry

This is the system of farming in which farmers that have multiple uses together with crops and/or pasture on the same land

### Importance of agroforestry

- Trees provide shades for animals.
- Legumes planted fix nitrogen in the soil.
- Trees area source of fodder to livestock.
- Some trees provide fruits that if food to man.
- They are source of firewood
- Provide materials for construction
- Leaves decomposed to form humus.

#### Reasons why there is limited adoption of agroforestry by farmers in Uganda

- Land fragmentation limits the size of land for agriculture.
- Inadequate training
- Lack of permanent land ownership.
- Inadequate supply of seed/seedling supply
- Poor infrastructure such as roads to distribute seedlings
- High costs of seedlings

Types of agroforestry practices commonly carried out by farmers.

- **Agro-Aquaculture** where the keeping of aquatic organism like fish in ponds surrounded by shrubs, trees and grass lawns.
- **Agri-silviculture system** where cultivated crops are intercropped with trees/shrubs for sustained production of food, fodder and wood.
- **Agri-silvi-pastoral system** where there is the integration of trees, crops, pasture and livestock on the same land for production of fodder, wood and pasture.
- **Entomoforestry** where the rearing of useful insects in association with trees, such as bee keeping (apiculture) and silkworm rearing (sericulture)

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- Silvo-pastoral system where trees are planted with pasture to provide shade and forage for animals.

## Characteristics of agroforestry

- They are quick maturing/grow fast
- They are deep rooted with few extensive lateral roots/have deep root system
- They have a narrow /less dense canopy
- They should grow straight with few or no branches
- They are easy to establish and quick to eradicate
- They withstand repeated pruning/are able to sprout easily and quickly grow
- They are nutritious and palatable to livestock/non-toxic
- They are resistant to pest and diseases
- They support growth of crops; some possess nitrogen fixing bacteria.
- 1. Which one of the following is a practice where trees, shrubs and crops are grown together?
  - A. Agrosilvipastoral
  - B. Agrosilviculture
  - C. Alley cropping
  - D. Taungya culture
- 2. A lever was used to lift a load of 80N by applying an effort of 20N. what was the mechanical advantage?
  - A. 0.25
  - B. 4
  - C. 25%
  - D. 400%
- 3. Which one of the following is NOT a characteristic of a good agroforestry tree species?
  - A. Having light canopy to allow sunlight penetration
  - B. Being deep rooted
  - C. Being easy to establish
  - D. Being able to compete with crops
- 4. How should annual crops be planted in the system of agroforestry? As
  - A. Scattered trees
  - B. Wood lots
  - C. Shelter belts
  - D. Hedges

## 1.B 2B 3D 4A

- 5. (a) Define agroforestry
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It is a farming system in which farmers deliberately plant multiple trees together with crops or pastures on the same land.

(b) Describe three types of agroforestry practices commonly carried out by farmers.

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- Entomoforestry where the rearing of useful insects in association with trees, such as bee keeping (apiculture) and silkworm rearing (sericulture)
- Silvo-pastoral system where trees are planted with pasture to provide shade and forage for animals.

(c) Give six characteristics of agroforestry

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