

Lec4. Classification of Agroforestry systems

Nair (1987) has classified the agroforestry systems based on the following four criteria.

1. Structural Basis
2. Functional basis
3. Socio economic Basis
4. Ecological basis

1. STRUCTURAL BASIS

- a) Nature of Components
- b) Arrangements of Components

a) Nature of Components

1. Agricultural systems
2. Silvopastoral systems
3. Agrosilvopastoral systems
4. Other systems

1. Agricultural systems

- i. Improved fallow species in shifting cultivation
- ii. The taungia system
- iii. Multispecies tree gardens
- iv. Alley cropping
- v. Multipurpose trees and shrubs on farmlands
- vi. Crop combinations with plantation crops
- vii. Agroforestry fuel wood plantations
- viii. Shelter belts
- ix. Wind breaks
- x. Soil conservation hedges

2. Silvopastoral systems

- i) Protein bank
- ii) Live fence of fodder trees and hedges
- iii) Trees and shrubs on pastures

3. Agrosivopastoral systems

- i) Home gardens
- ii) woody perennials for browse, mulch, green manure, soil conservation

4. Other systems

- i) Apiculture with trees
- ii) Aquaforestry
- iii) Multipurpose wood lots

b) Arrangement of components

1. Spatial arrangement
2. Temporal arrangement

2. FUNCTIONAL BASIS

- i) Productive functions
- ii) Protective functions

i) Productive functions

Food

Fodder

Fuel wood

Cloths

Shelter

NTFPs

Protective functions

Wind breaks

Shelterbelts

Soil conservation

Soil improvement

Shade

3. SOCIO ECONOMIC CLASSIFICATION

- i) Commercial systems
- ii) Intermediate systems
- iii) Subsistence systems

4. ECOLOGICAL CLASSIFICATION

- i. Humid / sub humid
- ii. Semiarid / arid
- iii. Highlands