

Agro Forestry Practices in Nigeria:

(a) Agro –Forestry: meaning and practices:

(i) Taungya System

(ii) Different agro-forestry combination in production of crops, livestock and pasture etc.

(iii) Tree species suitable for agro forestry practices.

Meaning of Agro-forest practices: Agro- forest is the practice of combining agriculture with forestry for the sustenance of trees, fertility of the soil and production of abundant food crops to meet the needs of man. This account for about 70 percent of agricultural production for farmers living in forest zones.

Agro-Forest Practices

Taungya System: It is a system of combining crop husbandry with forest management on the same piece of land, thereby integrating agriculture with forestry. Food crops are cultivated along with economic trees to provide shade at the initial stage of growth of the economic trees. The food crops are usually annual or biennial crops. Seedlings or seeds of economic trees are given to local farmers who have interest on taungya system to plant along with their own crops. After about two years they vacate the land while the forestry department takes over the management of the trees.

Examples of trees used in agro-forestry

- Parkia biblobasa (Ukpaka- locust beans)
- Irvingia spp (Ogbono)
- Adansonia digitata(baobab)
- Tectona grandis (Teak)
- Vitellaria paradoxa (shear butter)
- Chrysophyllum albidum (African star apple)
- Blighia sapida (Ishin)
- Gmelina spp
- Flame of the forest
- Pinus spp
- Iroko
- Albizia
- Abura
- Sapele
- Afara
- Opepe
- Obeche
- Acacia spp
- Nigerian Walnut

Examples of food crops in agro-forestry

- Plantain
- Maize
- Yam
- Banana
- Groundnut

- Cocoa yam
- Cassava
- Cowpea
- Melon
- Rubber
- Coffee
- Pawpaw
- Cocoa
- Oil palm
- Citrus

Advantages of Taungya system

1. Variety of crops are harvested
2. Availability of crops produce throughout the year
3. The farmers has a piece of land to cultivate where land is scarce
4. The young forest trees are taken care of by the farmers
5. It increases the income of the farmers
6. When leguminous crops are planted more nitrogen is supplied to both food crops and forest crops

Different Agro-Forestry Combination: The table below shows the different combination of crops and forest trees in agro-forestry.

Region	Agro-forestry Combination
Savanna	Vitellaria/millet/cowpea
	Parkia/ Vitellaria/sorghum/millet
	Vitellaria/ Parkia/millet/cowpea
	Vitellaria/sorghum/cowpea
Rain forest	Chrysophyllum / maize / cowpea
	Blighia sapida / plantain / coco yam
	Irvingia spp / bitter leaves /oil palm / cassava
	Baobab / rice / cowpea

ALLEY CROPPING: It is also refers to as hedge-row intercropping. Leguminous tree crops are grown simultaneously with arable crops. The trees are grown in wide rows while the arable crops are grown in-between the rows. The fresh branches of the tree crops are sometimes pruned and worked into the soil organic manure to supply the needed nutrients to the arable crops.

FOREST RESEERVES: These are large expanse of land dedicated to growing of trees of economic importance which may take several years to get matured. The soil fertility is maintained or restored and erosion is controlled.

WILDLIFE CONSERVATION: Land that is not suitable for crop production can be used for wildlife conservation. Different types of animals are kept and given adequate care and attention. The practice can as well be called game reserves. They serve the main purpose of preventing some types of animals from extinction and tourists attraction for the purpose of revenue generation.