

LECTURE 2: LAND CONCEPT AND AGRICULTURE

Land is a major resource on which agricultural development of any nation depends. Arable land is most valuable and at the same time the most vulnerable to abuse and misuse if it is not properly managed.

In Nigeria, the total land area is about 98.3 million ha out of which 71.2 million ha are cultivable. However, only one – third is under cultivation and this is used for sustainable food production.

2.1 Land Concept

Land means different things to different people. It is generally defined as a measurable entity divisible into parcels by means of mathematical and technical processes of surveying and cartography. Land comprises all elements of physical environments to the extent that they influence potentials for land use. It does not only refer to soil, it includes relevant features of geology, land forms, climate and hydrology, the plant cover and fauna, insects and micro fauna.

2.2 Pattern of Land Use

Land usage in any particular area is defined by the population density. This controls average amount of land available to individuals, families, and farming purpose. Land has been traditionally used for cultivation of crops and grazing of animals. The following are the various ways land is used for agriculture;

1. Forest – land is left for many years (as long as 25 years) to regenerate.
2. Bush fallow – the fallow period extends to 6 – 10 years to allow growth of small trees and bushes.
3. Short fallow – this is based on natural grass development with cultivation recurring after 1 – 2 years.

The above 3 can be grouped under shifting cultivation i.e. clearing, burning and planting of crops for a period thereafter leave the land to fallow and shift cultivation to another land. This is practicable where land is abundant.

4. Annual cropping – this involves cultivating the land for a very long time continuously and only left fallow for some months. The farmer restores the land through the use of fertilizers and manure.
5. Multi cropping (mixed cropping) – each land or plot of land is cultivated with 2 or more crops each year and virtually to fallow. It may involve planting different types of crops in the same field in one cropping season and may entail rotation but it may help to maintain soil fertility, check erosion and allow labour to spread evenly throughout the year. It is very difficult to mechanized and fertilize since different crops required different fertilizing period and quantity.
6. Crop rotation – this practice enables the farmer to keep the soil fertile without leaving the land fallow for long periods. It can be practiced by farmers who do not have sufficient land. It thus enables the farmer to make maximum use of farming land, as all the land can be cultivated each year. A good crop rotation helps to reduce the incidence of soil borne diseases which attack crops.
7. Mono cropping
8. Commercial plantation – is an intensive cultivation of a specific crop on a wide expanse of land, e.g. oil palm plantation, rubber plantation, cocoa plantation, sugarcane plantation, mango plantation, etc.