

CHAPTER 10 AGRICULTURE IN NIGERIA

Objectives

After studying this chapter, students should be able to:

- describe major agricultural practices in Nigeria.
- identify major cash and food crops in Nigeria.
- locate where these crops are found on the map.
- highlight the importance of agriculture.
- state the problems of agriculture in Nigeria and suggest solutions to the problems.

10.1 Definition and Types of Agricultural Practices

Agriculture can be defined as the planting of crops and the rearing of animals.

The main types of agriculture practised in Nigeria are:

- (i) Subsistence agriculture
- (ii) Mechanised agriculture
- (iii) Pastoral farming

Others include mixed farming and crop rotation.

1. Subsistence Agriculture

This is a system of agriculture in which the farmer cultivates a small area of land using simple tools such as hoes, cutlasses and sickles. Food crops are produced for the consumption of the farmer and his family and little or none is left for sale. Much human labour is required for all farm operations, hence, output per man is very low. The rainfall regime determines planting and harvesting periods and

the size of the harvest is influenced by rainfall variability. Shifting cultivation and bush fallowing fall under this system of agriculture.

Shifting cultivation involves permanent or semi-permanent movement of a farmer and his settlement from a piece of land to another for a very long time. However, in bush fallowing, a farmer cultivates a land for some years and leaves it for 3-4 years to regain its fertility. The farmer then returns to the previous land and continues farming activities. This system is practised in many areas in Nigeria. The fallow period has reduced due to population pressure and permanent cultivation has been possible through the application of manure and fertilizer.

2. Mechanized Farming

This involves the cultivation of food and cash crops on a large area of land using farm machines such as tractor, etc. Crops are cultivated mainly for sale. Output is high since machines are used for farm operations. It involves large capital investment. Crops are grown on plantations. Facilities such as schools, hospitals, industries are located on plantations. In Nigeria, plantations are owned by large organizations, government and some individuals. Examples include the rubber plantation in Sapele and Obubra cocoa plantation.



Fig. 10.1: Mechanized farming

3. Pastoral Farming

This involves the rearing of cattle, sheep and goats. Cattle rearing is carried out mainly by the Fulani and Shuwa Arabs herdsmen in the northern part of the country which is free from tsetsefly. During the dry season, the herdsmen move their cattle to the south in search of water and pasture and the length of stay at a particular place depends on the availability of these resources. During the wet season, they move their cattle back to the north. The annual migrations follow defined routes and there are fixed points of settlement. The herdsmen also move their cattle to the Plateau because of tsetse fly infestation in the valley during the wet season. This is known as **transhumance**. Overgrazing is a common feature of this form of pastoralism and so is the destruction of vegetation caused by the annual burning of coarse grass to enhance the rapid growth of fresh grass. These practices result in soil erosion, environmental deterioration and desertification.

4. Mixed Farming

This involves the integration of livestock and crop farming on the same piece of land. Among the Shuwa Arabs, the cattle are stall-fed as the cultivation of fodder crops for feeding cattle is absent. In the forest belt, goats and sheep are stall-fed while they are let loose on the grassland areas to forage for themselves.

5. Crop Rotation

This involves planting of different crops in a farm after each planting season. For example, a farmer may cultivate vegetables after which he plants root crops on the same plot the following year.

10.2 Food Crops

Food crops cultivated in Nigeria can be classified into three groups, namely grains, roots and fruits. The most widespread grains are guinea corn (sorghum), millet and maize. The fruits are grown in grassland areas but maize is also cultivated in the forest belt. Specifically, guinea corn is cultivated in Maiduguri, Kaduna, etc.; millet in Sokoto, Bauchi, Gombe, Kano, Damaturu, etc.; maize in Kano, Ibadan, Lokoja, Enugu, etc. Other grains include rice which is cultivated in areas of heavy rainfall such as Makurdi, Bida, Afikpo and Abakaliki.

Root crops especially yams, cocoyams and sweet potatoes are the second most important food crops in Nigeria. Yam is cultivated mainly in Southern Nigeria for example Abeokuta, Ado-Ekiti, Lokoja and Makurdi. Cocoyams are cultivated in parts of South-East (Owerri, Umuahia) and Middle belt (Lokoja and Makurdi).

Major fruits cultivated are banana and plantain. They are grown for consumption in the forest zone. They represent a significant item of internal

trade. Major areas of cultivation include Ado-Ekiti, Ondo in South West of Nigeria.

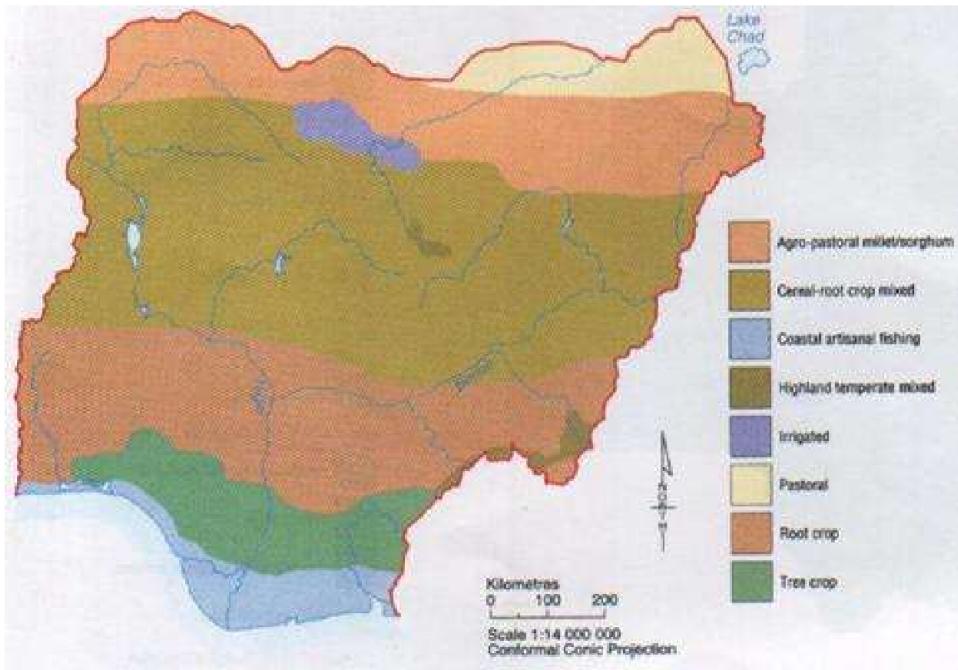


Fig. 10.2: Map showing food crops in Nigeria

10.3 Cash Crops

The main cash crops consist of perennial tree crops such as oil palm, cocoa and rubber and annual crops such as cotton, groundnut and cassava. Kolanut and beniseed are also important commercial crops. Oil palms grow in areas of high rainfall (1520mm) with low altitudes such as Owerri, Umuahia, Uyo and Calabar. Cocoa is cultivated on well drained deep loamy or clay soil and requires an annual rainfall of 1210-2000mm and high relative humidity. It is cultivated in Abeokuta, Ibadan, Akure, Ado-Ekiti and Osogbo. Nigeria is a major producer and exporter of rubber. It grows on gently-sloping land with fertile soil in regions having 1770-2030

mm rainfall and temperature of about 27^0C . It is grown in Benin City and Asaba.

Cotton which requires well-drained soils, rainfall of 760-1400mm, and a marked dry season is cultivated in Gusau, Kaduna, Bauchi, Gombe etc.

Groundnut is cultivated in areas with sandy soil with rainfall of 640 – 1000 mm and a marked dry season. It is grown in the Sudan and Sahel belt specifically Sokoto, Gusau, Kano, Damaturu, Maiduguri etc. Cassava which was formerly a food crop is now a major export crop in the country. It is cultivated mainly in the southern areas of Ibadan, Benin, Calabar, Enugu, Ilorin etc.

Physical Conditions Necessary for the Production of Cash Crops

(a) Cocoa

- (i) Moderate rainfall between 125cm to 200cm, January to December
- (ii) Well drained soil and undulating land.
- (iii) Rich loamy soil.
- (iv) Non-acidic soil
- (v) Low annual range of temperature.
- (vi) It requires shade for the seedlings.
- (vii) Dry period between December and February for drying the beans.

(b) Cotton

- (i) Moderate rainfall of about 60cm
- (ii) High temperature of about 27^0C for growth, ripening and harvesting
- (iii) Rich clayey loamy soil
- (iv) Well drained soil.
- (v) Dry sunny period for ripening of the boils

(c) Rubber

- (i) Moderate temperature of about 27°C
- (ii) Heavy rainfall up to 250cm
- (iii) Even distribution of rainfall
- (iv) Deep and humus soil
- (v) Abundant sunshine

(d) Groundnut

- (i) Wide plains of the North for easy cultivation
- (ii) Moderate rainfall of about 100cm annually
- (iii) Long dry season for drying, harvesting and storage
- (iv) Loose sandy or loamy soil
- (v) Average temperature between 25°C to 30°C

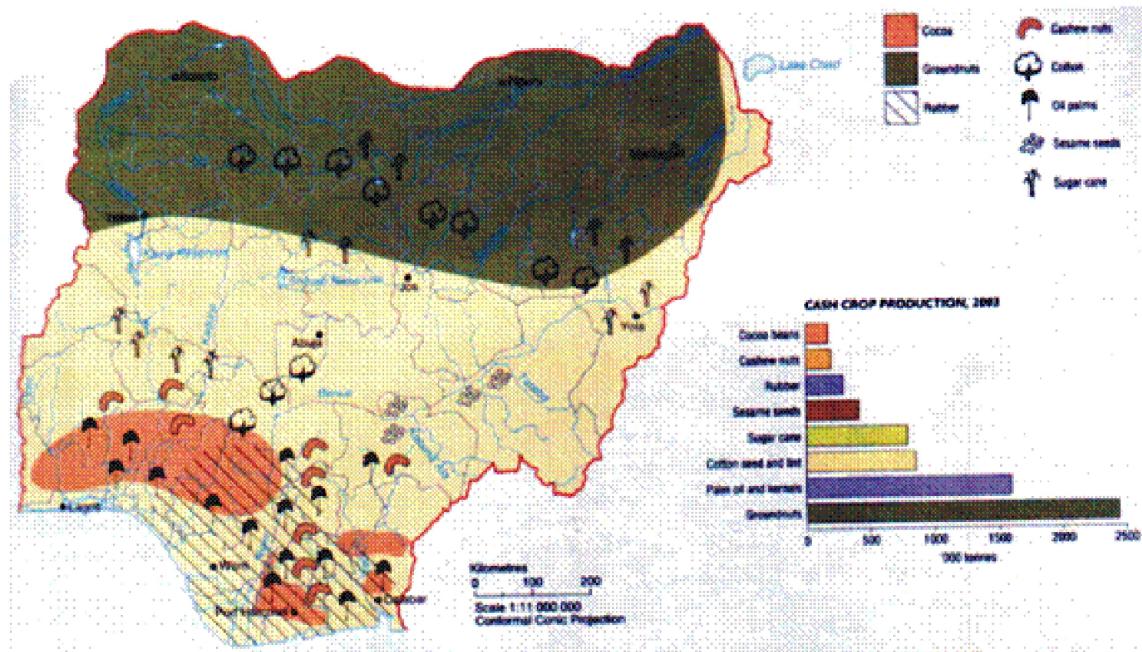


Fig. 10.3: Cash crops in Nigeria

10.4 Importance of Agriculture

The importance of agriculture to the economy of Nigeria include the following:

1. It is the source of food supply.
2. It provides employment for farmers.
3. It is a source of income to farmers.
4. Export of cash crops is a source of foreign exchange to the government.
5. It contributes to the development of towns.
6. It has improved the means of transportation as roads and railways were constructed to open up and link agricultural areas with the ports.

10.5 Factors Influencing Agriculture

There are several factors which influence the type of crop cultivated, animal reared and farming system in a particular area. These factors include:

- (i) **Climate:** Climatic elements particularly rainfall and temperature determine the type of crop that can be cultivated in an area. Amount and duration of rainfall varies across the ecological zones and influence agricultural activities. For example, oil palm requires high rainfall of 1520mm while groundnut requires 1000mm.
- (ii) **Relief:** Some crops thrive well in lowlands or plains such as groundnut, cocoa and rubber, or on highlands such as coffee and tea and swamps such as rice.
- (iii) **Soil:** Soil properties such as texture, structure, colour, influence crop cultivation. Each crop has its own soil requirement. For instance, groundnut is cultivated on sandy soil while cotton grows well on loamy soil. Since soil types vary from one location to another in Nigeria, cultivation of crops also vary. Crops are planted on suitable soil that enhance crop growth.

- (iv) **Biotic factors:** Insects, pests, weed and disease influence farming. Cattle rearing is dominant in the grassland areas free from tsetse fly.
- (v) **Size of land:** Subsistence farming is practised on small farm holdings while mechanized farming requires large area of land.
- (vi) **Culture:** The culture of people influences what they eat which affect the type of crop cultivated by farmers. Also, level of technology influences farming practices.
- (vii) **Capital:** Availability of capital determines the size of the farm, amount of input and level of output. Large capital is required to establish commercial farms and plantations.

Problems of Agriculture

- 1. **Rainfall variability and drought:** Rainfall determines when crops are planted and harvested. Late onset of rain, excessive high rainfall which cause flood and long periods of no rainfall damage crops on the farm thereby affecting output.
Solution: (i) *Construction of deep wells and irrigation in dry areas.* (ii) *Information on weather forecasts should be made available to farmers.*
- 2. **Poor soil fertility:** A large part of Nigeria is affected by leaching and soil erosion which influence soil fertility. Leaching is the washing down of soil nutrients by percolating water to levels beyond the reach of plant roots. It occurs in areas with high rainfall. Soil erosion is the washing away of top soil by water or wind. Gully and sheet erosion destroy farmlands in Enugu, Anambra states etc. The nature of the parent materials from which soil is formed also influences soil fertility.

Solution: (i) *Soil fertility can be improved by the use of fertilizer and manures.* (ii) *Planting of cover crops, terrace cultivation and*

contour ploughing will reduce erosion.

3. **Pests and diseases:** Pests and diseases affect farmers, crops and animals. Farmers productivity is reduced as a result of diseases. Pests such as birds, weevils, locusts and rodents destroy crops. Diseases such as blackpod and swollen shoot affect cocoa. Pesticides, insecticides etc, should be applied to crops.
4. **Low level of technology:** The use of simple tools such as hoes and cutlasses affect farmers productivity as small areas are cultivated.
Solution: Government should make machines available to farmers at low cost.
5. **Low capital:** Rural farmers do not have sufficient fund to purchase farm inputs such as pesticides, improved varieties of seeds, machines etc. This affects their output and income.
Solution: *Government should provide loans at low interest to farmers since they do not have collateral with which to borrow from banks.*
6. **Rural-urban migration:** Movement of young men to urban centres has reduced the number of farmers in rural areas and crop production. Social infrastructures such as electricity, schools, hospitals, water, roads should be provided in rural areas.

10.7 Fishing in Nigeria

Fishing is an important economic activity in Nigeria. Although, the country has numerous rivers, large amount of fish is imported to satisfy the growing demand. Fishing areas can be classified into three:

1. **Inland coastal areas:** Fishing is carried out in rivers and lake in areas such as Lagos, Port Harcourt, Calabar, Lokoga, Makurdi, Lake Chad and Kainji. Important towns include Sokoto, Argungu, Maiduguri etc.

Fishing is a dominant activity along the creeks of the Niger Delta. It is practised by the Ijaw fishermen.

2. **Offshore and lagoon fishing:** Fishing is also done in the lagoon and ocean. In areas such as Lagos, Warri, Port Harcourt and Calabar. Towns in these areas include Lagos, Epe opobo, Bomadi, Burutu.
3. **Artificial Ponds:** Fishing is done in artificial ponds made with concrete.

10.8 Methods of Fishing

Fishing is carried out using the following methods.

- (i) Traps
- (ii) Nets
- (iii) Trawlers
- (iv) Hooks
- (v) Intoxicants e.g. marsh leaf
- (vi) Spears
- (viii) Use of basket

10.9 Types of Fish

Types of fish in Nigeria include:

1. Tilapia
2. Mackerel
3. Mudfish
4. Catfish
5. Croaker
6. Ladyfish
7. Electric fish
8. Dogfish

10.10 Benefits of Fishing

- i. Fishes are sources of protein
- ii. Provides employment
- iii. Provides income to fishermen and women that sell them
- iv. Source of revenue to the government
- v. Source of raw materials to industries
- vi. Promotes inter-regional trade

Summary

- Agriculture can be defined as the planting of crops and the rearing of animals.
- The main types of agriculture practiced in Nigeria are: Subsistence agriculture, Mechanized agriculture, Pastoral farming.
- Food crops cultivated in Nigeria can be classified into three groups, namely grains, roots and fruits.
- Main cash crops consists of perennial tree crops such as oil palm, cocoa and rubber and annual crops such as cotton, groundnut and cassava.
- Fishing is carried out in rivers, lakes, creeks, lagoon and ocean.

Objective Questions

1. In subsistence agriculture, the farmers produce mainly
 - A. food crops
 - B. cash crops
 - C. for export
 - D. for sale in local market
2. Reduction in fallow period is caused by
 - A. high population
 - B. high demand for land for building construction

- C. demand for land for road construction
 - D. all of the above
3. Which of these is not a feature of mechanized farming?
- A. large area of land is used
 - B. crops are cultivated for sale
 - C. use of machines
 - D. food crops are planted.
4. Which of these animals is not reared in the southern part of Nigeria?
- A. goat
 - B. poultry
 - C. pigs
 - D. cattle
5. Millet is cultivated in these towns except
- A. Sokoto
 - B. Bauchi
 - C. Owerri
 - D. Kano
6. Which of these crops is not a cash crop?
- A. cassava
 - B. yams
 - C. millet
 - D. guinea corn
7. Which of these determine the type of crop cultivated and farming systems?
- A. climate
 - B. soil
 - C. pests and diseases
 - D. all of the above
8. Which of these is not a fishing area?

- A. Niger
 - B. Benue
 - C. Epe
 - D. Ibadan
9. Which soil type is suitable for groundnut cultivation?
- A. clay soil
 - B. sandy soil
 - C. loess
 - D. acidic soil
10. Which of these is cultivated in areas of high rainfall?
- A. Rubber
 - B. Cotton
 - C. Groundnut
 - D. millet

Essay Questions

- 1a. On a map of Nigeria, locate and name one town each where (i) groundnut (ii) cocoa (iii) rubber are produced
 - b. State the conditions necessary for the cultivation of crops listed in (a) above.
2. Discuss five problems of agriculture.
3. List the fishing areas in Nigeria with an example each.
4. State five benefits of fishing.
5. Highlight four importance of agriculture in Nigeria.