

Chapter 15

Agriculture

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CHAPTER

INTRODUCTION

Everyday, different types of food and fruits are eaten at different times of the year. Agriculture is the major form of cultivating such foods and fruits. So, agriculture is a very important sector of the economy of West African countries. Our economic, cultural and social values cannot be complete without agriculture. Its role in the economy and its contributions to the development of the country are discussed in this chapter.

OBJECTIVES

At the end of this chapter, students should be able to:

- ◆ Define the term 'agriculture';
- ◆ Explain the importance of agriculture to an economy;
- ◆ Mention and explain the components of agriculture;
- ◆ Explain the systems of agriculture.
- ◆ State the reasons for low agricultural productivities in Nigeria and ways of overcoming such problems.

15.1 Meaning of Agriculture

Agriculture can be defined as the cultivation of the soil for food crops and cash crops. It also covers fishing, livestock, poultry, forestry, crop production, and so on. Agriculture contributes largely to the nation's economic growth and development. This is as a result of the fact that it produces the most basic needs of man which includes food, shelter, clothing, and so on. It also produces raw materials for the use of industries, and thereby contributes to the industrial sector of the economy. In fact, it is not an overstatement when we say that the development of other sectors of the economy depends on the agricultural sector.

15.2 Importance of Agriculture to the Economy

(a) Supply of food: Food is necessary for human development, because it is one of the man's basic needs. It is the agricultural sector that supplies food for the country's growing population. Both rural and urban dwellers depend on agriculture for existence. Industrial workers, civil servants, students and the agriculturists themselves depend on farm for their food supplies. Agriculture thus provides food for nourishment and energy. The process of industrialisation suffers if agriculture fails to supply food adequately to the workers. If the country depends on importation of food, there will be a reduction in foreign exchange earnings needed for development. Agriculture is important since it supplies the domestic needs of the country.

(b) Employment opportunities: Agriculture is the greatest employer of labour in most West African countries. The majority of the population is engaged in cultivating the soil, while others are engaged in rearing of animals, livestock, poultry or fishery. Agriculture is a means of earning a livelihood. Even in Nigeria and Sierra Leone, mining and oil drilling have in recent years attracted some percentages of their labour force and the greater percentage of their people are engaged in agriculture.

(c) Provision of raw materials for industries: Agriculture provides raw materials for industries, and it includes cotton, tobacco, groundnut, cocoa, cassava, and so on. Industries whether at processing stages of development or when fully developed require raw materials to function

effectively. Raw materials constitute input factors. Processing and manufacturing cannot be complete without the supply of raw materials because most of these materials come from the agricultural sector.

(d) Contribution to the Gross Domestic Product (GDP): Sales of agricultural products help to increase the income of the country, thereby increasing the country's GDP or the national income. Before most West African countries gained independence, agriculture was the main contributor to the GDP for some of the countries like Nigeria and the share of the GDP was as high as 90%.

(e) Provision of foreign exchange: Agriculture provides a large percentage of foreign exchange earnings for the country. Large quantities of agricultural products such as groundnut, palm produce, cocoa, and so on are exported to countries like Britain, America and Libya. From such exports, foreign currencies such as dollars (\$), Japanese Yen (¥) and British pounds (£) are earned by Nigeria.

(f) Improved standard of living: Majority of the inhabitants of West Africa are farmers and they depend on agriculture for their livelihood. The incomes of the farmers depend on the sales of agricultural products and other raw materials. This income determines how a farmer's provision for shelter, feeding and clothing will be and consequently determines a farmer's standard of living. Agriculture indirectly helps to improve the living standard of inhabitants with the improvement of the basic infrastructure (roads, bridges, railways) which helps to bring about internal exchange between those living in the rural agricultural areas and those in the urban regions.

Components of agriculture: The components of agriculture can be grouped under four areas namely:

(a) Livestock: Livestock simply means keeping animals on a farm.

Livestock production is an important economic activity for both rural and urban dwellers.

Livestock includes poultry, piggyery, rearing of goats, sheep and cattle.

(b) Forestry: This is the growing of trees for timbers and tapping of forest resources. From the forest the following are produced: timber (including logs, plywood, veneer, sawdust, etc.), gumarabic, shea butter, tanning materials, wood and wildlife. The most outstanding trees from which these products are manufactured include "iroko", mahogany and obeche; firewood is important especially for domestic use to most rural and urban dwellers. Industrial woods play an important role not only for the export of timber but also for its use in the domestic economy.

(c) Fishery: Fishery is a business usually carried out by people living along the riverine areas. Fishing is an important occupation for the supply of fishes which is needed for domestic consumption and for export. Fishing is also one of the avenues that help in opening up waterways and outlets to the sea, thereby improving the communication and transportation system of the country. Fishing in most West African countries and Nigeria, in particular, is labour intensive. Generally, local fishermen use different equipments such as traditional hooks, nets and various types of fish traps. Different types of fishes and species are caught but the yields are low since fishermen operate on labour-intensive basis. But a more advanced form of fishing which is regarded as industrial fishery is required.

(d) Crop production: Cultivation of crops in order to produce food for the teeming population is a very important aspect of farming. Crop production for food supply is estimated at 80% of Nigeria's total agricultural produce. Crop production does not only supply food for domestic consumption but also provide raw materials for industries. It also constitutes the bulk of export commodities from the agricultural sector. Crop production is broadly classified into food crops and cash crops. The following table illustrates the various classifications of chosen examples of Nigeria's food crops.

TABLE 15.1: Classification of Nigeria's Food Crops

Root Crops	Cereals	Fruits and Vegetables	Cash Crops
Yams, cassava, cocoyam, potatoes	Rice, millet, maize, sorghum, wheat	Orange, grapes, pineapples, bananas, plantain, pawpaw, mangoes, cabbages, cauliflower, garden eggs, bitter leaf	Palm produce, groundnut, cocoa, cotton, rubber

15.3 Systems of Agriculture

A. Peasant farming: Peasant farming is a type of farming that is subsistence in nature and associated with land tenure system. It involves the members of the nuclear family made up of the father, mother and the children. Yields from such farm is generally low and is mainly for family consumption.

B. Plantation agriculture: Plantation agriculture has to do with the planting of crop seedlings and trees on vast acres of land. In recent times, private enterprises, individuals and governments have been practising plantation farming because it leads to largescale production and scientific farming. Rubber trees, oil palm trees, coconut palm, cocoa, and so on which grow wild on their own in special habitats are now being replaced by plantations.

Plantations thrive most in the tropical regions. In Nigeria, for instance, large hectares of sugarcane plantations at Bacita, Pategi and Numan are famous. Oil palm plantations at Eket in Cross Rivers State, Ohaji-Egbema in Imo State and Dunlop plantations of rubber in Rivers State are other examples. There are numerous cocoa estates or plantations in Ogun, Oyo, Ondo and Delta States.

Advantages of plantation agriculture

- (i) Helping to minimise waste of lands.
- (ii) Easy harvesting of crop yields.
- (iii) Higher crop yields leading to increase in income.
- (iv) Increasing employment opportunities.
- (v) Helping to open up rural areas.
- (vi) Possibility of easy mechanisation.

Disadvantages of plantation agriculture

- (i) Lack of adequate capital to purchase machinery and equipment.
- (ii) The practice of land-holding system.
- (iii) Plantations take time to mature, hence farmers abandon the projects because they want quick monetary returns.
- (iv) The fear of overproduction and fluctuations in the market prices without domestic stabilisation policies.

C. Farm Settlements: One of the most modern systems of agriculture is by settling farmers on allotted portions of land where they get involved in extensive farming. The scheme is called farm settlement. The scheme operates on the basis that the government or the enterprise acquires large hectares of land and allots them to people to farm. The size of land acquired and the number of people engaged determine also the size of farmland. Farm settlements are usually planned in such a way that mechanisation and plantation systems are possible. Settlements have usually a central pool of resources such as supply of agricultural equipment and servicing centres. They also contain facilities like medical centres, canteens and playground. Above all, farmers have access to credit facilities to be refunded at low interest rates by settled farmers.

D. Cooperative Farming: Farmers do form associations under cooperatives and agree to pool their resources together for more active participation in agriculture. The land is pooled together and cultivated as a single unit by members. This means management of land through joint cultivation of farmlands while expressed ownership of land is vested in the society. Cooperative farmers are in a better position to secure loans and purchase farm implements. They also have access to marketing facilities through cooperative consumer and wholesale associations.

Types of cooperative farming practice

(a) Cooperative joint farming: Land is entirely pooled together. Some members simply contribute their land and receive rent and dividend on it as members of the cooperative society.

(b) Cooperative tenant farming: By this system, ownership of land is not private. Members are tenants on the farmland. Cultivation is done by individuals as land is leased to them and holding of land is clearly demarcated for each person.

(c) Family joint cooperative farming: The family head owns the farmland on behalf of the family members (husband, wife and children). The members of the family contribute labour while the family head with rich resources provides capital in the form of machinery and other inputs like seeds and fertilisers. They all work on farmland providing labour and after harvest, family needs for consumption are met while sharing of profits is according to inputs.

E. Mechanisation farming: Mechanisation means introduction of the use of machines instead of the traditional system of human labour. It means the use of machines and techniques such as

tractors, ploughs and combined harvesters to work on the suitable hectares of land while human labour operates these machines.

15.4 Reasons for Low Agricultural Productivity in Nigeria

(a) Traditional farming methods: The method of traditional farming is one of the greatest problems confronting agricultural productivity in Nigeria. The use of crude implements such as hoes and cutlasses reduces the volume of agricultural productivity in Nigeria. Also, the quantity of farm products that will be produced with the use of traditional method will be very low. So over-dependence of traditional way of farming and inability to use modern implements to practise farming contributed to the low agricultural productivities.

(b) Limited funding: Limited funding is another problem facing agricultural productivity in Nigeria. The negative attitude of the government towards giving loans to the farmers is another issue responsible for low agricultural productivity in Nigeria.

(c) Problem of storage facilities: The problem of storage facilities is as a result of inability to preserve some agricultural products that are seasonal. Such products at the time of harvest are in abundance and there are no means of preserving them till the time of scarcity, and they waste off.

(d) Limitations of the land tenure system: This is a system whereby lands are owned by families who are unwilling to release their land for agricultural facilities. This has limited the development of agriculture in Nigeria.

(e) Neglect of agriculture: This problem is as a result of government and people of West Africa paying little attention to agriculture. The youths are not ready to engage in agriculture; rather, they depend on trade and some other works for existence because they see farming work as a dirty and non-lucrative job. Also, the government has neglected agriculture for crude oil. The overdependence on crude oil has really turned away the government's attention from agriculture.

(f) Lack of basic infrastructural facilities: Most of the farm settlements in remote areas are totally neglected by the government, because the basic amenities such as power is epileptic, water and good roads are not provided, while irrigation facilities are also lacking. They have reduced agricultural productivity in Nigeria.

(g) Rural–Urban Drift: The imbalance in urban–rural economy has led to a rural–urban drift. People are not ready to stay in rural areas; therefore, they are migrating to the cities, where farming cannot be practised thereby causing low agriculture productivity in Nigeria.

(h) Low price of agriculture products: Poor pricing of agricultural products discourages farmers. It therefore affects the productivity of agricultural products in Nigeria.

15.5 Ways of Overcoming the Problems of Low Agricultural Productivity in Nigeria

(a) Provision and development of infrastructural facilities:

The basic infrastructural facilities should be provided in the rural areas where they are needed. Better roads, electricity and good water should be provided where they are lacking. This will encourage people to stay in the rural areas to farm and also reduce rural–urban migration. Thereby mass agricultural products are ensured.

(b) Credit facilities: The government should make available credit facilities to the farmers. Also, government through the ministry of agriculture, should make available more funds, supervise the disbursement of the funds properly, and also guide against misappropriation of funds so that the credit facilities will get to the appropriate people that need it.

(c) Land tenure system: Land owners should be encouraged to release their land to prospective farmers so as to improve agricultural development.

(d) Introduction of new and modern methods of storage facilities:

The modern system of preserving agricultural products when they are produced in abundance should be introduced to avoid wastages. This will ensure availability of such products at the time of scarcity.

(e) Discouraging the negative attitudes of people and the government towards agriculture:

Government should pay more attention on agriculture and encourage the citizens to get involved in it rather than depending too much on crude oil.

(f) Extension services policy: There is the need to train and equip workers who will educate the rural folk on modern practice and the use of modern equipments. This should be encouraged to bring about increase in agricultural products.

(g) Mechanisation policy: The mechanised farming should be encouraged by the government;

this involves the use of modernised farm implements like tractors to practise farming. This will ensure mass production of agricultural products, while requiring less human labour.

Summary

◆ Agriculture is the cultivation of the soil for food crops and breeding, feeding and management of livestock.

The following are the importance of agriculture:

- ◆ Supply of food
- ◆ Providing employment opportunities
- ◆ Supply of labour
- ◆ Provision of raw materials for industries
- ◆ Contribution to the gross domestic product (GDP)
- ◆ Provision of foreign exchange

The following are the components of agriculture:

- ◆ Livestock
- ◆ Forestry
- ◆ Fishery
- ◆ Crop production

The following are the different systems of agriculture:

- ◆ Peasant farming
- ◆ Plantation agriculture
- ◆ Farm settlements
- ◆ Cooperative farming
- ◆ Mechanisation

The following are the problems of agriculture:

- ◆ Traditional farming method
- ◆ Limited funding
- ◆ Problems of storage facilities
- ◆ Inadequacy of the land tenure system
- ◆ Neglect of agriculture
- ◆ Inaccessibilities to farmland and lack of basic infrastructural facilities
- ◆ Rural–urban drift
- ◆ Low price of agricultural products

The following are solutions to the problems of agriculture:

- ◆ Provision and development of infrastructural facilities
- ◆ The provision of credit facilities
- ◆ Adequate provision for Agriculture within the land tenure system
- ◆ New and modern system of storage facilities
- ◆ Discouraging the negative attitudes of people and the government towards agriculture
- ◆ Extension service policy
- ◆ Mechanisation policy

Class Activities

- (a) Make a list of agricultural products found in your locality.
- (b) Discuss the systems of agriculture most prevalent in your locality.
- (c) Make a list of food crops grown in your village or urban areas.
- (d) Make another list of crops mainly grown for the purpose of raising cash in your local

government area.

(e) Excursion: Visit the nearest plantation, oil palm estate, cocoa estate, and so on. Discuss the results of your observations in the class.

(f) Practical work: Students and staff are advised to take part in school farm work.

Revision Questions

Objective Questions

1. The primary objective of the agricultural credit guarantee scheme is the provision of:

- (a) Guarantee for loans granted by banks for agricultural purposes
- (b) Agricultural inputs to facilitate credit from banks
- (c) Loans for every farmer
- (d) Agricultural products for farmers

2. Subsistence means:

- (a) Cultivation for external use
- (b) Cultivation for local industry
- (c) Farming for the urban dwellers
- (d) Cultivation for household consumption
- (e) Cultivation for foreign currency

3. Farm products are graded, packed and distributed by:

- (a) Purchasing cooperatives
- (b) Agricultural cooperative bank
- (c) Consumer cooperative society
- (d) Marketing cooperatives
- (e) Wholesale cooperatives

4. Monocultural agriculture means:

- (a) The cultivation of seasonal crops
- (b) The cultivation of one major crop
- (c) Plantation agriculture
- (d) Shifting cultivation

(e) Excursion: Visit the nearest plantation, oil palm estate, cocoa estate, and so on. Discuss the results of your observations in the class.

(f) Practical work: Students and staff are advised to take part in school farm work.

5. One of the factors responsible for low agricultural production in West Africa is:

- (a) Shortage of land
- (b) Inadequate labour
- (c) Inadequate implements
- (d) Inadequate research

Essay Questions

1. 'Despite having about 75% of their labour force in agriculture, West African countries cannot meet their domestic food requirements'. Discuss. **(SSCE 1990)**

2. Discuss five contributions made by agriculture to the industrial development of Nigeria. **(SSCE 1991)**

3. Discuss the different types of agricultural systems that exist in West Africa. **(SSCE 1992)**

4. Discuss the problems facing agriculture in Nigeria. **(SSCE 1993)**

Glossary

Farm settlement: A type of agriculture in which a given number of farmers are housed in a place and carry out their agricultural duties. **Forestry:** Growing of trees and tapping of forestry resources, for example, timber, mahogany, obeche and iroko.

Livestock farming: Farming activity that involves the rearing of animals such as poultry, cattle and piggery.

Mechanised farming: Use of modern machines (e.g., tractors, caterpillars, harvesters) for large-scale farming activity.

Plantation agriculture: Planting of crops, seedlings and trees on a large acre of land; for example, rubber, oil palm and cocoa.