

CHAPTER 1

Meaning and Importance of Agriculture

OBJECTIVES

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

â define agricultural science.

â state the importance of agricultural science to individual, community and nation.

1.1 Introduction

Agriculture started with the early man. The existence of man from prehistoric era up to the ancient civilization depended on his ability to hunt and gather food for consumption. During the period, most of the crops were raised with crude implements. However, the perception of agriculture as cultivation of land alone has changed due to technological advancement. Today, about 75% of the world population is engaged directly or indirectly in agriculture.

1.2 Definition of Agricultural Science

Agricultural science is the branch of knowledge that deals with the production and management of plants and animals for the benefit of man. Agriculture as a concept was expanded in meaning in recent years beyond the cultivation of crops and rearing of animals to breeding and biotechnological research in crops, forestry, wildlife, fisheries and other emerging areas of biological sciences.

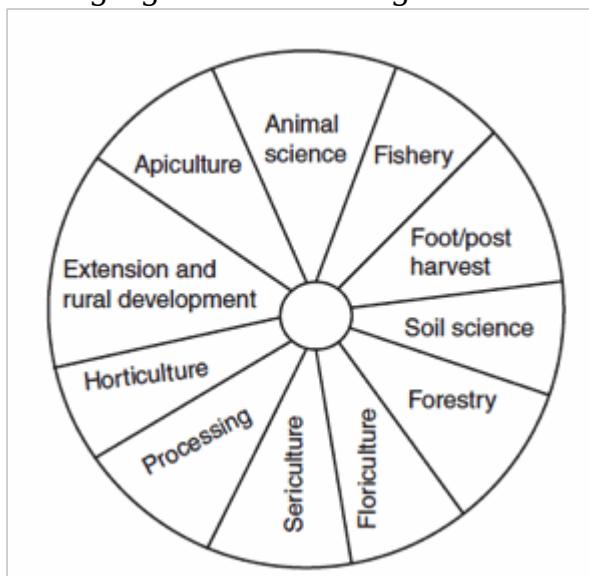


FIGURE 1.1 Areas of agricultural science

1.3 Importance of Agricultural Science

Agriculture is important to the growth and survival of any nation, for supply of essential things that make life stable and meaningful .It is important to the individual, the community and the nation in the following ways.

1.3.1 To the individual

(a) It provides food for man.

- (b)** It provides feed for animals.
- (c)** It provides a source of income to the farmers.
- (d)** It provides wood for the construction of shelter for man and animals.
- (e)** It provides raw material for construction work such as furniture and ship building.
- (f)** It provides employment opportunities.
- (g)** It provides opportunities for learning through agricultural extension and education programmes.
- (h)** It provides opportunities for career development.

1.3.2 To the community

- (a)** Agricultural activities create marketing and distribution outlets.
- (b)** It facilitates rural development through provision of amenities such as good roads, electricity, schools, health care services and industries.
- (c)** It promotes commerce and industries.
- (d)** It protects the environment through afforestation.

1.3.3 To the nation

- (a)** It provides direct income to the nation such as tax and revenue from agricultural produce and products.
- (b)** It earns foreign exchange through export of produce and products.
- (c)** It provides a source of employment to the citizens.
- (d)** It provides source of research for development of local and international scientists.
- (e)** It provides opportunities to become members of international organizations such as FAO, CODEX, IPPC and IPPO.

1.4 Opportunities in Agriculture

Agricultural science is studied as a subject and course at primary, secondary and tertiary levels. It prepares the citizens to earn a living.

In Nigeria, many people are engaged in agriculture directly or indirectly through agricultural programmes like National Directorate for Employment (NDE), National Poverty Eradication Programme (NAPEP). Career opportunities in agriculture can be categorized into:

- â unskilled (primary and secondary school graduates).
- â skilled (other tertiary level & university graduate).

1.4.1 Opportunities for primary school graduates

- (a)** Employment as field labour assistants such as poultry attendants/crop husbandry attendants/horticulture attendants.
- (b)** Self-employment to practice different aspects of agriculture such as poultry keeping, horticulture, oil palm produce and product processing, marketing of agricultural produce, etc

1.4.2 Opportunities for secondary school graduates

- (a)** As livestock/crop husbandry/horticulture attendants

(b) Self-employment to practise in any area of agriculture

1.4.3 Opportunities for tertiary level graduates other than university graduates

These include graduates of monotechnics, polytechnics, colleges of education and others in these categories who graduated with ordinary and higher national certificates and Nigerian Certificate in Education (NCE).

- â Tractor operators
- â Tractor mechanics
- â Agricultural machines fabricators
- â Agricultural officer in establishment
- â Farm managers
- â Agricultural extension officers
- â Demonstrators/teachers of agricultural science
- â Agricultural supervisors
- â Special assistance at local/state levels
- â Self-employed – producers of agricultural product, marketers and processors
- â Some can be employed in banks
- â Agricultural institutes as superintendents
- â Agricultural investment companies
- â As agricultural technologist in universities and allied institutions
- â Creation or establishment of non-governmental organisations (NGOs)
- â Sales representative/promoters for agricultural companies

1.4.4 Opportunities for university graduates and post-graduates

- â Employment as farm managers
- â Bankers/financial institution
- â University lecturers/instructors
- â Researchers in universities and related institutions
- â Manufacturer and fabricators of agricultural equipment
- â Set up of NGOs in agriculture and related areas
- â Special assistants to government at all levels
- â Sales representatives/promoters of agricultural corporations
- â Agricultural officers in establishment
- â Veterinary doctors

1.5 Unified Tertiary Matriculation Examination/Joint Admissions and Matriculation Board Requirement

Five credit pass levels in English language, Mathematics, Chemistry, Biology/Agricultural

Science, Physics/Geography are required. For direct entry students, three A^{level} passes in the following are required in addition to a good O^{level} result.

- 1. Chemistry.**
- 2. Biology/Agricultural science.**
- 3. Physics/Geography.**

Activity 1: Divide students into four groups and each group should list agricultural produce and products that are found in their localities.

Summary

- ◆ Agricultural science is defined as the branch of knowledge that deals with the production and management of plants and animals for the benefit of man.
- ◆ Agricultural science is important to individuals by providing food, shelter, income and employment.
- ◆ To the community, it provides facilities for rural development, promotes commercial and industrial activities.
- ◆ To the nation, it provides a direct source of income, foreign exchange earnings and research opportunities.

Revision Questions

- 1.** (a) Define agricultural science. (b) State five reasons why agriculture is important to an individual.
- 2.** (a) Mention five opportunities in agriculture for tertiary level graduates other than university.
(b) List five agricultural products through which the nation can earn foreign exchange.
- 3.** Discuss five reasons why agriculture can be regarded as the mainstay of Nigeria's economy.
- 4.** List four areas of specialisation in agriculture and state two contributions of each to agricultural development.
(WASSCE, June 2004).

Objective Questions

- 1.** The branch of agriculture that deals with the cultivation of ornamental plants, vegetables and fruits is known as
 - (a) agricultural education.
 - (b) agricultural engineering.
 - (c) agronomy.
 - (d) horticulture.
- 2.** Which of the following best defines agricultural science?
 - (a) The branch of knowledge that deals with production and management of plants and animals for the benefit of man.
 - (b) The raising of farm animals by rural communities.
 - (c) The raising of crops to satisfy human needs.
 - (d) The art of farming inherited from our forefathers.
- 3.** Which of the following is not correct about the importance of agricultural science?
 - (a) Supply of food
 - (b) Provision of employment
 - (c) Provision of electricity
 - (d) Serving as a source of foreign exchange
- 4.** Tractor driving/mechanics are opportunities for
 - (a) primary school graduates.
 - (b) secondary school graduates.

- (c) university/allied institutions graduates.
- (d) none of the above.

- 5.** The following are the importance of agriculture to an individual except
- (a) source of food.
 - (b) employment opportunity.
 - (c) opportunity to travel.
 - (d) source of income.

Answers to Objective Questions

- 1. (d) 2. (a) 3. (c) 4. (d) 5. (c)