

SUBJECT: AGRICULTURAL SCIENCE

TOPIC: ROLE OF SCIENCE AND TECHNOLOGY IN AGRICULTURE

CLASS: SS1

WEEK: WEEK FIVE (5)

TERM: 1ST TERM

Science can be defined as knowledge obtained through the observation and testing of facts which are arranged in an orderly manner. Technology is the application of specific knowledge of production .technology increase efficiency, thus providing high result from minimum effort. The role of science and technology considered under the following:

**FARM POWER AND MACHINERY:** Through the aid of science and technology there has been an invention of various kind of machinery like tractor, plough, harrow, cultivator, harvester, etc. Farmers have been given loans by both federal and state government to purchase agricultural machinery.

**PRODUCTION OF CHEMICALS, FERTILIZER:** The development and production of chemicals and organic fertilizer can be seen and a direct result of the effect of science and technology .different types of fertilizers and liming materials have been developed.

**HARVESTING, PROCESSING AND PACKAGING:** Science and technology have developed a machine that can harvest, process and package various crops.

**AGRICULTURAL RESEARCH:** Scientific research into agriculture has developed efficient systems and crops which are yielding and resistance to some pests and diseases.

**TRANSPORTATION AND COMMUNICATION:**

Transportation which is vital to the growth of agriculture has been greatly improved through science and technology. The contraction of communication networks such as road, railway, and canals helps to link the village to another and help the farmer to transport farm products to the cities.

**PEST AND DISEASES CONTROL:**

Damage caused by pest and diseases to crops and animals have been big problems for farmers.

**STORAGE FACILITIES:** As a result of scientific invention, farmers can now store their agricultural products for a long time.

**FACTORS AFFECTING THE INTRODUCTION OF SCIENCE AND TECHNOLOGY**

Several factors affect the introduction and adoption of science and technology in agriculture. They include;

1. Availability of funds

2. Availability of lands
3. The willingness of the farmer to adopt science and technology
4. Education and research
5. Availability of marketing facilities.

#### ASSIGNMENT

1. List three areas of improvement of agriculture through science and technology
2. List three factors affecting the introduction of science and technology.