

SMART AGRICULTURE



MAURITIUS INSTITUTE OF EDUCATION under the aegis of



MINISTRY OF EDUCATION AND HUMAN RESOURCE



ACKNOWLEDGE

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INTRODUCTION TO AGRICULTURAL TECHNOLOGIES

Lesson 13
**Introduction to Agricultural
Technologies**



Duration:
35 minutes



Grade:
7





Introduction to agricultural technologies

Lesson Overview

This lesson introduces learners to emerging agricultural technologies, smart tools, and machines that help farmers grow crops more efficiently. Through relatable examples such as drones, solar-powered irrigation systems, smartphones, and automatic seed planters, learners will explore how modern technologies are transforming traditional farming methods to make food production faster, easier, and smarter.

Lesson Aims

The aim of this lesson is to develop learners' understanding of emerging agricultural technologies and their crucial role in improving farming practices.

Lesson Objectives

At the end of this lesson, learners will be able to:

1. Identify three types of emerging agricultural technologies used in modern farming.
2. Explain how specific technologies such as drones or smart irrigation systems assist farmers.
3. Compare traditional farming methods with modern technological approaches.

Teaching Tips

1. **Use Simple Language:** Break down complex terms into everyday language.
2. **Interactive Activities:** Engage learners with hands-on activities; like matching tools to their functions.
3. **Visual Demonstrations:** Show videos or real-life demonstrations of these technologies in use.
4. **Repetition (Positive reinforcement):** Reiterate key points to reinforce learning.



Introduction to agricultural technologies

Lesson Overview

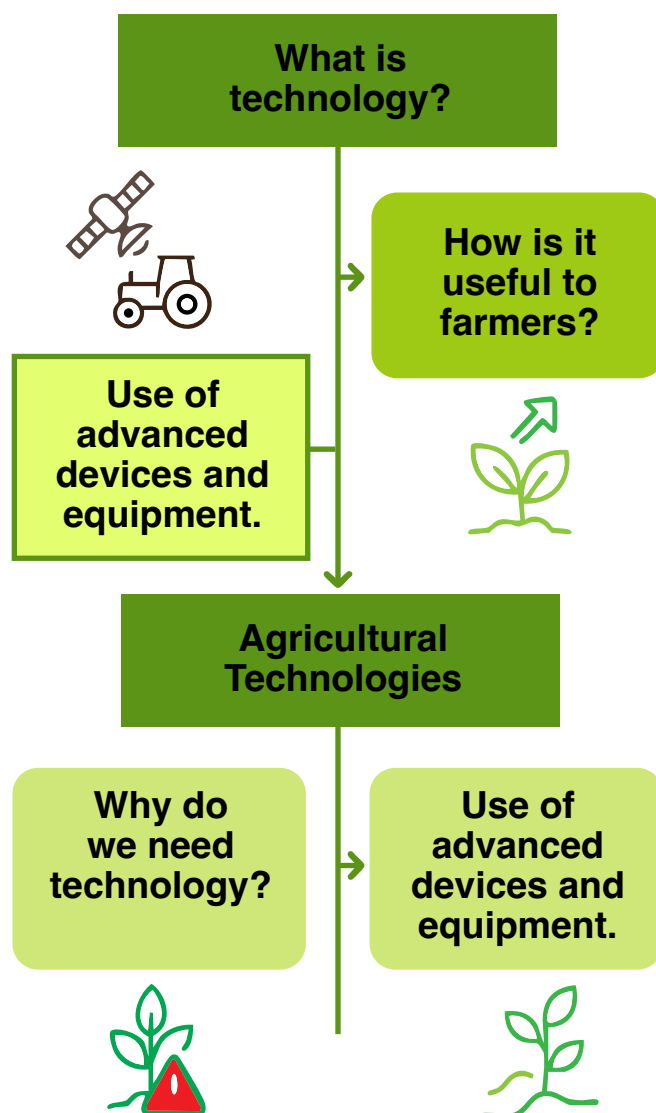
1. Introduction

Teacher explains:

- What is technology?
- Why technology is important in farming practices?
- Simple meaning of “agricultural technology”: New tools that help farmers.

Use:

- A real object (e.g. a small tool)
- Simple chart or picture with word “technology”





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Lesson Overview

2. Main Content

Introducing 4 technologies:

- **Drones** – Think of them as cameras with wings. They fly over fields to check on plants.
- **Seed-planting machines** – Big tools that plant seeds very quickly.
- **Mobile phone apps** – Show farmers when to plant, water, and provide important tips. Use “Picture This” App with the learners.
- **Solar-powered pumps** – Pull water out of the ground by using sunlight.

Teaching Aids:

- Big, clear pictures of each tool
- Real-life examples or videos if available



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Lesson Overview

3. Group Activity - “Be the Smart Farmer!”

How It Works (Role-Play with Props): ‘Walk and Match’

Set Up 4 “Farm Stations” in the classroom or outdoors:

- **Drone Station:** Use a paper drone or toy with wings
- **Seed Planter Station:** Use cups and seeds with a scoop
- **Mobile App Station:** Use toy phones or cardboard phones with printed apps
- **Solar Pump Station:** Use a small bucket and sun cut-out (or torchlight)

Learner Roles:

- Divide learners into small groups. Each group will rotate through the 4 stations. At each station, they’ll:
- Act out how the tool is used
- Explain what how the tool does (with help from a simple sentence card)
- Answer a simple question or complete a task (e.g. “Plant 3 seeds using this tool”)

Props to Make It Fun:

- **Drone:** Hang a paper drone from a stick and let them “fly” it.
- **App:** Give them the weather or farming info on a card.
- **Solar Pump:** Use a toy bucket to “collect” water using “sunlight” (flashlight).

Example Script Card at Each Station:

- **Drone:** “I fly in the sky to check the crops.”
- **App:** “I tell the farmer when to water the plants.”
- **Seed Planter:** “I help to sow seeds fast.”
- **Solar Pump:** “I use solar energy to pump water to plants.”



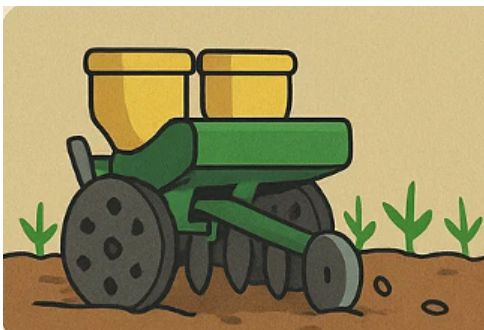
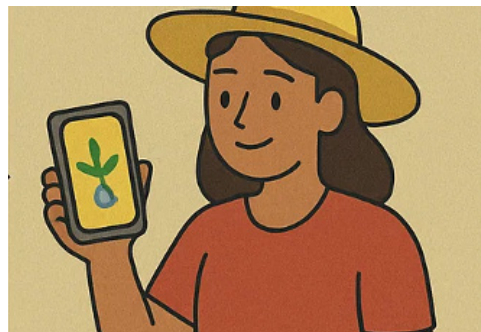
Introduction to agricultural technologies

Example script card at each station:



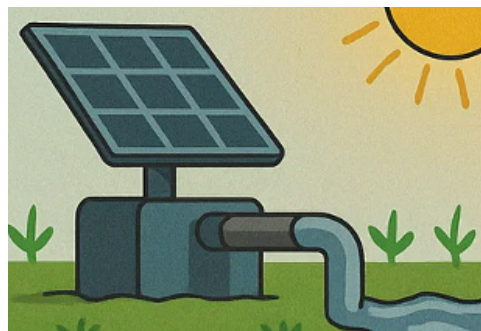
I fly it in the sky to
check crops.

It informs the farmer
when to water the
plants.



It helps to sow
seeds faster.

It uses solar energy
to pump water to
plants.



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Lesson Overview

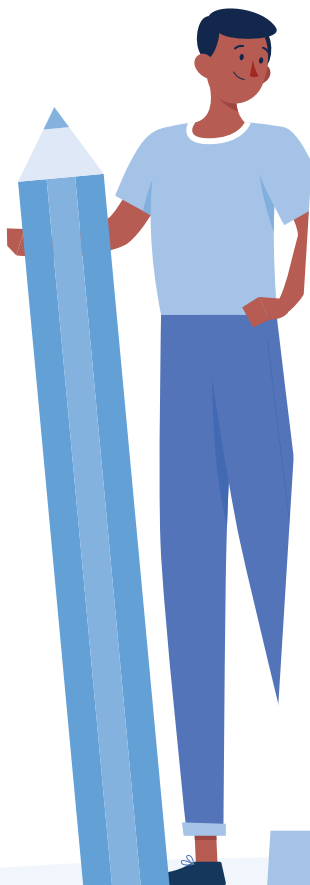
4. Recap and Review

PERSONAL JOURNAL

Hint: Which tool flies
in the sky?



Hint: What helps
pump water using
the sun?





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Teacher Observation sheet

Student Name	Listens Attentively (Y/N)	Participates in Discussions (Y/N)	Asks/ Answers Questions (Y/N)	Demonstrates Understanding	Needs Support (Yes/No/ How?)	Comments



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General Notes / Additional Observations

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