

SMART AGRICULTURE



MAURITIUS INSTITUTE OF EDUCATION under the aegis of



MINISTRY OF EDUCATION AND HUMAN RESOURCE



ACKNOWLEDGE

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IRRIGATION SYSTEMS IN TRADITIONAL AND SMART AGRICULTURE

Lesson 2:
**Irrigation Systems in Traditional and
Smart Agriculture**



Duration:
35 minutes



Grade:
7





Week 2

Lesson Overview

This lesson introduces students to irrigation systems in both traditional and smart agriculture. The main strategies used are simple explanation, visual learning, and interactive activities are tailored for low-ability learners.

Lesson Aims

To enable students to recognise and describe basic irrigation systems and demonstrate the importance of water in agriculture using visuals and simple activities.

Lesson Objectives

By the end of this activity, learners will be able to:

- Identify different types of irrigation systems (surface, manual, overhead, drip).
- Demonstrate the importance of water to plant growth and soil health.
- Distinguish between traditional and smart irrigation methods.
- Participate in visual and hands-on learning activities to reinforce knowledge.

Step-by-Step Lesson Procedure



1. Introduction (5 minutes)

Teacher: Greet students and show an image of irrigation. Ask what they see. Explain the meaning of irrigation.

Students: Respond based on observations and participate in the discussion.



2. Main Lesson (15 minutes)

Part A: Importance of Water (5 minutes)

Teacher: Show visual on the importance of water. Explain in simple terms.

Students: Identify parts of the diagram and repeat key phrases.



Week 2



Part B: Types of Irrigation (10 minutes)

Teacher: Show and explain infographic on irrigation systems. Use flashcards to reinforce learning

Students: Match flashcards and repeat the key vocabulary taught aloud.

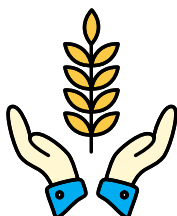


3. Interactive Activity (10 minutes)

Game: Irrigation Match-Up

Teacher: Hand out worksheets. Guide students to match names with appropriate pictures.

Students: Match and color images. Work in pairs to complete the activity.



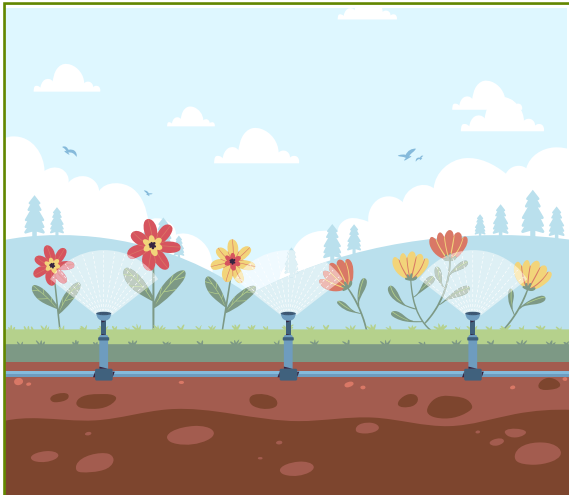
4. Assessment & Wrap-Up (5 minutes)

Teacher: Ask review questions. Reward participation.

Students: Answer orally or with gestures. Share one thing they learned.



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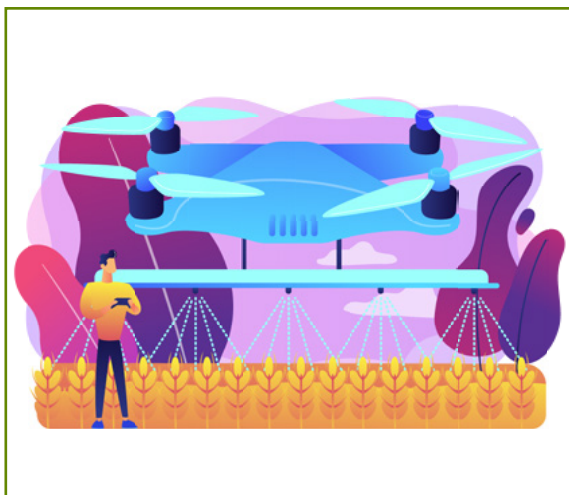
Surface Irrigation

Water is applied and distributed over the soil surface.



Manual Irrigation

Water is directly applied to plants using watering cans.



Overhead Irrigation

Sprinkles are used to distribute water over the plants.



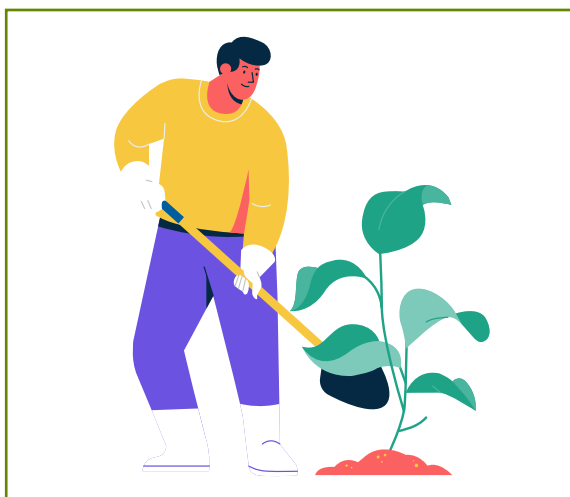
Drip Irrigation

Water drips slowly to the roots through tubes or emitters.

Figure 1: Types of Irrigation Systems



IMPORTANCE OF WATER IN AGRICULTURE



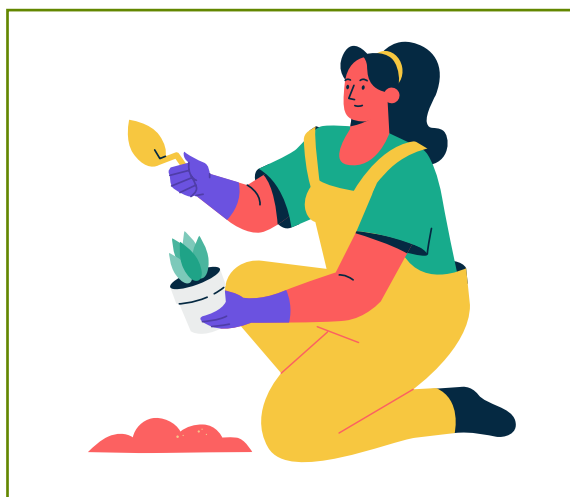
Plant Growth

Essential for plant development.



Crop Yield

Increases productivity and output.



Soil Health

Maintains soil moisture and fertility.



Livestock

Provides drinking water and forage.

Figure 2: Importance of Water in Agriculture



GENERAL IRRIGATION PROCESS



Figure 3: General Irrigation Overview



Week 2

Assessment Tools

- Verbal recall questions during wrap-up
- Observation of participation and oral responses

Adaptating for Low-Ability Learners

- Use repetition and clear visuals
- Pair work for peer support
- Simple, slow-paced language
- Positive reinforcement and praise

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