

GRADE 7 RATIONALIZED AGRICULTURE AND NUTRITION LESSON NOTES

STRAND ONE -CONSERVATION OF RESOURCES.

1.1 Controlling soil Pollution

- ↪ It is very important to human beings and animals to conserve the agricultural environment.
- ↪ This can be done by learning about soil pollution and how to control it when carrying out agricultural farming activities or practices.
- ↪ **Soil pollution** is the contamination of soil with harmful substances.
- ↪ The harmful substances in the soil are known as **pollutants** or **contaminants**

Causes of soil pollution in farming

- **Excessive use of artificial fertilizers.**
 - These fertilizers introduce pollutants such as Nitrogen compounds and heavy metals into the soil which accumulate in the soil to toxic levels and become harmful to crops and soil living organisms.
- **Excessive use of agricultural chemicals (agrochemicals) such as herbicides and pesticides.**
 - These chemicals become pollutants when they get into the soil. They accumulate into the soil and become toxic to soil living organisms.
- **Throwing plastic wastes in the garden.**
 - Plastic wastes are not broken down by soil living organisms. They contaminate the soil and interfere with the growing crops or reduces agricultural space.
- **Throwing Chemical containers.**
 - Chemical leftovers from these containers get into the soil and become pollutants. The pollutants accumulate to toxic levels and become harmful to the soil living organisms.
- **Surface run off carrying contaminated water**
 - Surface run-off that contains any contaminants deposits them to the soil when passing over.

- **Industrial wastes**

- Waste from industries have dangerous chemicals and heavy metals if not disposed off well ends up in the soil. The contaminants get into the soil and affect soil micro-organisms.

-

❖ **What is the effect of soil pollution?**

It causes production of crops that are not safe for consumption or use by human beings. This poses health risks.

Soil pollution also affects soil fertility and soil pH affecting agricultural production. This affects food security.

Control of soil pollution

How can soil pollution be controlled in Farming?

Soil should be protected from pollution to make agricultural produce safe.

Safe soil pollution control practices are measures that are taken to reduce the pollutants in the soil.

Safe Soil pollution Control measures include the following methods:

- o Reusing of plastic materials such as using bottles for drip irrigation.
- o Use of correct types and amount of artificial fertilizer and agrochemicals.
- o Safe disposal of used agricultural chemical containers.
- o Safe disposal of plastic wastes, containers and straws.
- o Recycling waste materials into other useful products.
- o Practicing organic farming which is the growing of crops and rearing livestock without using artificial fertilisers and agricultural chemical.
- o Planting trees and cover crops to reduce surface run-off than carry contaminants and distribute over the soil surface.

Creating Awareness on Prevention of Soil Pollution in Framing.

The farming community may not know that the practices they carry out on the farm pollute the soil.