

## **Growth of Soil Fertility:**

### **Soil Fertility:**

Soil fertility is the element of overall soil productivity that deals with its available nutrient status, and its ability to provide nutrients for plant growth. Plants need nutrients to grow and thrive.

In short, soil fertility is the capacity of soil to grow crops.

### **Fertilizer:**

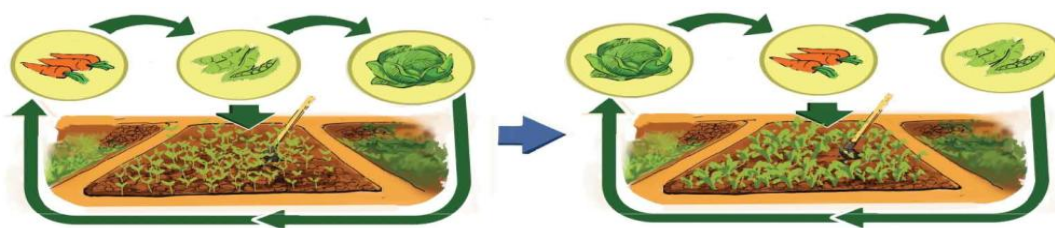
Fertilizer is a chemical or natural substance added to soil or land to increase its fertility. There are two types of fertilizer.

1. Organic fertilizer: Example: cow dung and compost.
2. Inorganic fertilizer: Example: urea and TSP



### **The ways to maintain soil fertility:**

1. Using fertilizer: fertilizer can help soil to restore lost nutrient and enhance the plant growth.
2. Rotating crops: crop rotation helps to maintain soil fertility. Example: beans help put nutrients back into soil.



**Lost nutrients in soil can be replaced by rotating crops.**

**Pollution:**

Pollution is the introduction of contaminants into the natural environment that cause adverse change.

**Soil pollution:**

The contamination of soil with harmful substance is called soil pollution

**Causes of soil pollution:**

1. Littering garbage: throwing garbage anywhere or littering garbage such as domestic waste or polythene on the land.
2. Using pesticide: the use of pesticide or herbicide for agricultural activities increasing soil pollution.
3. Unorganized factories waste management: leakage of oil or harmful materials from factories to the land.



## Exercise

### 1. Fill in the blanks with appropriate words:

- a) Lost nutrients in soil can be replaced by \_\_\_\_\_ crops.
- b) Urea is an \_\_\_\_\_ fertilizer.
- c) The capacity of soil to grow crops is called \_\_\_\_\_.
- d) Compost is an \_\_\_\_\_ fertilizer
- e) \_\_\_\_\_ happens when people introduce harmful materials into soil.

### 2. Choose the correct answer:

- a) Which of the following is natural fertilizer?
  - i. Urea
  - ii. Halogen
  - iii. Potassium
  - iv. Cow dung
- b) What is the topmost layer of the Earth?
  - i. Air
  - ii. Soil
  - iii. Water
  - iv. Plants
- c) Which one can increase the fertility of the soil?
  - i. Topsoil
  - ii. Air
  - iii. Starch
  - iv. Fertilize
- d) What is the cause of soil pollution?
  - i. Littering trash
  - ii. Picking up trash
  - iii. Recycling
  - iv. Using compost
- e) What is a good idea on how to maintain soil fertility?
  - i. Planting the same crop
  - ii. Rotating the crop
  - iii. Watering the crops
  - iv. Spraying pesticide

### 3. Write the answer of the following questions in short:

- a) Why do plants need nutrients?
- b) What is soil fertility?
- c) How many types of fertilizer are there? Give examples.
- d) What is soil pollution?

### 4. Write the answer of the following broad questions:

- a) What are the ways to maintain soil fertility?
- b) What are the causes of soil pollution?

# Answer Sheet

1.

- a) Rotating
- b) Inorganic
- c) soil fertility
- d) Organic
- e) soil pollution

2.

- a) iv. Cow dung
- b) ii. Soil
- c) iv. Fertilizer
- d) i. Littering trash
- e) ii. Rotating the crop

3.

- a) Plants need nutrients to grow and thrive.
- b) Soil fertility is the capacity of soil to grow crops.
- c) There are two type of fertilizer.
  - 1. Organic fertilizer: Example: cow dung and compost.
  - 2. Inorganic fertilizer: Example: urea and TSP
- d) The contamination of soil with harmful substance is called soil pollution.

4.

a) The ways to maintain soil fertility:

- 1. Using fertilizer: fertilizer can help soil to restore lost nutrient and enhance the plant growth.
- 2. Rotating crops: crop rotation helpsto maintain soil fertility. Example: beans help put nutrients back into soil.

b) Causes of soil pollution:

1. Littering garbage: throwing garbage anywhere or littering garbage such as domestic waste or polythene on the land.
2. Using pesticide: the use of pesticide or herbicide for agricultural activities increasing soil pollution.
3. Unorganized factories waste management: leakage of oil or harmful materials from factories to the land.

\*\*\*\* Share to your afternoon teacher what you have learned from today's lecture.