# Lecture 7

### Soil management Technology

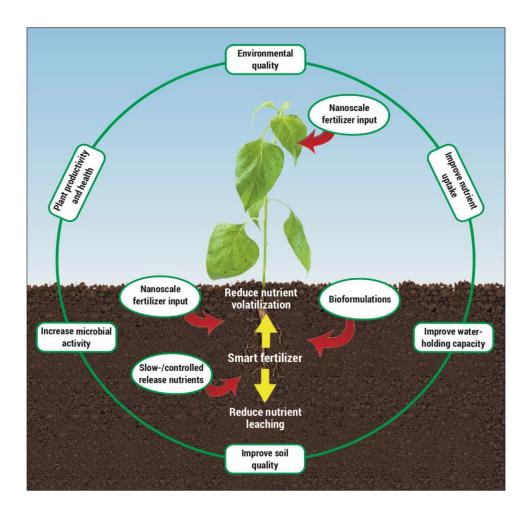
## **Management Practices to Improve Soil Health**

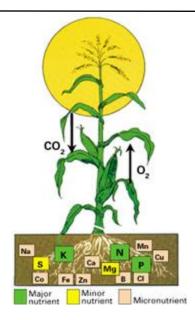
### Using fertilizers increases nutrients:

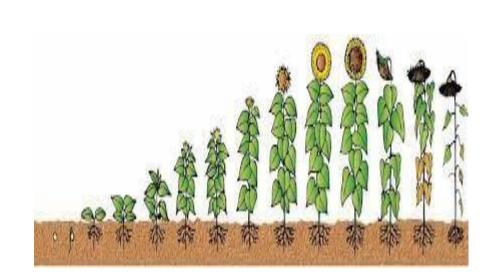
Fertility Issues is Nutrients, CEC, Acidity, and Alkalinity.

Nutrients like potassium, magnesium, zinc, calcium, sulfur, boron, manganese, iron, and copper.

Manure application increases soil organic concentration and reduces runoff and soil erosion.







### Using a perennial grain crop:

Perennial crops are crops that – unlike annual crops – don't need to be replanted each year. Many fruit and nut crops are naturally perennial.

Perennial cropping can reduce topsoil losses due to erosion, increase biological carbon sequestration, and greatly reduce waterway pollution through agricultural runoff due to less nitrogen input.

#### **Benefits:**

- 1. Erosion control
- 2. Water-use efficiency
- 3. Nutrient cycling efficiency:
- 4. Carbon sequestration
- 5. Environmental