

5th week

Environmental factors affecting agriculture production

Climate is defined as the average weather condition of a place, measured over a long period of time (usually over 35 years).

Factors:

Rainfall	Pressure
Temperature	Light
Wind	Radiant Energy
Relative humidity	

Important of climate in Agriculture

- i. Climate affects the duration of a cropping seasons
- ii. It determines the yield of crops
- iii. It affects the incidence of pests
- iv. It determines the type of livestock's to be reared in the area
- v. It affects the incidence of diseases
- vi. It determines the types of crops to be grown on an area

The environmental factors affecting agricultural production are grouped into 3 major classes

- a. Climatic factor
- b. Biotic factor
- c. Edaphic factor s

Climatic factors:

1. **Rainfall:** This is referring to the release of excess condensed water vapor in the atmosphere into the earth.
 - a. It determines the distribution of crops and animals
 - b. It is necessary for seed germination
 - c. It determines the type of vegetation in an area.
 - d. It determines the season in Nigeria i.e rainy and dry season
 - e. The season also determines the type of crop to be grown
2. **Drought:** This refers to the lack of or insufficient rainfall in an area.

Effects of drought on plant growth and development

- i. Poor crop establishment
- ii. Wilting
- iii. There is reduction in yield
- iv. Possible death of plants
- v. There is a reduction in photosynthesis

3. **Temperature:** is defined as the degree of hotness or coldness of a place.

Effects

- i. Temperature is necessary for seed germination
- ii. it affects the wilting of field crops, ripening and maturity of crops
- iii. it affects the distribution of crops and animals

4. **Wind:** is defined as air in motion

Effects

- i. It aids seeds and fruits dispersal
- ii. It can aid pollution and spread of diseases
- iii. It determines the season in Nigeria

5. **Sunlight:** is the amount of heat and the period the sunrays are received at a place

Effects

- i. It is necessary for photosynthesis
- ii. It affects evapo-transpiration
- iii. It affects the productivity of a crop due to length of a day
- iv. It affects the rate of production in poultry

6. **Relative Humidity:** refers to the amount of moisture in the atmosphere.

Effects

- i. It effects in the formation of rain
- ii. It determines the types of crops grown in an area
- iii. It affects the growth rate of crops