

SS2WK5 2nd term lesson note.

Topic: climatic factors(Abiotic factors).

Definition: Climate is the average condition of weather taken over a long period of time.

Examples of climatic factors.

- I) Temperature.
- II) Rainfall.
- III) Humidity.
- IV) Sunlight.
- V) Wind etc.

Explanation.

- I) **Temperature:** Nigeria expresses high temperature because it's among tropical belt. In Africa, temperature has been recorded to be between 21oc and 32oc. It has also been observed that tropical crops grows better at temperature between 18 and 32 oc. Tropical breeds of livestock's are adapted to high temperature in Nigeria while imported breeds do not adapt well.
- II) **Rainfall:** This is the most important factor of climate that influences agric.in the tropics. The amount of rainfall and it's distribution through out the year determines the type of crops to be grown. Example, in a place of low rainfall like in northern states , they grow mainly annual crops than perennial crops. But in southern Nigeria, growing seasonal crops is usually long and perennial crops grows well there. Because of high rainfall there, livestock eg cattles are highly affected by the tse tse fly.
- III) **Humidity:** This is the amount of moisture in the atmosphere. Atmospheric humidity varies with the amount of rainfall distribution. The relative humidity is high in southern Nigeria and low in Northern Nigeria. This high humidity favours the rapid development and spreading of fungi and bacterial diseases which causes moulds of crops under storage.
- IV) **Wind:** Wind is air in motion. It affects agricultural production because it causes sheet erosion. It's very serious in Northern part of Nigeria because their soil is very dried and not protected by vegetation. It carries away the the top soil which is very rich in organic matters. Wind can be beneficial during pollination in wind pollinated plants.
- V) **Sunlight:** Growing plants requires light during the process of photosynthesis. Green plants uses carbon dioxide from atmosphere to manufacture carbohydrates as food. $6\text{CO}_2 + 6\text{H}_2\text{O} \xrightarrow{\text{Sunlight}} \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$. The sunlight

distribution pattern directly influence vegetation in different part of Nigeria because crops requires optimal light to do well.

LESSON TWO.

Topic: Instruments for measuring climatic factors.

- 1) Temperature:** Is the decree of hotness or coldness of an object. The instrument for measuring temperature is called **thermometer.**
- 2) Relative Humidity:** It's the amount of vapour in the atmosphere. Instrument for measuring it is called **Hygrometer.**
- 3) Rainfall:** Water let down from the sky/ condensed water. The instrument for measuring it is called **Rainuage.**
- 4) Pressure:** Is force per unit area. Instrument for measuring it is called **Barometer.**
- 5) Wind:** Air in motion. Instrument for measuring wind speed is called **Anemometer.** Wind direction is called **Wind vane.**