# **EDITORIAL**

# Factors affecting agriculture

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Cong S. Factors affecting agriculture. J Plant Biol Agri Sci. 2021;3(2):9.

#### DESCRIPTION

Agriculture is the main source of income for hundreds of millions of people around the world suffering from poverty and hunger. Most of them are affiliated with small farms or small farms- plots of land roughly the size of a soccer pitch or American football field.

Agriculture began slowly with only a handful of crops, and most food was collected from the wild. Changes in soil and weather may have supported agriculture and its continued growth. In contrast to hunting, agriculture can feed more people in the same area. Initially, agriculture was primarily for personal use, but has evolved into commercial agriculture.

Agriculture has also expanded to include a variety of techniques such as crop rotation, fencing, fertilizer use, plantations, weeding, livestock and breeding. This technology is designed to increase agricultural production and production to increase yields. Similarly, agriculture is widespread around the world today due to a variety of factors. The following factors are affecting agriculture around the world:

# CHALLENGES RELATED TO WATER MANAGEMENT IN AGRICULTURE

## Economic factors affecting farming

Agriculture is an ancient practice, but its modern form is influenced by a variety of economic factors.

<u>Subsidies</u>: Farmers receive subsidies from the government to help grow their crops. Meanwhile, the government provides farmers with financial incentives for certain types of crops.

<u>Commodity prices</u>: Weather, investor speculation, and demand for non-food (such as biofuels) and edible crops all affect the prices of major commercial crops such as soybeans and corn. Raw materials bring losses or profits to farmers based on the general production prices that industrial buyers are willing to pay.

Immigration laws and labour: Low-wage workers in the form of immigrant farmers are at the heart of mainstream agriculture. Immigration law affects agriculture because it affects the availability of the workforce, including labor law that is responsible for allowing or banning subsistence agriculture wages.

## Climatic factors affecting farming

Climate factors such as light, water, rain fall, temperature, air, relative humidity and wind also affect agriculture in many ways.

<u>Light:</u> Light is essential for plant photosynthesis and chlorophyll production. Light also affects phototropism, mineral absorption, stomatal movement, translocation, photomorphogenesis, and abscission.

<u>Water and rainfall:</u> Water promotes the life of animals and plants. Water availability affects plant growth and development, and thus yield.

<u>**Temperature:</u>** It affects a variety of crop growth processes, including disruption of seed dormancy, photosynthesis, transpiration, respiration, protein synthesis, seed germination and translocation.</u>

<u>Air:</u> Plants need oxygen during breathing to produce the energy used in the growth and development of various plants. During photosynthesis, plants need carbon dioxide to produce food.

<u>Relative humidity:</u> The temperature of the air determines the amount of water vapor that can be retained. Warm air can store more water vapor than cold air.

<u>Wind:</u> Wind moves air due to various warming and pressure gradients. Air promotes pollination and thus promotes fruit and seed development. In gentle winds, gas exchange takes place in the plants. However, strong winds can promote water loss and toppling or lodging or crops.

## Physical/environmental factors affecting farming

Various factors in the natural environment affect agriculture. Topography, soil and climate are the main physical factors affecting agriculture.

**Topography/relief:** Topography is associated with land cultivation difficulties, soil erosion, and poor transport networks and facilities. Agriculture can be mechanized, depending on the topography of the land used.

<u>Climate:</u> Climate factors such as precipitation and temperature affect agriculture as described above.

<u>Soil:</u> The plant grows on rich loamy soil with proper drainage. Plants absorb food and water from the soil through their roots. Soil with poor texture and harsh chemicals is less productive.

It is important for farmers to be aware of these factors in the particular area where they are planning to grow so that they can choose the right crop to grow. Choosing the right crop for every agricultural area is key to high crop growth and yield.

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Received date: October 04, 2021; Accepted date: October 19, 2021; Published date: October 26, 2021



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