

Q) Having the largest irrigation system in the world, the land of the sub-continent served as the main food basket for British power for more than a century, but now Pakistan has to import food commodities. Discuss in detail the causes of this agricultural decline (CSS-2023)

Q)

Ans) **Introduction:**

Pakistan is an agricultural country, its 24% of its total GDP depends on agriculture and 37.4% of country's labour force is associated with an agriculture.

Moreover, Pakistan has one of the largest irrigation systems in the world. Despite these, Pakistan has to import food commodities.

The main causes of this decline are water issues, climate change, mismanagement, and some social issues. Pakistan needs new climate policy, revise water policies, and good governance to tackle this challenge.

Food Insecurity Imports in Pakistan

Despite being a agriculture country, Pakistan imports food commodities. Pakistan's imports of food is was 16.11% of its total imports in 2023, according to the World Bank reports moreover in 2024 the food imports bill has increased by more than 50%.

Causes of Agriculture Decline

The major causes of agriculture decline are water issues, population rate, climate change and lack of good governance and policies.

1. Water Issues

Water issues are the main cause of decline in agriculture productivity. The water issues are discussed under:

a. Indian Factor: Building of Dams

One of the water issues is India is building dams on rivers that flow into Pakistan, including the Ravi and Chenab rivers. The two hydropower plants are Shahpur Kandi Dam and Mawusodar Dam. This is against the Indus Water Treaty, but the World Bank is unable to solve this issue. Moreover, on the water issues, Indian PM gave a statement that,
"Water and Blood cannot run together"

b. Unavailability of Water Storage:

According to the study of PIDE, Pakistan has only 18 water reservoirs. Pakistan has not invest in water infrastructure. This also leads to the wastage of water during monsoon season. According to the ISRA reports, 29 million acre feet of flood water goes in waste.

c. Water Distribution Issues:

One of the major causes of water issues is water distribution issues between provinces. It also results in conflicts many times: Water Apportionment Act - 1991 was

designed in 1991; ~~desi~~ however, it is not revised till now despite the impacts of climate change. The Cholistan Irrigation Project is an example of conflict on water. This is 221 billion project but there is a conflict on this project between Sindh and Punjab. Sindh Irrigation Minister said that, "Sindh is already suffering from water shortage, and this project could turn our land into barren."

2. Climate Change:

Extreme weather conditions due to climate change have affected the production of agriculture. Some of the issues are discussed as under.

a. Delay in monsoon season:

Due to climate change there is a delay in monsoon season which disturbs the production of crops.

b. Devastating Floods:

Climate change triggers floods and almost once every year in Pakistan this leads to economic loss and a destruction of crops. For instance in floods 2022 resulted in ^{loss of} 1.9 million tons of rice.

c. The Drought Conditions: According to the UN report, Pakistan is among the 23 countries which are facing drought emergencies. Unavailability of water and rise in average temperature makes the land drought, resulting in loss in production.

d. Rise in Average Temperature: Rise in average temperature due to climate change affects the agriculture production, resulting in impacts of food.

3- lack of Good Governance:

The government of Pakistan lacks capability to counter the problems of water crisis. The issues of governance in water crisis is listed down,

a. Infrastructure Development:

The government of Pakistan is unable to resolve issues between provinces on the issues of ~~dam~~ building of dams, which results in lack of infrastructure development for water storage, that results in agriculture decline.

b. Revision of Policies:

There are short coming in the water policies of Pakistan. For instance "Sindh Irrigation Policy" is unable to counter climate change issues, resulting in decline in production.

4- Social Problems:

There are some social problems as well which contributes to the crisis of water in Pakistan. The problems are

- a. Unplanned Urbanization
- b. Rapid Population Growth
- c. Wastage of water

These social problems contributes to the issue of water crisis that leads to agriculture decline

Solutions For Agriculture Decline

The way ^{forwards} ~~forwards~~ for to increase agriculture production are

- a. Rain Water Harvesting
- b. Use of Vertical Farming
- c. Promotion of Hybrid Seeds
- d. Recycling of waste water
- e. Agricultural reforms

These solution can counter the problem of agriculture decline and decrease the import of food commodities

Conclusion

Food Imports contributes a major share in imports of Pakistan, which also leads to the problem of trade deficit and other economic problems. To counter this is

important to ~~to~~ increase the productivity of agriculture. To sum up, it can be argued that agriculture decline is due to water crises, climate change, governance issues and some social problem. However, with the use of technology these problems can be mitigated.