

Question:

Pakistan's agriculture is facing problems of low productivity. Highlight causes and suggest remedial measures.

Answer:

Introduction:

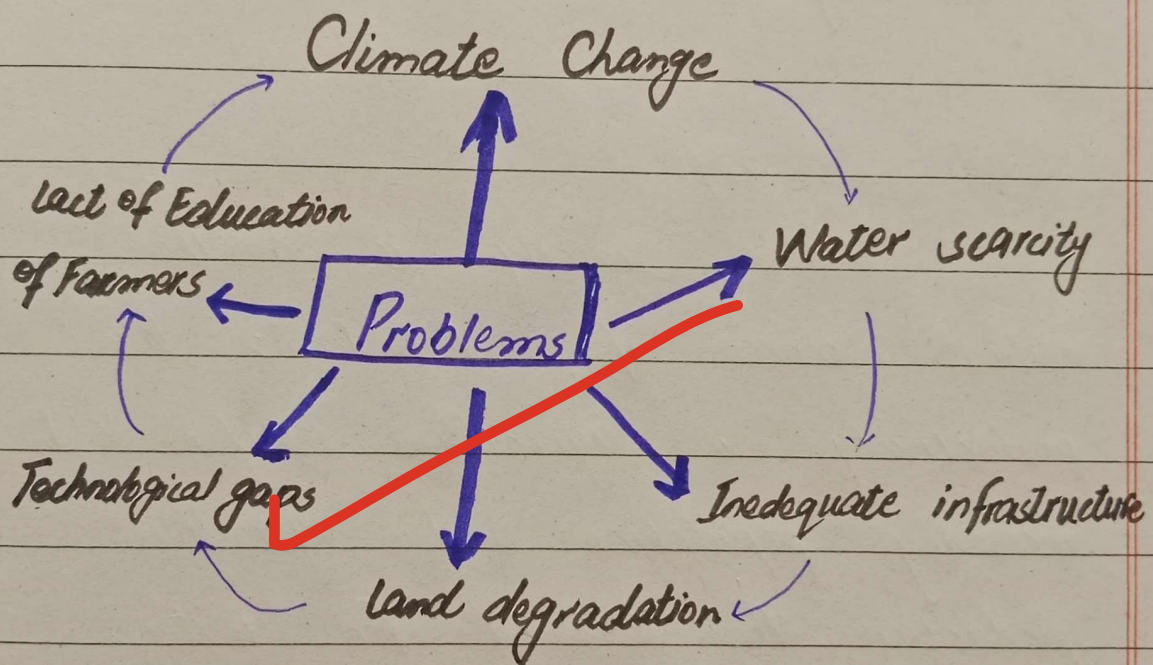
Since its inception, Pakistan's agriculture sector has played a significant role in its economy. At the time of partition, it contributed 60% to GDP with

82% labour force, but its growth has hindered since the post-Green Revolution era. According to Pakistan Economic Survey 2023-24, this sector contributes 24% to country's GDP.

Despite its immense importance, this sector faces many problems which stem from rapid population growth and

urbanization. Various factors that contribute to low productivity of Pakistan's agriculture sector are discussed here.

Challenges faced by this sector



⇒ Escalating evidence of Climate Change:

Climate change is widely recognized universal truth and it poses a potential threat for a developing country like Pakistan. In the

Global Climate Risk Index, Pakistan is ranked ten most climate-affected countries. Pakistan is vulnerable to extreme weather events such as drought and floods which adversely affects productivity.

⇒ Water Scarcity:

Water scarcity is another critical concern for Pakistan's low productivity in agriculture sector. With increasing population and agriculture production, the demand for water increases putting more stress on already limited water resources. According to UN's estimates, Pakistan's water demand is increasing at an average annual rate of 10%. Limited water resources lead to low availability of water for crops, ultimately

resulting less production.

⇒ Land degradation and Deteriorating soil health

Soil health and fertility are the two fundamental factors for agriculture production as crops grown in better soil which are rich in micro and macro-nutrients like P, N, Ca, Mg etc. Healthy soil allows for better water infiltration and overall better crop production.

Land degradation due to salinity, soil erosion and nutrient depletion is a major concern for Pakistan's agriculture. The Food and Agriculture

Organization (FAO) estimates that 50% of Pakistan's soil due to salinity.

Moreover, increasing uses of chemical fertilizers has long-term effect on agriculture sustainability. 1

⇒ Inadequate Infrastructure:

Pakistan's agriculture suffers from inadequate infrastructure with poor transport networks, low agriculture credit and poor processing facilities.

This limits farmers' access to markets and results in post-harvest losses when farmers fail to preserve crops.

⇒ Technological gaps:

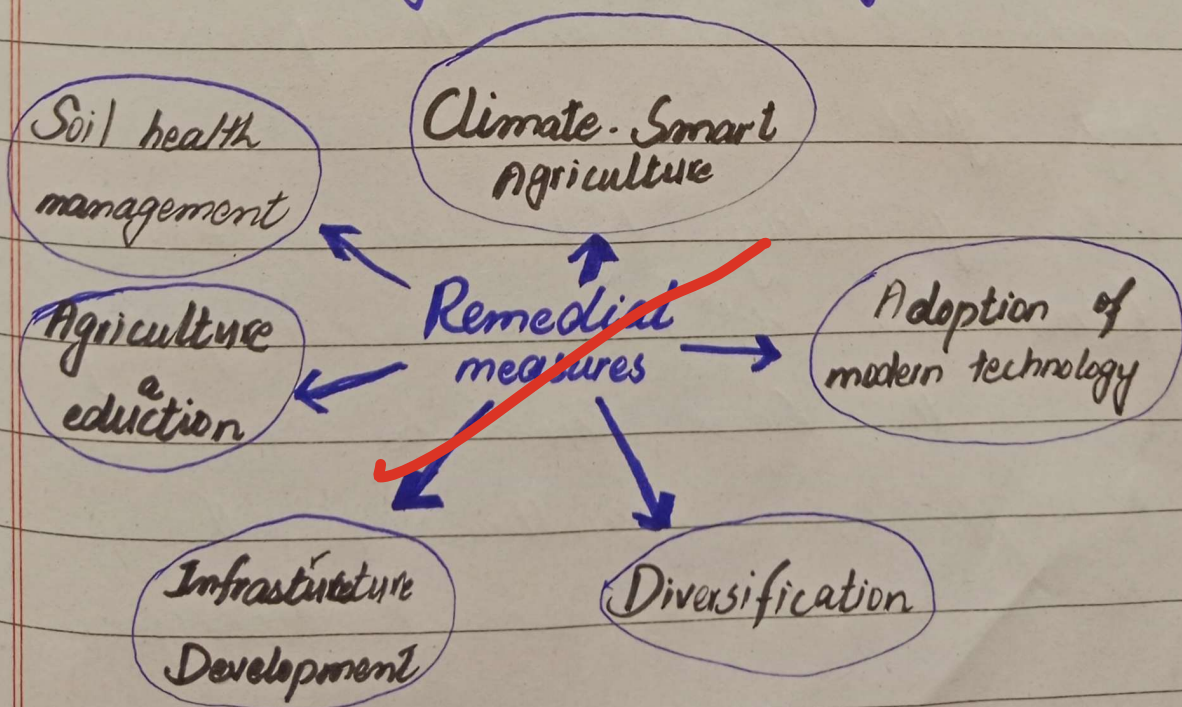
Pakistan's low productivity is low persistent compared to other countries. Factors contributing to this include traditional farming practices, limited access to modern technology and insufficient investment in development of this sector. It is estimated that only 25% farmers have access to modern technology.

⇒ Lack of Education of Farmers:

Agricultural productivity has significant relation to the efficiency of farmers. Unfortunately, in Pakistan, farmers are not trained of modern farming techniques. They use traditional techniques which results in low output but more input efforts.

This lack of knowledge in farmers is a potential setback to agriculture sector's growth.

Transforming Pakistan's Agriculture:



⇒ Climate-Smart Agriculture:

The Climate-Smart Agriculture is a set of strategies that focus on increasing production by increasing agriculture resilience to climate change.

This includes farming drought or flood resilient crops, efficient water tech irrigation techniques, water management strategies and adoption of renewable energy resources.

⇒ Adoption of modern technology:

Pakistan should adopt modern technology as it promises high yield with low input and costs, generating high income for farmers, thus it reduces overall poverty.

The focus should be on knowledge-based agriculture as the Fourth Generation Revolutionary techniques

are bringing revolutionary changes in the world. It promotes the integration of ~~AI~~ into agriculture sector such as sensor systems, modern seed technology etc.

⇒ Crop Diversification:

Pakistan's low agriculture production also results from narrow crop choices. It grows such crops like rice, wheat etc. that demand more water and remain uncompetitive in global ~~markets~~. Therefore, it should shift its focus to other crops that are competitive and demand low costs but yield more annual production.

⇒ Infrastructure Development:

Poor infrastructure is a critical

issue that is in urgent need to be resolved. Transport networks are damaged, often lead to limited access of farmers to markets. Pakistan can should focus measures to address procuring issues, work on establishing proper transportation and increase cold storage capacities.

⇒ Soil health management:

Soil fertility is one of the primary determiner of maximum crop yield. Awareness should be raised among farmers on the proper use of chemical fertilizers as these are the main cause of soil degradation.

⇒ Promoting agriculture education

Adoption of new and modern farming practices is the need of the

hour, because efficient crop yield is reliant on the efficiency of farmers.

Farmers should be equipped with necessary skills to adopt modern techniques, in terms of handling high-yield variety seeds and modern inputs.

add a few more arguments.....

Conclusion:

Pakistan's agriculture sector has a great potential for reshaping its economy. Although, it faces some challenges but these challenges can be resolved if handled properly and take some measures, focusing on the increase of production. Measures should be long-term rather than just raising productivity for a short period. By increasing crop diversification, modern technology adoption and educating farmers, Pakistan can achieve its targeted production.