



AGRICULTURAL GROWTH IN INDIA - GS III MAINS

Q. Indian agriculture confronted various challenges, mitigation of which requires a holistic policy approach. Comment (15 marks, 250 words)

News: *Producing more from less: How Indian agriculture has grown with limited 'factors of production'*

What's in the news?

- Indian agricultural sector, though having some major achievements, faces a number of challenges that impacts its productivity severely.

Key takeaways:

- While agriculture's share in India's economy has progressively declined to less than 15% due to the high growth rates of the industrial and services sectors.

Importance of Agricultural Sector:

1. Population dependency:

- Nearly three-quarters of India's families depend on rural incomes.

2. Rural sector:

- The majority of India's poor (some 770 million people or about 70 percent) are found in rural areas.

3. Food Security:

- India's food security depends on producing cereal crops, as well as increasing its production of fruits, vegetables and milk.

Achievements of the Indian Agriculture Sector:

1. Record Production of Food grains:

- Indian agriculture witnessed a distinct step up in the growth of output following the green revolution in the 1960s driven by the intensive use of inputs and technological advancement, which was sustained during the seventies and eighties.

2. Diversification towards Horticulture Crops:

- Horticulture production has outpaced food grains production since 2012-13 and it currently accounts for around 35 per cent of the total value of crop output in the agriculture sector.

3. Growing Importance of Allied Activities:

- The allied sector has steadily gained importance in the last decade led by strong growth in animal husbandry and fish production.
- The Indian livestock sector attained a record growth of 6.6 per cent during the last decade (2010-19) with India emerging as a major producer of milk, egg and meat in the world.



4. Changing Dynamics of Agriculture Trade:

- As India has emerged as a leading producer of various agricultural commodities in the world, its share in the global trade of agricultural and allied sector products has doubled from 1.1 per cent in 2000 to 2.2 per cent in 2018.

Challenges to Indian Agriculture Sector:

- Small and Fragmented Land Holdings
- Inferior Quality seeds
- Synthetic Manures, Fertilizers and Biocides
- Irrigation challenges
- Lack of Mechanization
- Weak Marketing
- Poor Storage Infrastructure
- Low Capital Infusion

Issues in Indian Agriculture:

- **Highest number of farmers suicides:** The National Crime Records Bureau of India reported that a total of 296,438 Indian farmers had committed suicide between 1995-2014. High debt burden and crop failure remain the major reasons for it.
- **High wastage of agricultural products:** A rough estimated figure by the Food and Agricultural Organisation (FAO) – Approximately 40% of the food produced in India is wasted every year due to fragmented food and inefficacious supply chain system.
- **Low income of farmers:** A report released by the National Statistical Office in 2021 reveals the pathetic income level of Indian farmers. The average monthly income from different sources per agricultural household from July 2018 to June 2019 comes to only ₹10,218, where a net receipt is obtained considering the 'paid out expenses' approach. This amount of income further reduces to ₹8,337 when net receipt is obtained considering both the paid-out and imputed expenses.
- **High Disguised Unemployment:** As per Census statistics, the rural population in India stands at 833 million, constituting almost 68 percent of the total. While the agriculture sector engages 49 percent of the total labour force in the country, its contribution to overall GVA is only 17 percent which shows the overdependence of the Indian labour force on agriculture resulting in significant hidden or disguised unemployment in the sector and thus lower labour productivity.
- **Increasing chemical and pesticide usage:** Since the availability of agricultural land is decreasing in India, the pressure on existing agricultural land is increasing to produce more food. In this quest, chemicals and pesticide usage is increasing in India. 275 pesticides were registered for use in India, of which about 255 are chemical poisons.
- **High dependence on government and MSP:** As agricultural production in India is still heavily dependent on rainfall and its spatial distribution, adverse climatic conditions like drought, flood and market factors, Indian farmers are highly dependent



on government support schemes and policies such as MSP during every stage of growing a crop.

- **Low private participation:** Due to price uncertainties, low confidence of farmers in private players and weak supply chains in the agriculture sector, the private sector is largely uninterested in investing in the agriculture sector, which leads to low capital formation, poor technologies penetration and high dependence on government.

Measures taken by Government:

- Improvement in soil fertility through the Soil Health Card scheme.
- Providing improved access to irrigation and enhanced water efficiency through Pradhan Mantri Krishi Sinchai Yojana (PMKSY).
- Supporting organic farming through Paramparagat Krishi Vikas Yojana (PKVY).
- Support for the creation of a unified national agriculture market to boost the income of farmers.
- Pradhan Mantri Fasal Bima Yojana (PMFBY) has been launched to mitigate the risk of crop loss in the agriculture sector.
- Launch of e-NAM portal for online trading in agricultural products.
- Ashok Dalwai committee was formed to suggest measures to double income of Indian farmers.
- Government accepted the recommendations of the MS Swaminathan commission to provide MSP at 1.5 times the cost of production of the crop.
- Multiple schemes have been launched for the allied agriculture activities like Matsya sampada yojna for fisheries, Rashtriya Gokul mission for livestock sector etc so as double income of farmers.

WAY FORWARD:

- Promoting new technologies and reforming agricultural research and extension
- Improving Water Resources and Irrigation
- Facilitating crop diversification to higher-value commodities
- Promoting high-growth commodities
- Developing markets, agricultural credit and public expenditures
- Climate change mitigation
- Marketing reforms
- Minimizing Post-Harvest Losses
- Developing Food Processing Industry

Indian agriculture scaled new heights with record production of various food grains, commercial and horticultural crops, exhibiting resilience and ensuring food security during the COVID period. The sector, however, confronted various challenges, mitigation of which requires a holistic policy approach. Addressing these challenges would require a second green revolution focussed on the agriculture water-energy nexus, making agriculture more climate resistant and environmentally sustainable.